New Issue - Book-Entry Only **Ratings: See "RATINGS" herein**

In the opinion of Co-Bond Counsel, interest on the 2017 Bonds (as herein defined) is excluded from gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions, subject to conditions described in "TAX EXEMPTION AND OTHER TAX MATTERS" herein. Interest on the 2017 Bonds will not be a specific preference item for purposes of the individual and corporate alternative minimum taxes; however, such interest is taken into account in computing the alternative minimum tax for certain corporations and may be subject to certain other federal taxes affecting corporate holders of the 2017 Bonds. Under the laws of the Commonwealth of Pennsylvania, as enacted and construed on the date hereof, the 2017 Bonds are exempt from Pennsylvania personal property taxes and the interest on the 2017 Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax. For a more complete discussion, see "TAX EXEMPTION AND OTHER TAX MATTERS" herein.

$235,240,000
THE HOSPITALS AND HIGHER EDUCATION FACILITIES AUTHORITY OF PHILADELPHIA
Hospital Revenue Bonds
(Temple University Health System Obligated Group), Series of 2017

Dated: Date of Delivery
Interest Payable: January 1 and July 1

Due: July 1, as shown on inside cover
First Interest Payment: January 1, 2018

The Hospitals and Higher Education Facilities Authority of Philadelphia (the "Authority") is issuing its $235,240,000 Hospital Revenue Bonds (Temple University Health System Obligated Group), Series of 2017 (the "2017 Bonds") to finance a project (as described herein) on behalf of an obligated group (the "Obligated Group") consisting of Temple University Hospital, Inc., Temple University Health System, Inc., Jeanes Hospital, Temple Health System Transport Team, Inc., Temple Physicians, Inc., The American Oncologic Hospital d/b/a The Hospital of Fox Chase Cancer Center, The Institute for Cancer Research d/b/a The Research Institute of Fox Chase Cancer Center, Fox Chase Cancer Center Medical Group, Inc. and Fox Chase Network, Inc. (each, a "Member" and collectively, the "Members"). The 2017 Bonds will bear interest at the rates shown on the inside cover hereof and will be issued in denominations of $5,000 or any integral multiple thereof. The principal or redemption price of the 2017 Bonds will be payable upon presentation and surrender thereof at the corporate trust office of the Trustee (as hereinafter defined) in Philadelphia, Pennsylvania. Interest on the 2017 Bonds will be payable on January 1 and July 1 of each year, commencing January 1, 2018, by check mailed (or in certain circumstances by wire transfer) to the registered owners thereof by the Trustee.

The 2017 Bonds, when, as and if issued, will be issuable as fully registered bonds without coupons, and when issued will be registered in the name of Cede & Co., as registered owner and nominee for The Depository Trust Company ("DTC"), New York, New York. DTC will act as Securities Depository for the 2017 Bonds. Except as described herein, purchasers will not receive certificates representing their beneficial ownership in the 2017 Bonds. See "BOOK-ENTRY ONLY SYSTEM" herein.

So long as DTC or its nominee, Cede & Co., is the registered owner of the 2017 Bonds, payments of principal or redemption price of and interest on the 2017 Bonds will be made directly to DTC or such nominee by the Trustee. Disbursement of such payments to the DTC Participants (as herein defined) is the responsibility of DTC and disbursements of such payments to the Beneficial Owners (as herein defined) is the responsibility of the DTC Participants and the Indirect Participants (as herein defined), as more fully described herein.

The 2017 Bonds are limited obligations of the Authority and will be secured under the provisions of a Fourteenth Supplemental Loan and Trust Agreement dated as of October 1, 2017 (the "Fourteenth Supplement"), by and among the Authority, the Obligated Group and U.S. Bank National Association, as successor trustee (the "Trustee"), which amends and supplements the Loan and Trust Agreement dated as of January 15, 1993.

See "BONDHOLDERS' RISKS" herein for a discussion of certain factors which should be considered in connection with an investment in the 2017 Bonds.

The 2017 Bonds are subject to optional, extraordinary and special redemption prior to maturity, and to purchase in lieu of redemption, as described herein. See "THE 2017 BONDS - Redemption of 2017 Bonds" herein.

THE 2017 BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY AND SHALL NOT BE DEEMED TO CONSTITUTE A DEBT OF THE CITY OF PHILADELPHIA, THE COMMONWEALTH OF PENNSYLVANIA, OR ANY POLITICAL SUBDIVISION, AGENCY OR INSTRUMENTALITY THEREOF OTHER THAN THE LIMITED OBLIGATION OF THE AUTHORITY AS AFORESAID. NEITHER THE GENERAL CREDIT OF THE AUTHORITY NOR THE CREDIT OR THE TAXING POWER OF THE CITY OF PHILADELPHIA, THE COMMONWEALTH OF PENNSYLVANIA OR ANY OTHER POLITICAL SUBDIVISION, AGENCY OR INSTRUMENTALITY THEREOF IS PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OR REDEMPTION PRICE OF, OR INTEREST ON, THE 2017 BONDS. THE AUTHORITY HAS NO TAXING POWER.

NEITHER TEMPLE UNIVERSITY-OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION ("TEMPLE UNIVERSITY") NOR ANY AFFILIATE OF TEMPLE UNIVERSITY (OTHER THAN THE MEMBERS OF THE OBLIGATED GROUP) HAS GUARANTEED OR IS OTHERWISE LIABLE FOR THE PAYMENT OF THE PRINCIPAL OR REDEMPTION PRICE OF, OR INTEREST ON, THE 2017 BONDS.

The cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read this entire Official Statement to obtain information essential to making an informed investment decision.

This Official Statement is dated October 25, 2017 and the information contained herein speaks only as of that date.

The 2017 Bonds are offered subject to the approving legal opinion of Dilworth Paxson LLP, Philadelphia, Pennsylvania, and Stevens & Lee, P.C., Philadelphia, Pennsylvania, as Co-Bond Counsel, to be furnished upon delivery of the 2017 Bonds. Certain legal matters will be passed upon for the Obligated Group by Beth C. Koob, Esquire, Chief Counsel of Temple University Health System, Inc. Certain legal matters will be passed upon for the Underwriters by Ballard Spahr LLP, Philadelphia, Pennsylvania, and for the Authority by its Counsel, Austin J. McGreal, Esquire, Philadelphia, Pennsylvania. The 2017 Bonds are expected to be available in definitive form for delivery in New York, New York on or about November 2, 2017.

MORGAN STANLEY **PNC CAPITAL MARKETS LLC**

$235,240,000
THE HOSPITALS AND HIGHER EDUCATION FACILITIES AUTHORITY OF PHILADELPHIA
Hospital Revenue Bonds
(Temple University Health System Obligated Group),
Series of 2017

MATURITY SCHEDULE

Maturity Date (July 1)	Principal Amount	Interest Rate	Price	Yield	CUSIP No.†
2019	$6,440,000	5.00%	105.034	1.910%	717903K23
2020	5,505,000	5.00	107.364	2.140	717903K31
2021	5,680,000	5.00	109.468	2.290	717903K49
2022	13,095,000	5.00	111.124	2.460	717903K56
2023	10,690,000	5.00	112.168	2.670	717903K64
2024	14,195,000	5.00	113.026	2.840	717903K72
2025	14,920,000	5.00	113.525	3.010	717903K80
2026	15,685,000	5.00	113.602	3.190	717903K98
2027	15,385,000	5.00	113.698	3.330	717903L22
2028	16,170,000	5.00	112.904	3.420*	717903L30
2029	16,995,000	5.00	112.291	3.490*	717903L48
2030	17,950,000	5.00	111.682	3.560*	717903L55
2031	18,830,000	5.00	111.336	3.600*	717903L63
2032	19,800,000	5.00	111.164	3.620*	717903L71
2033	20,820,000	5.00	110.648	3.680*	717903L89
2034	23,080,000	5.00	110.391	3.710*	717903L97

* Yield calculated to first optional redemption date of July 1, 2027.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2017 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME WITHOUT NOTICE.

THE UNDERWRITERS MAY OFFER AND SELL THE 2017 BONDS TO CERTAIN DEALERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES STATED ON THE INSIDE COVER PAGE HEREOF AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

THE ORDER AND PLACEMENT OF MATERIALS IN THIS OFFICIAL STATEMENT, INCLUDING THE APPENDICES, ARE NOT TO BE DEEMED TO BE A DETERMINATION OF RELEVANCE, MATERIALITY OR IMPORTANCE, AND THIS OFFICIAL STATEMENT, INCLUDING THE APPENDICES, MUST BE CONSIDERED IN ITS ENTIRETY. THE OFFERING OF THE 2017 BONDS IS MADE ONLY BY MEANS OF THIS ENTIRE OFFICIAL STATEMENT.

THE 2017 BONDS HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACT. THE REGISTRATION OR QUALIFICATION OF THE 2017 BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE SECURITIES LAWS OF CERTAIN STATES, IF ANY, IN WHICH THE 2017 BONDS HAVE BEEN REGISTERED OR QUALIFIED AND THE EXEMPTION FROM REGISTRATION OR QUALIFICATION IN CERTAIN OTHER STATES CANNOT BE REGARDED AS A RECOMMENDATION THEREOF. NEITHER THESE STATES NOR ANY OF THEIR AGENCIES HAVE PASSED UPON THE MERITS OF THE 2017 BONDS OR THE ACCURACY OR COMPLETENESS OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

This Official Statement is not to be construed as a contract or agreement among the Authority, the Obligated Group, the Underwriters and the purchasers or owners of any offered 2017 Bonds. This Official Statement and the information contained herein are subject to completion or amendment without notice. Under no circumstances shall this Official Statement constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No dealer, broker, salesman or any other person has been authorized by the Authority, any Member of the Obligated Group or the Underwriters to give any information or make any representation, other than those contained in this Official Statement, in connection with the offering of or solicitation of offers for the 2017 Bonds. If given or made, such information or representation must not be relied upon as having been authorized by the Authority, any Member of the Obligated Group or the Underwriters.

Information contained in this Official Statement was obtained in part from officials of the Authority, the Members of the Obligated Group, DTC and from other sources which are deemed to be reliable. Such sources are not guaranteed as to accuracy or completeness. Such information is not intended to be, and should not be relied upon, as a complete report or analysis; it is not to be construed as a representation by the Underwriters or, as to information from sources other than the Authority or the Obligated Group, by the Authority or the Obligated Group.

All quotations from and summaries and explanations of provisions of laws and documents in this Official Statement do not purport to be complete and reference is made to such laws and documents for full and complete statements of their provisions. Any statements made in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended merely as estimates or opinions and not as representations of fact. The information and expressions of opinion contained herein are subject to change without notice; neither the delivery of this Official Statement nor any sale of the 2017 Bonds shall under any circumstances create any implication that there has been no change in matters described herein since the date of this Official Statement.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

THIS OFFICIAL STATEMENT CONTAINS STATEMENTS WHICH, TO THE EXTENT THEY ARE NOT RECITATIONS OF HISTORICAL FACT, CONSTITUTE FORWARD-LOOKING STATEMENTS, AS SUCH TERM IS DEFINED IN SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. IN THIS RESPECT, SUCH FORWARD-LOOKING STATEMENTS ARE IDENTIFIED BY THE USE OF THE WORDS ESTIMATE, PROJECT, ANTICIPATE, EXPECT, FORECAST, INTEND OR BELIEVE OR THE NEGATIVE THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. SUCH FORWARD-LOOKING INFORMATION INVOLVES IMPORTANT RISKS AND UNCERTAINTIES THAT COULD RESULT IN THE ACTUAL INFORMATION BEING SIGNIFICANTLY DIFFERENT FROM THAT EXPRESSED IN THIS OFFICIAL STATEMENT. POTENTIAL INVESTORS SHOULD SPECIFICALLY CONSIDER THE VARIOUS FACTORS WHICH COULD CAUSE ACTUAL EVENTS OR RESULTS TO DIFFER MATERIALLY FROM THOSE INDICATED BY SUCH FORWARD-LOOKING STATEMENTS. SUCH FORWARD-LOOKING STATEMENTS SPEAK ONLY AS OF THE DATE OF THIS OFFICIAL STATEMENT. THE AUTHORITY AND THE OBLIGATED GROUP DISCLAIMS ANY OBLIGATION OR UNDERTAKING TO RELEASE PUBLICLY ANY UPDATES OR REVISIONS TO ANY FORWARD-LOOKING STATEMENT CONTAINED HEREIN TO REFLECT ANY CHANGES IN THE AUTHORITY'S OR THE OBLIGATED GROUP'S EXPECTATIONS WITH REGARD THERETO OR ANY CHANGE IN EVENTS, CONDITIONS OR CIRCUMSTANCES ON WHICH ANY SUCH STATEMENT IS BASED.

IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE AUTHORITY, THE OBLIGATED GROUP AND THE TERMS OF THE OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. THE 2017 BONDS WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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OFFICIAL STATEMENT
relating to

$235,240,000
THE HOSPITALS AND HIGHER EDUCATION FACILITIES AUTHORITY OF PHILADELPHIA
Hospital Revenue Bonds
(Temple University Health System Obligated Group), Series of 2017

INTRODUCTORY STATEMENT

Purpose of this Official Statement

The purpose of this Official Statement, including the cover page and the Appendices hereto, is to set forth information in connection with the offering by The Hospitals and Higher Education Facilities Authority of Philadelphia (the "Authority") of its $235,240,000 aggregate principal amount Hospital Revenue Bonds (Temple University Health System Obligated Group), Series of 2017 (the "2017 Bonds"). The 2017 Bonds are authorized to be issued pursuant to a Resolution of the Authority duly adopted on August 17, 2017. See Appendix "C" for the definitions of certain capitalized words and terms used in this Official Statement and not otherwise defined herein. For additional information concerning the 2017 Bonds, see "THE PLAN OF FINANCE" herein.

The Authority

The Authority is a body corporate and politic, organized and existing under the Municipality Authorities Act, 53 Pa. C.S.A §5601, *et seq*. (the "Act"), and by an Ordinance of the Council of the City of Philadelphia approved on January 28, 1974. See "THE AUTHORITY" herein.

Purpose of the Offering

The proceeds of the 2017 Bonds, along with other funds, will be used to provide financing for a project consisting of: (i) the current refunding of all or a portion of (a) the Authority's outstanding Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series A of 2007 (the "2007A Bonds"); (b) the Authority's outstanding Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series B of 2007 (the "2007B Bonds"); and (c) the Authority's outstanding Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series B of 2012 (the "2012B Bonds"); (ii) funding a deposit to the debt service reserve fund for the 2017 Bonds; and (iii) paying the costs of issuance of the 2017 Bonds (collectively, the "Project"). See "THE PLAN OF FINANCE" herein.

The Obligated Group

Temple University Hospital, Inc. ("Temple University Hospital" or "TUH"), Temple University Health System, Inc. (the "Parent," "TUHS" or the "Health System"), Jeanes Hospital ("Jeanes"), Temple Health System Transport Team, Inc. ("Temple Transport"), Temple Physicians, Inc. ("TPI"), The American Oncologic Hospital d/b/a The Hospital of Fox Chase Cancer Center ("AOH"), The Institute for Cancer Research d/b/a The Research Institute of Fox Chase Cancer Center ("ICR"), Fox Chase Cancer Center Medical Group, Inc. ("FCCCMG") and Fox Chase Network, Inc. (the "Network") (each is sometimes individually referred to as a "Member" or "Obligated Group Member" and collectively as the

"Members" or "Obligated Group Members") are currently members of an obligated group (the "Obligated Group") with respect to Obligations issued under the Loan and Trust Agreement (defined herein). Temple University Hospital, Jeanes and AOH are sometimes individually referred to as a "Hospital" and collectively, as the "Hospitals" or the "Hospital Group." Each Member of the Obligated Group is jointly and severally liable for all Obligations issued under or secured by the Loan and Trust Agreement. See "The Loan and Trust Agreement" below and "SECURITY AND SOURCES OF PAYMENT FOR THE 2017 BONDS" herein. The Loan and Trust Agreement provides prescribed conditions which govern the admission of each new member of the Obligated Group and the withdrawal of any existing Obligated Group Member. The Loan and Trust Agreement provides that Temple University Hospital may not withdraw from the Obligated Group while any Obligations are Outstanding.

Temple University - Of The Commonwealth System of Higher Education ("Temple University") is the sole member of the Parent. The Parent is the sole member of Temple University Hospital, Jeanes, Temple Transport, TPI and AOH. AOH is the sole member of ICR, FCCCMG and Network. The Parent coordinates the activities and plans for those entities as well as certain other affiliated health-care related entities of the Parent that are not members of the Obligated Group (the "Non-Members"). Temple University Hospital, the Parent, Jeanes, Temple Transport, AOH, ICR, FCCCMG, the Network, TPI and the Non-Members are referred to hereinafter collectively as the "Health System." See Appendix "A" hereto for a more detailed description of the operations of each Member of the Obligated Group, and a description of the Health System in general.

Each of the Members of the Obligated Group (the "Qualified Members") is an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code") exempt from federal income tax under Section 501(a) of the Code, except for unrelated business income subject to taxation under Section 511 of the Code, and is not a "private foundation" within the meaning of Section 509(a) of the Code. The Obligated Group has represented that 2017 Bond proceeds will not be used in an unrelated trade or business.

None of Temple University, the Non-Members, nor any other affiliate of Temple University (other than the Obligated Group) has guaranteed or is otherwise liable for the payment of the principal or redemption price of, or interest on, the 2017 Bonds.

The Loan and Trust Agreement

The 2017 Bonds will be issued under a Fourteenth Supplemental Loan and Trust Agreement dated as of October 1, 2017 (the "Fourteenth Supplement"), by and among the Obligated Group, the Authority and U.S. Bank National Association, as successor trustee (the "Trustee"), which amends and supplements a Loan and Trust Agreement dated as of January 15, 1993 (as previously amended and supplemented, the "Original Loan and Trust Agreement" and, together with the Fourteenth Supplement, the "Loan and Trust Agreement" or "Agreement"), and will be equally and ratably secured thereunder, except as otherwise provided herein, with all other Obligations (as defined in the Loan and Trust Agreement) now or hereafter issued under or secured by the Loan and Trust Agreement. The Fourteenth Supplement is sometimes referred to as a "Supplement." For a description of all Obligations currently outstanding under the Loan and Trust Agreement, see "SECURITY AND SOURCES OF PAYMENT FOR THE 2017 BONDS – Existing Obligations" and "THE PLAN OF FINANCE" herein.

Security

The 2017 Bonds are limited obligations of the Authority, payable solely from the Trust Estate (as hereinafter defined), which includes payments to be made by the Obligated Group under the Loan and Trust Agreement. The 2017 Bonds will be secured on an equal and ratable basis, except as otherwise

provided herein, with the Obligations currently Outstanding and any other Obligations issued under the Loan and Trust Agreement. As security for the Obligated Group's obligations under the Loan and Trust Agreement, each Member of the Obligated Group has pledged its respective Gross Receipts (as hereinafter defined). The 2017 Bonds are also secured by mortgages on certain real property interests of certain Members of the Obligated Group. See "SECURITY AND SOURCES OF PAYMENT FOR THE 2017 BONDS – The Mortgages" herein. The 2017 Bonds will be additionally secured by the 2017 Debt Service Reserve Fund established under the Supplement. See "SECURITY AND SOURCES OF PAYMENT FOR THE 2017 BONDS" herein, and Appendix "C" hereto.

In connection with the issuance and delivery of the 2017 Bonds, certain amendments will be made to the Loan and Trust Agreement. The amendments concern, among other things, certain changes to the definition of "Debt" contained therein, the substitution of security for the Obligations of the Obligated Group in the event of a merger, consolidation, member substitution or similar transaction involving an affiliation of the Obligated Group with an entity or entities subject to an existing master trust indenture or similar financing document (collectively, the "Amendments"). The Amendments shall be effective upon delivery to the Trustee of evidence that a majority in principal amount of Outstanding Obligations have consented to the Amendments (the "Required Consent"). **The initial purchasers of the 2017 Bonds by their purchase and acceptance of the 2017 Bonds shall be deemed to have approved and irrevocably consented to the Amendments, which consent shall be binding upon present and future holders of the 2017 Bonds.** See "SUBSTITUTION OF SECURITY" and Appendix "C" – "SUMMARIES OF CERTAIN PROVISIONS OF THE LOAN AND TRUST AGREEMENT, FOURTEENTH SUPPLEMENT, INCLUDING LOAN AND TRUST AGREEMENT AMENDMENTS – Agreement Amendments" herein for a description of the amendments to the Loan and Trust Agreement.

The 2017 Bonds will together represent 48.11% of the aggregate principal amount of the Obligations Outstanding under the Loan and Trust Agreement on the date of delivery of the 2017 Bonds. Prior to or simultaneously with the issuance of the 2017 Bonds, the Obligated Group is also expected to receive the consent of PNC Bank, National Association ("PNC Bank"), as holder of the note issued and delivered under the Thirteenth Supplemental Loan and Trust Agreement dated as of June 20, 2017 (the "Thirteenth Supplement"), which evidences the Obligated Group's obligations under the PNC Line of Credit (as defined herein), and, as a result of the deemed consent of the holders of the 2017 Bonds and the receipt of PNC Bank's consent, the Obligated Group expects to have received the Required Consent (in the amount of 53.23% of the holders of the Outstanding Obligations). Upon delivery to the Trustee of the Required Consent, the Amendments will become effective.

Bondholders' Risks

Reference is made to the section in this Official Statement under the heading "BONDHOLDERS' RISKS" for a description of certain considerations relevant to an investment in the 2017 Bonds. In connection with the delivery of the Substitute Security (as defined herein), the pledge of the Gross Receipts and the Mortgages securing the Obligated Group's obligations under the Loan and Trust Agreement may be released.

Continuing Disclosure Agreement

Each Member of the Obligated Group has covenanted in a Continuing Disclosure Agreement dated as of October 1, 2017 (the "Continuing Disclosure Agreement"), among each Member of the Obligated Group and Digital Assurance Certification, L.L.C., as dissemination agent (the "Dissemination Agent") (i) to file certain information with the Municipal Securities Rulemaking Board, which operates the Electronic Municipal Market Access system ("EMMA") for municipal securities disclosures and (ii) to disclose the occurrence, if any, of certain events relating to the 2017 Bonds. The obligations of each

Member under the Continuing Disclosure Agreement will constitute a written undertaking for the benefit of the holders and beneficial owners from time to time of the 2017 Bonds. See "CONTINUING DISCLOSURE UNDERTAKING" herein and Appendix "E" hereto.

Underlying Documents

The descriptions and summaries of various documents set forth in this Official Statement do not purport to be comprehensive or definitive and reference is made to each document for complete details of all terms and conditions. All statements herein are qualified in their entirety by the terms of each such document. Copies of all such documents will be available for inspection after delivery of the 2017 Bonds at the corporate trust office of the Trustee at Two Liberty Place, 50 South 16th Street, Suite 2000, Philadelphia, Pennsylvania 19102.

Forward-Looking Statements

Information included under the heading "BONDHOLDERS' RISKS" and other sections in this Official Statement and Appendix "A" hereto includes forward-looking statements about the future that are necessarily subject to various risks and uncertainties (the "Forward-Looking Statements"). These Forward-Looking Statements are (i) based on the beliefs and assumptions of management of each Member of the Obligated Group and on information currently available to such management and (ii) generally identifiable by words such as "estimates," "expects," "anticipates," "plans," "believes" and other similar expressions.

Any number of events could cause future results to differ materially from those expressed in or implied by Forward-Looking Statements or historical experience. These events include the impact or outcome of many factors that are described throughout this Official Statement and Appendix "A" hereto, including, without limitation, the discussion under "BONDHOLDERS' RISKS" in this Official Statement and "SUMMARY FINANCIAL AND OPERATING INFORMATION" in Appendix "A" hereto. Although the ultimate impact of such factors is uncertain, they may cause future performance to differ materially and adversely from results or outcomes that are currently sought or expected by the Obligated Group.

THE AUTHORITY

General

The Authority is a body corporate and politic organized under the Act and by an ordinance of the Council of the City of Philadelphia ("City Council") approved on January 28, 1974. Pursuant to an ordinance approved by City Council on March 10, 1983, the Authority changed its name from "The Hospitals Authority of Philadelphia" to "The Hospitals and Higher Education Facilities Authority of Philadelphia." The purpose of the Authority is to acquire, hold, construct, finance, improve, maintain and operate, own and lease, either in the capacity of lessor or lessee, projects including hospitals, certain not-for-profit sub-acute health care facilities, and certain educational institutions. The address of the Authority is 1880 J.F.K. Boulevard, Suite 1102, Philadelphia, Pennsylvania 19103.

Board

The governing body of the Authority is a Board consisting of five members appointed by an affirmative vote of two-thirds of all members of City Council from nominations made by the Mayor of the City of Philadelphia. Members of the Board are appointed for staggered five-year terms and each serves until death, disqualification, resignation, removal or the appointment of a successor.

Currently serving as members of the Board are:

Name	Office
Robert W. Bogle	Chairman
Theodore Burden, M.D., M.B.A.	Vice Chairman
James P. Baker, Jr.	Member
Shelley Y. Simms Reed, Esq.	Member

Authority Staff. The Authority Board appoints a staff to execute the functions of the Authority. Present members of the staff are:

Name	Office
James P. Baker, Jr.	Interim President, Assistant Secretary and Assistant Treasurer
Lila M. Jones	Secretary
Marinita Perrin-Lambert	Treasurer

Financings of the Authority

From its inception through April 30, 2017, the Authority has issued 143 revenue or special obligation bond or note issues in the aggregate principal amount of $6,408,334,999. Each issue is payable solely from revenues derived from the project being financed or from special funds established therefor, and is separately secured from the 2017 Bonds, except for certain bonds and other obligations previously issued by the Authority for the benefit of the Members of the Obligated Group as described herein that are secured on a parity with the 2017 Bonds.

Certain series of revenue bonds issued by the Authority are presently in default. Florida law requires certain further disclosure concerning such defaults under certain circumstances unless the issuer determines in good faith that such disclosure is not material. The Authority does not believe any further information regarding such defaults is material because none of such defaulted issues were issued on behalf of any Member of the Obligated Group or any affiliates of the Obligated Group, nor are any of such bonds otherwise secured by or payable from the security or sources of payment herein described with respect to the 2017 Bonds.

The Authority intends from time to time to enter into additional financing transactions for hospitals, certain not-for-profit sub-acute healthcare facilities, and institutions of higher education. Such transactions will provide for the issuance of bonds or notes, which will be limited obligations of the Authority, payable from and secured by revenues derived from such projects. The Authority may also from time to time enter into refinancing transactions for obligations previously issued.

THE 2017 BONDS

General

The 2017 Bonds will be issued as fully registered bonds, without coupons, in the aggregate principal amounts set forth on the cover page and inside cover page hereof, and will be subject to redemption and to purchase in lieu of redemption prior to maturity as described herein. The 2017 Bonds are issuable in the denominations of $5,000 or any integral multiple thereof. The 2017 Bonds will be dated as of their date of delivery, will bear interest from such date at the rates and mature in the amounts and on the dates listed in the maturity schedule on the inside cover page hereof, and will be subject to

redemption and to purchase in lieu of redemption prior to maturity as described below. Interest on the 2017 Bonds will be payable semiannually on January 1 and July 1 of each year (each, an "Interest Payment Date"), commencing January 1, 2018, until maturity or redemption.

The 2017 Bonds will bear interest from the Interest Payment Date to which interest has been paid next preceding the date of authentication, unless the date of authentication is (i) an Interest Payment Date to which interest has been paid, in which event such 2017 Bonds shall bear interest from such Interest Payment Date, (ii) after a Record Date (as hereinafter defined) and before the next succeeding Interest Payment Date, in which event such 2017 Bonds shall bear interest from such Interest Payment Date, (iii) on or prior to the Record Date (as hereinafter defined) next preceding the first Interest Payment Date for such 2017 Bonds, in which event such 2017 Bonds shall bear interest from their dated date, or (iv) as shown by the records of the Trustee, interest on the 2017 Bonds shall be in default, in which event the 2017 Bonds shall bear interest from the date on which interest was last paid on such 2017 Bonds.

The principal of any 2017 Bond shall be payable when due to a registered owner upon presentation and surrender of such 2017 Bond at the corporate trust office of the Trustee and interest on any 2017 Bond shall be paid on each Interest Payment Date by check which the Trustee shall cause to be mailed on that date to the person in whose name the 2017 Bond is registered at the close of business on the December 15 and June 15 (whether or not a Business Day) next preceding the applicable Interest Payment Date (the "Record Date"). The interest becoming due with respect to the 2017 Bonds shall, at the election of any Holder of 2017 Bonds aggregating $1,000,000 in principal amount or more, be paid by wire transfer to any account in the United States of America if written instructions satisfactory to the Trustee in its sole discretion are delivered to the Trustee on or prior to the Record Date next preceding the date of the surrender of such 2017 Bonds. Such payments shall be made to the Holder of the 2017 Bonds so surrendered as shown on the registration books of the Trustee on the date of payment. If and to the extent that the Authority shall fail to make payment or provision for payment of interest on any 2017 Bond on any Interest Payment Date, that interest shall cease to be payable to the person who was the registered owner of that 2017 Bond as of the applicable Record Date, but instead shall be payable to the persons who are the registered owners of the 2017 Bonds at the close of business on a special record date to be established by notice mailed by the Trustee on behalf of the Authority for such purpose not less than 15 days preceding such special record date and not less than 20, but not more than 30, days prior to the date of proposed payment. The Trustee shall cause notice of the proposed payment date and the special record date therefor to be mailed, first class, postage prepaid, to each registered owner of a 2017 Bond at such person's address as it appears in the bond register (the "Bond Register") maintained by the Trustee, as bond registrar (in such capacity, the "Bond Registrar"), on behalf of the Authority, at the close of business on the Business Day preceding the date of mailing.

The Authority has established a book-entry only system of registration for the 2017 Bonds (the "Book-Entry System"). Except as otherwise provided in the Fourteenth Supplement, The Depository Trust Company, New York, New York ("DTC"), or its successor as securities depository (DTC or such successor is referred to as the "Securities Depository") (or its nominee) will be the registered owner of the 2017 Bonds. By acceptance of a confirmation of purchase, delivery or transfer, each Beneficial Owner (defined herein) of an interest in the 2017 Bonds will be deemed to have consented to the Book-Entry System. The Securities Depository (or its nominee), as registered owner of the 2017 Bonds, will be the registered owner or holder of the 2017 Bonds for all purposes of the Fourteenth Supplement. So long as Cede & Co. is the registered owner, as nominee of DTC, references herein to the registered owners shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the 2017 Bonds. See "BOOK-ENTRY ONLY SYSTEM" herein.

So long as the 2017 Bonds are held in the Book-Entry System, the principal or redemption price of, and interest on, the 2017 Bonds will be paid through the facilities of the Securities Depository.

Otherwise, the principal or redemption price of the 2017 Bonds is payable upon surrender thereof at the corporate trust office of U.S. Bank National Association, or its successor as the Trustee. Interest on the 2017 Bonds is payable by check mailed to the Owner of record; provided that upon the written request of an Owner of record of at least $1,000,000 aggregate principal amount of 2017 Bonds received by the Trustee on or prior to the Record Date, interest accrued on such 2017 Bonds will be paid by wire transfer within the continental United States in immediately available funds.

If the Book-Entry System is discontinued and the 2017 Bonds are issued in certificated form, the 2017 Bonds may be transferred or exchanged for an equal total amount of 2017 Bonds of other authorized denominations upon surrender of such 2017 Bonds at the corporate trust office of U.S. Bank National Association, or its successor as the Trustee and Bond Registrar, duly endorsed for transfer or accompanied by an assignment executed by the Owner or the Owner's duly authorized attorney. Except as provided in the Fourteenth Supplement, the Bond Registrar will not be required to register the transfer or exchange of (i) any 2017 Bond during the 15 days preceding any Interest Payment Date, or (ii) any 2017 Bond after such 2017 Bond has been called for redemption. Registration of transfers and exchanges shall be made without charge to the Owners, except that the Bond Registrar may require the Owner requesting registration of transfer or exchange to pay any required tax or governmental charge.

Redemption of 2017 Bonds

Optional Redemption. The 2017 Bonds maturing on or after July 1, 2028 are subject to optional redemption prior to maturity by the Authority, at the option and direction of the Obligated Group, in whole or in part at any time on or after July 1, 2027, in such order of maturity as the Obligated Group shall determine, and by lot within a maturity as selected by the Trustee. Any such redemption shall be made at a redemption price equal to 100% of the stated principal amount of the 2017 Bonds to be redeemed, together with interest accrued thereon to the date fixed for redemption.

Extraordinary Redemption. In the event of damage or destruction to all or any part of the Property (as defined in Appendix "C" hereto), or a taking by eminent domain of all or any part of the Property of the Obligated Group in which there are remaining insurance or eminent domain net proceeds after certain reconstruction and other uses of such proceeds as set forth in the Loan and Trust Agreement, all Obligations, including the 2017 Bonds, are required to be redeemed as an extraordinary redemption to the maximum extent possible, in whole or in part, and in such order of maturity as shall be set forth in the written request of the Obligated Group Agent (as defined in Appendix "C" hereto), at a redemption price equal to 100% of the principal amount of the Obligations redeemed plus accrued interest to the redemption date. See Appendix "C" - "SUMMARIES OF CERTAIN PROVISIONS OF THE LOAN AND TRUST AGREEMENT, FOURTEENTH SUPPLEMENT, INCLUDING LOAN AND TRUST AGREEMENT AMENDMENTS - Recovery of Insurance Proceeds - Eminent Domain - Option to Redeem Obligations" for additional terms of the Loan and Trust Agreement relating to the calculation of remaining insurance or eminent domain net proceeds and other matters.

Special Redemption for Specified Change of Control Event. The 2017 Bonds are subject to redemption prior to maturity by the Authority, at the option and direction of the Obligated Group Agent in whole at a redemption price of 105% of the greater of the principal amount to be redeemed or the Amortized Value thereof, together with accrued interest to the date fixed for redemption, on or within sixty (60) days after the occurrence of a Specified Change of Control Event. The Amortized Value and the redemption price shall be calculated by any firm of independent financial accountants, any investment banking firm or any financial advisor selected by the Obligated Group Agent, and shall be furnished in writing to the Trustee, the Obligated Group Agent and the Authority no later than five (5) Business Days prior to the redemption date.

Capitalized terms used in this section shall have the following meanings:

"Amortized Value" means the principal amount of the 2017 Bonds to be redeemed multiplied by the price of such 2017 Bonds expressed as a percentage, calculated based on the industry standard method of calculating bond prices, with a delivery date equal to the date of redemption, a maturity date equal to (a) for 2017 Bonds originally offered at a premium, the earlier of (x) the scheduled maturity date of such 2017 Bonds or (y) the first date such 2017 Bonds are subject to optional redemption, or (b) for 2017 Bonds originally offered at a discount or par, the maturity date of such 2017 Bonds, and a yield equal to the original offering yield of such 2017 Bonds.

"Control" means, with respect to: (a) a corporation having stock, the ownership, directly or indirectly, of more than 50% of the securities (as defined in Section 2(a)(1) of the Securities Act of 1933, as amended) of any class or classes, the holders of which are ordinarily, in the absence of contingencies, entitled to elect a majority of such corporation's directors (or persons performing similar functions); (b) a nonprofit corporation not having stock, the power to elect or appoint, directly or indirectly, a majority of the Governing Body of such corporation; (c) a partnership, the ownership, directly or indirectly, of general partnership interests equal to at least 50% of the general partnership interests; or (d) any other entity, the power to direct the management of such entity through the ownership of at least a majority of its voting securities or the right to designate or elect at least a majority of the members of its Governing Body, by contract or otherwise. "Controlled" means subject to Control by another entity.

"For Profit Acquirer" means a corporation, limited liability company, partnership or other entity that is not tax-exempt under Section 501(c)(3) of the Code and that is not under common Control with the Obligated Group Members prior to acquiring Control of the Obligated Group Members.

"Specified Change of Control Event" means the occurrence of any merger, consolidation or conversion from a 501(c)(3) organization to a for-profit status of an Obligated Group Member in a transaction in which the Obligated Group Members become Controlled by a For Profit Acquirer, or the direct or indirect acquisition by a For Profit Acquirer of substantially all of the Obligated Group's Property relating to clinical operations.

Notice of Redemption. As provided more fully in the form of the 2017 Bonds, notice of redemption of 2017 Bonds shall be given by mailing a copy of the redemption notice by first class mail, postage prepaid, at least twenty days and no more than sixty days prior to the redemption date to the Holders of 2017 Bonds to be redeemed at their addresses as they appear in the Bond Register. If, at the time of mailing of any notice of any optional redemption, there shall not have been deposited with the Trustee moneys sufficient to redeem all of the 2017 Bonds called for redemption, such notice may state that it is conditional - i.e., that it is subject to the deposit of the redemption moneys with the Trustee not later than opening of business on the redemption date, and such notice shall be of no effect unless such moneys are deposited. No defect affecting the redemption of any 2017 Bond, whether in any notice of redemption or mailing thereof (including any failure to mail such notice), shall affect the validity of the redemption of any other 2017 Bonds. So long as DTC or its nominee is the Owner of the 2017 Bonds, the Authority and the Trustee will recognize DTC or its nominee as the Holder of the 2017 Bonds for all purposes, including notices and voting. Conveyance of notices and other communications by DTC Participants and by DTC Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory and regulatory requirements as may be in effect from time to time. So long as DTC or its nominee is the Owner of the 2017 Bonds, any failure on the part of DTC or failure on the part of a nominee of a Beneficial Owner (having received notice from a DTC Participant or otherwise) to notify the Beneficial Owner so affected shall not affect the validity of the redemption. So long as DTC or its nominee is the Owner of the 2017 Bonds, if less than all of the 2017 Bonds of any maturity shall be

called for redemption, the particular 2017 Bonds or portions of 2017 Bonds of such maturity to be redeemed shall be selected by lot by DTC in such manner as DTC may determine.

Mandatory Purchase in Lieu of Redemption. Each Holder, by purchase and acceptance of any 2017 Bond, irrevocably grants to the Obligated Group the option to purchase such 2017 Bond at any time such 2017 Bond is subject to optional redemption as described in the Loan and Trust Agreement. Such 2017 Bond can be purchased at a purchase price equal to the then applicable redemption price of such 2017 Bond plus accrued interest. The Obligated Group may only exercise such option after the Obligated Group shall have delivered a Favorable Opinion of Bond Counsel to the Trustee, and shall have directed the Trustee to provide notice of mandatory purchase (such notice to be provided, as and to the extent applicable, in accordance with the notice of redemption provisions of the Loan and Trust Agreement). On the date fixed for purchase of any 2017 Bond in lieu of redemption as described in this paragraph, the Obligated Group shall pay the purchase price of such 2017 Bond to the Trustee in immediately available funds, and the Trustee shall pay the same to the Holders of the 2017 Bonds being purchased against delivery thereof. No purchase of any 2017 Bond in lieu of redemption as described in this paragraph shall operate to extinguish the indebtedness of the Authority evidenced by such 2017 Bond. No Holder may elect to retain a 2017 Bond subject to mandatory purchase in lieu of redemption.

SECURITY AND SOURCES OF PAYMENT FOR THE 2017 BONDS

Sources of Payment

The 2017 Bonds are limited obligations of the Authority and are payable solely from: (i) amounts received from the Members of the Obligated Group under the Loan and Trust Agreement; and (ii) certain moneys held by the Trustee in funds established under the Loan and Trust Agreement (with the exception of the Rebate Fund and any Fund established for any other Obligations, including any debt service reserve fund for such Obligations). The 2017 Bonds will additionally be secured by the Debt Service Reserve Fund created under the Fourteenth Supplement. Under the Fourteenth Supplement, each Member of the Obligated Group will be absolutely and unconditionally, jointly and severally, obligated to make payments to the Trustee, as the assignee of the Authority, sufficient to provide for the payment of the principal or redemption price of, and interest on, the 2017 Bonds when due, and at such time as may be required, to make payments in such amounts as are required to cure any deficiency which may occur in any funds or accounts established under the Loan and Trust Agreement.

The 2017 Bonds are limited obligations of the Authority and shall not be deemed to constitute a debt of the City of Philadelphia, the Commonwealth of Pennsylvania, or any political subdivision, agency or instrumentality thereof other than the limited obligation of the Authority as aforesaid. Neither the general credit of the Authority nor the credit or the taxing power of the City of Philadelphia, the Commonwealth of Pennsylvania or any other political subdivision, agency or instrumentality thereof is pledged for the payment of the principal or redemption price of, or interest on, the 2017 Bonds. The Authority has no taxing power.

None of Temple University, the Non-Members nor any other affiliate of Temple University (other than the Obligated Group) has guaranteed or is otherwise liable for the payment of the principal or redemption price of, or interest on, the 2017 Bonds.

Pledge of the Trust Estate

Upon the execution of the Fourteenth Supplement, the 2017 Bonds will be secured thereunder, equally and ratably with the other Obligations currently outstanding and described below under "Existing Obligations" and any Obligations thereafter issued thereunder, by the pledge and grant to the Trustee of a

continuing security interest in (i) the right, title and interest of the Authority under the Loan and Trust Agreement (except the Authority's right to receive payment of its fees and expenses and its right to indemnification), (ii) all of the Authority's rights, whether existing on the date of the Loan and Trust Agreement or thereafter acquired, to enforce any loan or loans of proceeds of the 2017 Bonds, the other Obligations currently outstanding or any Obligations incurred pursuant to the terms of the Loan and Trust Agreement, and (iii) revenues to be received from the Obligated Group and all funds and investments held from time to time in the Funds established under the Loan and Trust Agreement, including the Debt Service Reserve Fund established with respect to the 2017 Bonds (except the Rebate Fund and any Fund, including any Debt Service Reserve Fund established for any other Obligations) (collectively, the "Trust Estate"). For a detailed description of the Trust Estate, see Appendix "C."

Pledge of Gross Receipts

As security for their obligations under the Loan and Trust Agreement to make payment on account of the 2017 Bonds and all other Obligations now or hereafter issued or secured thereunder, each Member of the Obligated Group has granted, or will grant, to the Trustee a continuing security interest in its respective Gross Receipts and upon any rights to receive such Gross Receipts. "Gross Receipts" is defined under the Loan and Trust Agreement to mean, with respect to any Obligated Group Member, all receipts, revenues, income and other moneys received by or on behalf of such Obligated Group Member; including, but without limiting the generality of the foregoing, revenues derived from the ownership or operation of Property, including insurance and condemnation proceeds with respect to such Property or any portion thereof, and all rights to receive the same, whether in the form of accounts, accounts receivable, contract rights or other rights, and the proceeds of such rights, whether now owned or held or hereafter coming into existence; with certain exclusions as described in the Loan and Trust Agreement.

See "Limitations on Security Interests in the Members of the Obligated Group's Gross Receipts" contained under "BONDHOLDERS' RISKS."

Rate Covenant

The Obligated Group covenants that it will use its best efforts to maintain for each Fiscal Year a ratio of Income Available for Debt Service to Annual Debt Service of at least 1.10 and shall furnish the Trustee with an Officer's Certificate to that effect promptly after the audited financial statements for such Fiscal Year shall have become available. If such ratio, as calculated based on the audited financial statements for such Fiscal Year, is below 1.10, the Obligated Group Agent is required to notify the Trustee to that effect and the Obligated Group covenants to retain a Consultant within sixty (60) days of such calculation to make recommendations to increase such ratio for subsequent Fiscal Years of the Obligated Group at least to the level required or, if in the opinion of the Consultant the attainment of such level is impracticable, to the highest practicable level. The Obligated Group agrees that the Obligated Group will, to the extent practicable and not prevented by law or existing contracts, follow the recommendations of the Consultant. The Obligated Group must promptly notify the Trustee in each case in which a Consultant is retained and of the recommendations of the Consultant. So long as the Obligated Group shall retain a Consultant and shall follow such Consultant's recommendations to the extent not prevented by law or existing contracts, this covenant shall be deemed to have been complied with even if such ratio for any subsequent Fiscal Year of the Obligated Group is below 1.10, provided that such ratio shall not be below 1.00.

If Government Restrictions exist which prevent compliance with the 1.10 coverage ratio set forth in the immediately preceding paragraph, that requirement shall be deemed satisfied as long as a Consultant's report is received by the Trustee at least once during each year that Government Restrictions

exist, which Consultant's report confirms the continued existence of the factual circumstances giving rise to the Government Restrictions.

So long as the 2012A Bonds or 2012B Bonds are outstanding, within thirty (30) days of receipt of the Consultant's report referred to in the immediately preceding paragraph, the Obligated Group will retain a second consultant acceptable to the Trustee to verify the first Consultant's confirmation of the existence of the factual circumstances giving rise to the Government Restrictions. If the second consultant agrees with the findings of the Consultant, the Obligated Group may rely on the above provisions. If the second consultant finds that the factual circumstances giving rise to the Government Restrictions do not or no longer exist, then the second consultant shall prepare recommendations consistent with the rate covenant and the Loan and Trust Agreement and the Obligated Group shall follow the second consultant's recommendations.

Days-Cash-On-Hand Covenant

So long as the 2017 Bonds remain Outstanding, the Obligated Group has covenanted in the Loan and Trust Agreement that it shall maintain Days-Cash-On-Hand of at least forty-five (45) days. Compliance shall be tested annually, on the basis of the annual audited financial statements delivered pursuant to the Loan and Trust Agreement for the preceding Fiscal Year. "Days-Cash-On-Hand" is defined in the Loan and Trust Agreement to mean, for each Fiscal Year, Unrestricted Cash and Investments (as defined in Appendix "C"), divided by total operating expenses, net of Depreciation, Amortization, Restructuring Costs, Asset Impairment, Gain or Losses (as such terms are defined in accordance with GAAP) on the sale of fixed assets, bad debt expense and other non-cash expense items, divided by 365. For purposes of this definition, "total operating expenses," "bad debt expense" and "non-cash expense items" shall mean such line items as reported on the consolidated statements of operations and changes in net assets of the audited financial statements of the Obligated Group delivered pursuant to the Loan and Trust Agreement.

The Obligated Group is required to furnish to the Trustee and the Authority within one hundred twenty (120) days after the close of each Fiscal Year, a certificate signed by its President or Vice President demonstrating and concluding that the Obligated Group has (or has not) been in compliance with the Days-Cash-On-Hand Covenant.

If the Days-Cash-On-Hand of the Obligated Group is less than sixty (60) days as of any annual testing period, then the Obligated Group shall, within fifteen (15) days of the delivery of annual audited financial statements for such Fiscal Year, retain a Consultant. Such Consultant shall, within ninety (90) days of such appointment, deliver to the Obligated Group and the Trustee a report setting forth in detail the reason that the Obligated Group has less than sixty (60) Days-Cash-On-Hand and making recommendations with respect to the operation and management of the Obligated Group which in such Consultant's judgment will enable the Obligated Group to achieve sixty (60) Days-Cash-On-Hand (unless such Consultant reasonably concludes that the reason the Obligated Group has been less than sixty (60) Days-Cash-On-Hand is principally due to factors wholly outside the control of the Obligated Group). Notwithstanding anything to the contrary, the failure to comply with the Days-Cash-On-Hand covenant constitutes an Event of Default under the Loan and Trust Agreement.

The Mortgages

As further security for their obligations under the Loan and Trust Agreement to make payment on account of the 2017 Bonds and all other Obligations now or hereafter issued thereunder, certain members of the Obligated Group executed and delivered to the Trustee mortgages (the "Mortgages") with respect to certain real property interests held by them, all located in Philadelphia, Pennsylvania and with respect

to certain facilities operated by the Obligated Group Members. These Mortgages consist of a subleasehold first mortgage given by Temple University Hospital in its subleasehold property interest that is the subject of a lease from the Commonwealth of Pennsylvania to Temple University and a sublease from Temple University to Temple University Hospital; and a leasehold first mortgage given by Jeanes in certain of its leasehold property interest that is the subject of a lease from Friends Fiduciary Corporation to Jeanes. The mortgages given by Temple University Hospital and Jeanes are each subject to certain limitations and conditions based on the provisions of the sublease or lease applicable to their respective property interests. Two additional fee mortgages were given by AOH and ICR on the two parcels of real property in Northeast Philadelphia which comprise the main campus of AOH, each of which is subject to a reversionary clause in the applicable deed, enforceable by the Friends Fiduciary Corporation, which provides that the land shall be re-conveyed to the Friends Fiduciary Corporation if ICR or AOH, respectively, shall no longer own the premises or if the premises are no longer used for cancer research and treatment purposes.

The property where Temple University Hospital is located ("TUH Premises") is subject to a lease between the Department of General Services, acting for and on behalf of the Commonwealth ("DGS"), and Temple University, dated December 18, 1978 (the "Temple University Lease"). The Temple University Lease provides that Temple University may enter into a sublease for the TUH Premises, and Temple University and Temple University Hospital entered into a Sublease Agreement dated April, 1997, as amended (the "Sublease") for use of the TUH Premises as a hospital, medical school, health care provider, and health services administration, management and office facility. Both the Temple University Lease and the Sublease expire on December 31, 2043. The Temple University Lease provides that Temple University is in default if it fails to pay annual rent of $1.00 or is in breach of any covenants of the Temple University Lease, including the requirements that Temple University maintain the TUH Premises as a hospital, medical school, health care provider, and health services administration, management and office facility and procure certain insurance policies. If Temple University fails to cure a default within thirty days of written notice, DGS may void the Temple University Lease and take possession of the TUH Premises. The Temple University Lease does not require DGS to honor the Sublease.

Temple University and its successors and assigns may grant a leasehold mortgage to secure financing provided that the leasehold mortgagee agrees to be bound by the terms of the Temple University Lease. Pursuant to an Open-End Sub-Leasehold Mortgage and Security Agreement, dated June 20, 2005 (the "Temple Hospital Mortgage"), Temple University Hospital granted to the Trustee a first mortgage on its sub-leasehold interest in the TUH Premises. At the time the Temple Hospital Mortgage was granted, the Trustee agreed to be bound by the terms of the Temple University Lease.

Defaults under the Sublease include, but are not limited to, failure to pay rent and other amounts due under the Sublease, bankruptcy and a failure to comply with the provisions of the Sublease, including the requirement that Temple University Hospital obtain certain insurance policies. The minimum annual rent under the Sublease is $1.00. The Sublease is a "triple net" lease and Temple University Hospital is required to pay all operating expenses, taxes, insurance, utilities, maintenance and repairs (including capital improvements) associated with the TUH Premises. Among other rights, upon a default by Temple University Hospital, Temple University has the right to enter the TUH Premises and lease the TUH Premises or any part thereof to other persons.

If the Sublease is terminated, either because it is not honored by DGS following a default under the Temple University Lease, or due to a default under the Sublease, the rights of the Trustee, as leasehold mortgagee, are extinguished.

In 1996, in connection with the acquisition of Jeanes Hospital by the Parent, Jeanes and the Friends Fiduciary Corporation ("FFC"), the owner of the property (the "Jeanes Property") on which the Jeanes Hospital is located, entered into an Income Agreement, an Affiliation Agreement (the "Jeanes Affiliation Agreement") and a Lease Agreement (the "Jeanes Lease"). The Income Agreement provides that the income on certain funds held by FFC will be transferred by FFC to Jeanes to be used for health, health-related and health-related educational purposes in the community in which the Jeanes Property is located. The Jeanes Affiliation Agreement governs the affiliation between the Parent and Jeanes. The Jeanes Lease expires on June 30, 2046 but is renewable for additional 10 year terms after the first 20 years (which triggered on June 30, 2016) for a rolling 50 year period so long as Jeanes is a tenant in good standing. The annual rent is $1.00. The Jeanes Lease restricts the use of the Jeanes Property to health, health-related and health-related educational purposes in the community in which the Jeanes Property is located. Defaults under the Jeanes Lease include, but are not limited to, failure to pay rent, bankruptcy, breach of the Jeanes Affiliation Agreement (which generally relate to governance issues, a change of purpose or a change of use of Jeanes Hospital) and a breach of the Income Agreement.

The Jeanes Lease provides that Jeanes may grant a leasehold mortgage to secure financing provided that the leasehold mortgagee agrees to be bound by the terms of the Jeanes Lease, except those relating to use and governance. While FFC's remedies upon a default by Jeanes include specific performance, injunctive relief and damages, FFC can dispossess Jeanes only if (i) following notice and meetings between Jeanes and FFC, it concludes that further meetings would be unproductive and (ii) such notices occur twice within ten years.

At the time it became a member of the Obligated Group in 2005, Jeanes granted a leasehold mortgage on its interest in the Jeanes Property to the Trustee. The Trustee, as leasehold mortgagee, can foreclose and, except as stated below, can continue to lease the Jeanes Property on the same terms. The Jeanes Lease provides that the leasehold mortgagee has six months to cure defaults, but has no obligation to cure defaults relating to use violations. It further provides that if the tenant provided by the leasehold mortgagee following a foreclosure action is not a 501(c)(3) organization, the rent to be paid will be a fair market rent.

Debt Service Reserve Fund

The 2017 Bonds will additionally be secured by the 2017 Debt Service Reserve Fund created under the Fourteenth Supplement. Upon delivery of the 2017 Bonds, there will be deposited an amount in the 2017 Debt Service Reserve Fund equal to the 2017 Bonds Debt Service Reserve Fund Requirement. The Members of the Obligated Group may satisfy the 2017 Bonds Debt Service Reserve Fund Requirement by replacing the funds deposited in the 2017 Debt Service Reserve Fund with a Credit Facility as provided in the Loan and Trust Agreement. See Appendix "C" hereto.

Moneys on deposit in the 2017 Debt Service Reserve Fund are to be transferred by the Trustee to the account in the Debt Service Fund for the 2017 Bonds to the extent the amounts therein on the dates specified in the Fourteenth Supplement are less than the amounts required to be deposited therein by the Members of the Obligated Group on such dates.

The moneys in the 2017 Debt Service Reserve Fund and any investments (or Credit Facility) held as a part of such Fund shall be held in trust and, except as otherwise provided, shall be applied by the Trustee solely to the payment of the principal (including sinking fund installments) of and interest on the 2017 Bonds and shall not secure any other Obligations under the Loan and Trust Agreement.

Existing Obligations

The 2017 Bonds will be equally and ratably secured with the other Obligations now or hereafter issued under or secured by the Loan and Trust Agreement, except as otherwise set forth herein. The Authority's Hospital Revenue Bonds (Temple University Health System Obligated Group), Series A of 2012 (the "2012A Bonds"), outstanding in the aggregate principal amount of $219,210,000, the unrefunded portion of the 2012B Bonds, outstanding in the aggregate principal amount of $9,470,000, and the revolving credit facility issued by PNC Bank under the Thirteenth Supplement for the benefit of the Obligated Group, in the maximum amount of $25,000,000 (the "PNC Line of Credit"), will be the only Obligations issued or secured under the Loan and Trust Agreement which will remain outstanding after the issuance of the 2017 Bonds.

Additional Indebtedness

The Loan and Trust Agreement permits the issuance of additional indebtedness of the Obligated Group, including Bonds, Parity Debt and Guarantees (as such terms are defined in the Loan and Trust Agreement) issued on a parity with the 2017 Bonds and the other Obligations currently outstanding, provided the Obligated Group satisfies certain requirements concerning the issuance of such indebtedness, including the delivery of an executed supplemental agreement to the Loan and Trust Agreement providing for the payment of and terms of any such Obligations and such certificates, documents, instruments and opinions as required under the Loan and Trust Agreement and by the Trustee thereunder.

Certain Transfers Under the Loan and Trust Agreement

Under the Loan and Trust Agreement, each Obligated Group Member may transfer Current Assets (as defined in the Loan and Trust Agreement to include cash, securities and certain other assets) to another Obligated Group Member without restriction. In addition, each Obligated Group Member may transfer Current Assets outside the Obligated Group under certain circumstances and subject to certain conditions set forth in the Loan and Trust Agreement. One such provision allows the Obligated Group to transfer Current Assets to any person if an officer's certificate is delivered to the Trustee demonstrating that the long-term debt service coverage ratio for the most recent fiscal year for which audited financial statements are available, calculated in accordance with the Loan and Trust Agreement (after deducting the amount of the proposed transfer from Income Available for Debt Service), would have been at least 1.10 or would not have been reduced by more than 10% as a result of such transfer and if the purpose of such transfer is to support, sponsor or develop health care-related activities. See "BONDHOLDERS' RISKS – Factors That Could Affect the Future Financial Condition of the Obligated Group – Advances and Transfers to Affiliates and Other Obligations" herein. The Loan and Trust Agreement also governs transfers of other assets of the Obligated Group, additions and withdrawals of Members and other matters.

Amendments to Loan and Trust Agreement

In connection with the issuance and delivery of the 2017 Bonds, certain amendments will be made to the Loan and Trust Agreement. The Amendments shall be effective upon delivery to the Trustee of the Required Consent. **The initial purchasers of the 2017 Bonds by their purchase and acceptance of the 2017 Bonds shall be deemed to have approved and irrevocably consented to the Amendments, which consent shall be binding upon present and future holders of the 2017 Bonds.** See "SUBSTITUTION OF SECURITY" and Appendix "C" – "SUMMARIES OF CERTAIN PROVISIONS OF THE LOAN AND TRUST AGREEMENT, FOURTEENTH SUPPLEMENT, INCLUDING LOAN AND TRUST AGREEMENT AMENDMENTS – AGREEMENT AMENDMENTS" herein for a description of the amendments to the Loan and Trust Agreement.

The 2017 Bonds will together represent 48.11% of the aggregate principal amount of the Obligations Outstanding under the Loan and Trust Agreement on the date of delivery of the 2017 Bonds. Prior to or simultaneously with the issuance of the 2017 Bonds, the Obligated Group is also expected to receive the consent of PNC Bank, as holder of the note issued and delivered under the Thirteenth Supplement which evidences the Obligated Group's obligations under the PNC Line of Credit, and, as a result of the deemed consent of the holders of the 2017 Bonds and the receipt of PNC Bank's consent, the Obligated Group expects to have received the Required Consent (in the amount of 53.23% of the holders of the Outstanding Obligations). Upon delivery to the Trustee of the Required Consent, the Amendments will become effective.

In accordance with Financial Accounting Standards Board Accounting Standard Update 2016-02, Leases (Topic 842) ("ASU 2016-02"), effective for the Fiscal Year beginning July 1, 2019, the Health System will classify each lease under which it is a lessee as a "finance lease" or as an "operating lease," and will account for leases in its financial statements in the manner prescribed by ASU 2016-02. The Health System does not believe that implementation of ASU 2016-02 will have a material effect on its financial statements or its calculations of debt service coverage. However, in order to clarify that the term "Debt" in the Loan and Trust Agreement will include "finance leases" but exclude "operating leases," the Health System intends to amend the definition of "Debt" in the Loan and Trust Agreement as described in Appendix "C" – "SUMMARIES OF CERTAIN PROVISIONS OF THE LOAN AND TRUST AGREEMENT, FOURTEENTH SUPPLEMENT, INCLUDING LOAN AND TRUST AGREEMENT AMENDMENTS." The foregoing amendment shall be effective upon delivery to the Trustee of the Required Consent. **The initial purchasers of the 2017 Bonds by their purchase and acceptance of the 2017 Bonds shall be deemed to have approved and irrevocably consented to the foregoing amendment, which consent shall be binding upon present and future holders of the 2017 Bonds.**

SUBSTITUTION OF SECURITY

The Loan and Trust Agreement provides that in connection with any merger, consolidation, member substitution or similar transaction involving an affiliation of the Obligated Group with an entity or entities subject to an existing master trust indenture or similar financing document, the pledge of Gross Receipts securing the Obligations shall be terminated upon presentation to the Trustee of the following:

(i) a direction by the Obligated Group Agent that a substitution of security as contemplated by the Loan and Trust Agreement will take effect and setting forth the effective date of such change;

(ii) master indenture notes or similar obligations (the "Substitute Security") issued by the Obligated Group or a surviving, resulting or transferee entity meeting the requirements for the addition of members to the Obligated Group as described in Appendix "C" – "SUMMARIES OF CERTAIN PROVISIONS OF THE LOAN AND TRUST AGREEMENT, FOURTEENTH SUPPLEMENT, INCLUDING LOAN AND TRUST AGREEMENT AMENDMENTS – "Additional Obligated Group Members" (the "Substitute Obligated Group") under and pursuant to and secured by a master trust indenture or similar financing document (the "Substitute Security Document") executed by the Obligated Group or any Substitute Obligated Group, and any other parties named therein (collectively, the "New Group") and an independent corporate trustee (the "New Trustee") (which may be the Trustee) meeting the eligibility requirements of the Trustee as set forth in the Loan and Trust Agreement, which Substitute Security has been duly authenticated by the New Trustee;

(iii) the Substitute Security Document, which shall contain the agreement of each member of the New Group (i) to become a member of the New Group and thereby to become subject to compliance with all provisions of the Substitute Security Document and the Loan and Trust Agreement, and (ii) unconditionally and irrevocably (subject to the right of such Person to cease its status as a member of the

New Group pursuant to the terms and conditions of the Substitute Security Document and the Loan and Trust Agreement) to jointly and severally make payments upon each Obligation, including the Substitute Security, issued under the Substitute Security Document at the times and in the amount provided in each such obligation;

(iv) evidence that the ratings, if any, on Obligations following the substitution of the Substitute Security for the pledge of Gross Receipts will be the same as or better than the ratings on such Obligations prior to the substitution of the Substitute Security;

(v) an Opinion of Bond Counsel that the replacement of the pledge of Gross Receipts with the pledge of the Substitute Security to secure the Obligations will not, in and of itself, adversely affect the validity of any Obligations or any exemption for the purposes of federal income taxation to which interest on such Obligations would otherwise be entitled;

(vi) an Opinion of Counsel to the Obligated Group that the conditions set forth in this section for the termination of the pledge of Gross Receipts and the substitution of the Substitute Security to secure the Obligations have been met and that, as of the date of such termination and substitution, no Event of Default shall have occurred and be continuing under the Loan and Trust Agreement or the Substitute Security Document;

(vii) so long as the Bonds are Outstanding, an Officer's Certificate stating that, upon delivery of the Substitute Security and the Substitute Security Document, either:

(A) each rating agency then maintaining a rating on the 2017 Bonds provides written confirmation to the effect that the most recent or next long-term rating assigned to the 2017 Bonds by each such rating agency is or will be no less than "BBB+" or its equivalent; or

(B) the Substitute Security Document contains a pledge of Gross Receipts of the current Members of the Obligated Group substantially similar in scope to the pledge of Gross Receipts established under the Loan and Trust Agreement; and

(viii) such other opinions and certificates as the Trustee may reasonably require, together with such reasonable indemnities as the Trustee may request.

In connection with any merger, consolidation, member substitution or similar transaction involving an affiliation of the Obligated Group with an entity or entities subject to an existing master trust indenture or similar financing document as described above, the provisions of the Loan and Trust Agreement regarding requirements for the addition of an Obligated Group Member shall be deemed inapplicable.

The Amendments provide that upon the effectiveness of the Substitute Security Document, the provisions relating to the security interest in the Gross Receipts and certain restrictions on the Obligated Group, including but not limited to those relating to, additional indebtedness, the rate covenant, the Days-Cash-On-Hand covenant and transfers of Current Assets, will be terminated and one or more of the Mortgages may be released.

BOOK-ENTRY ONLY SYSTEM

The following information concerning DTC and DTC's book-entry only system has been obtained from DTC. The Authority, the Underwriters, the Members of the Obligated Group and the Trustee make no representation as to the accuracy of such information.

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the 2017 Bonds. The 2017 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered certificate will be issued for each maturity of 2017 Bonds, in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has Standard & Poor's rating of AA+. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2017 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2017 Bonds on DTC's records. The ownership interest of each actual purchaser of each 2017 Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2017 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in 2017 Bonds, except in the event that use of the book-entry only system for the 2017 Bonds is discontinued.

To facilitate subsequent transfers, all 2017 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of 2017 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2017 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2017 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory

requirements as may be in effect from time to time. Beneficial Owners of 2017 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2017 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the 2017 Bond documents. For example, Beneficial Owners of 2017 Bonds may wish to ascertain that the nominee holding the 2017 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the 2017 Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to 2017 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2017 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal of and interest on the 2017 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the Trustee on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, the Authority or the Obligated Group, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee; disbursement of such payments to Direct Participants will be the responsibility of DTC and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the 2017 Bonds at any time by giving reasonable notice to the Authority or the Trustee. Under such circumstances, in the event that a successor securities depository is not required under the Loan and Trust Agreement or obtained, 2017 Bond certificates are required to be printed and delivered in accordance with the Loan and Trust Agreement.

The Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or successor securities depository). In that event 2017 Bond certificates will be printed and delivered to DTC.

The information set forth hereinabove in this section concerning DTC and DTC's book-entry system has been obtained from DTC and the Authority and the Obligated Group take no responsibility for the accuracy thereof.

THE AUTHORITY, THE OBLIGATED GROUP AND THE TRUSTEE WILL HAVE NO RESPONSIBILITY OR OBLIGATION TO THE DIRECT PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE ACCURACY OF THE RECORDS OF DTC, ITS NOMINEE OR ANY DIRECT PARTICIPANT PERTAINING TO OWNERSHIP OF THE 2017 BONDS OR THE PAYMENTS TO, OR THE PROVIDING OF NOTICE FOR, TO THE DIRECT PARTICIPANTS, OR THE INDIRECT PARTICIPANTS OR THE BENEFICIAL OWNERS.

The Authority may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, 2017 Bond certificates will be printed and delivered to DTC.

THE PLAN OF FINANCE

Proceeds of the 2017 Bonds, together with other available funds, will be used to finance the costs of (i) the current refunding of all or a portion of the 2007A Bonds, the 2007B Bonds and the 2012B Bonds (collectively, the "Refunded Bonds"); (ii) funding a deposit to the debt service reserve fund for the 2017 Bonds; and (iii) paying the costs of issuance of the 2017 Bonds.

The following table sets forth the dated date, original principal amount, maturities being refunded, principal amount being refunded, CUSIP numbers, redemption dates and redemption premiums of the Refunded Bonds.

Series	Dated Date	Original Principal Amount	Maturities Being Refunded	Principal Amount Being Refunded	CUSIP Number (717903)*	Redemption Date	Redemption Premium
2007A Bonds	08/16/07	$66,700,000	07/01/30	$66,700,000	C48	11/24/17	0%
		84,130,000	07/01/34	84,130,000	C55	11/24/17	0%
		$150,830,000		$150,830,000			
2007B Bonds	08/17/07	$7,025,000	07/01/22	$7,025,000	D47	11/24/17	0%
		41,470,000	07/01/26	41,470,000	D54	11/24/17	0%
		$48,495,000		$48,495,000			
2012B Bonds	07/02/12	$56,605,000	07/01/23	$56,605,000	J74	11/24/17	0%
				$255,930,000			

Upon the issuance of the 2017 Bonds, a portion of the proceeds of the 2017 Bonds will be deposited in escrow with the trustee for the Refunded Bonds in an amount which, together with other funds available therefor and interest earnings thereon, will be sufficient to pay the redemption price of and interest on the Refunded Bonds to the respective redemption dates identified above. See "VERIFICATION" herein.

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ESTIMATED SOURCES AND USES OF FUNDS

Sources of Funds:

Principal Amount of the 2017 Bonds	$235,240,000.00
Plus Original Issue Premium	27,365,237.35
Other Available Funds*	26,139,166.17
Total Sources of Funds	$288,744,403.52

Uses of Funds:

Redemption of Refunded Bonds	$261,508,981.35
Deposit to 2017 Debt Service Reserve Fund	23,524,000.00
Costs of Issuance†	3,711,422.17
Total Uses of Funds	$288,744,403.52

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* Includes funds on hand in the debt service funds and debt service reserve funds established in connection with the issuance of the Refunded Bonds.

† Includes Underwriters' discount, legal fees, financial advisory fees, auditor fees, verification agent fees, Authority fees and expenses, fees and expenses of the Trustee, rating agency fees, printing costs and other fees associated with the transaction.

ANNUAL DEBT SERVICE REQUIREMENTS

The following table shows a schedule of principal and interest requirements on the 2017 Bonds, and the principal, interest and sinking fund requirements on the other indebtedness of the Health System outstanding after issuance of the 2017 Bonds for each Fiscal Year ending June 30.

Fiscal Year	Principal and Interest on Existing Indebtedness*	Principal on 2017 Bonds	Interest on 2017 Bonds	Total Debt Service on 2017 Bonds	Aggregate Debt Service
2018	$38,432,805	-	$1,927,661	$1,927,661	$40,360,466
2019	27,911,589	-	11,762,000	11,762,000	39,673,589
2020	17,098,421	$6,440,000	11,601,000	18,041,000	35,139,421
2021	15,866,080	5,505,000	11,302,375	16,807,375	32,673,455
2022	14,348,766	5,680,000	11,022,750	16,702,750	31,051,516
2023	12,965,320	13,095,000	10,553,375	23,648,375	36,613,695
2024	12,924,891	10,690,000	9,958,750	20,648,750	33,573,641
2025	12,911,415	14,195,000	9,336,625	23,531,625	36,443,040
2026	12,911,415	14,920,000	8,608,750	23,528,750	36,440,165
2027	12,911,415	15,685,000	7,843,625	23,528,625	36,440,040
2028	12,911,415	15,385,000	7,066,875	22,451,875	35,363,290
2029	12,911,415	16,170,000	6,278,000	22,448,000	35,359,415
2030	12,911,415	16,995,000	5,448,875	22,443,875	35,355,290
2031	12,911,415	17,950,000	4,575,250	22,525,250	35,436,665
2032	12,330,563	18,830,000	3,655,750	22,485,750	34,816,313
2033	12,330,563	19,800,000	2,690,000	22,490,000	34,820,563
2034	12,330,563	20,820,000	1,674,500	22,494,500	34,825,063
2035	12,330,563	23,080,000	577,000	23,657,000	35,987,563
2036	34,022,813	-	-	-	34,022,813
2037	34,016,172	-	-	-	34,016,172
2038	34,024,719	-	-	-	34,024,719
2039	34,023,953	-	-	-	34,023,953
2040	34,014,797	-	-	-	34,014,797
2041	34,022,188	-	-	-	34,022,188
2042	34,011,063	-	-	-	34,011,063
2043	34,025,797	-	-	-	34,025,797
Totals	**$551,411,526**	**$235,240,000**	**$125,883,161**	**$361,123,161**	**$912,534,687**

* Includes debt service on all outstanding debt of the Health System, including the Obligations outstanding under the Loan and Trust Agreement (other than Obligations being refunded with the proceeds of the 2017 Bonds, and the PNC Line of Credit) and approximately $1,000,000 of annual payments due through Fiscal Year 2031 with respect to other loans and capitalized leases of the Health System not secured under the Loan and Trust Agreement.

BONDHOLDERS' RISKS

The following is intended only as a summary of certain risk factors attendant to an investment in the 2017 Bonds and is not intended to be exhaustive. In order to identify risk factors and make informed investment decisions, potential investors should be thoroughly familiar with the entire Official Statement (including each Appendix) in order to make a judgment as to whether the 2017 Bonds are an appropriate investment. **The risk factors discussed below should be considered in evaluating the ability of the Obligated Group to make payments in amounts sufficient to meet their obligations under the Loan and Trust Agreement. This discussion is not, and is not intended to be, exhaustive.**

Factors That Could Affect the Future Financial Condition of the Obligated Group

General. The health care industry is highly dependent on a number of factors that may limit the ability of the Obligated Group Members to meet their obligations under the Loan and Trust Agreement, a number of which are beyond the control of the Obligated Group Members. Among other things, participants in the health care industry are subject to significant regulatory requirements of federal, state and local governmental agencies and independent professional organizations and accrediting bodies, technological advances and changes in treatment modes, various competitive factors and changes in third party reimbursement programs. Discussed below are certain of these factors which could have a significant impact on the future operations and financial condition of the Obligated Group Members.

The descriptions set forth below of certain governmental policies affecting health care and other matters are not intended as a complete discussion of all aspects of laws and regulations and such other matters that may affect the financial performance of health care providers. Health care providers operate in a complicated regulatory environment, many aspects of which may adversely affect the revenues and operations of such providers. Recent federal health care reform legislation is expected to profoundly change, over the next several years, many aspects of the operations and finances of health care providers; these changes are not yet fully developed, implemented, or understood and could be influenced by future legislative, regulatory and judicial action and interpretation. The Hospitals are health care providers which derive significant portions of their revenues from Medicare, Medicaid, Independence Blue Cross ("Blue Cross"), HMOs and other third party payor programs. The Hospitals are subject to governmental regulation applicable to health care providers and the receipt of future revenues by the Hospitals is subject to, among other factors, federal and state policies affecting the health care industry and other conditions which are impossible to predict. Such conditions may include limits on increasing charges and fees charged by the Hospitals, changes in federal and state laws and regulations affecting payments for health services, the continued increase in managed care or development of new third-party payment policies which reduce revenues, increased competition from other health care providers, and changes in demand for health services. The receipt of future revenues by the Hospitals is also subject to demand for the Hospitals' services, the ability to provide the services required by patients, physicians' relationships with the Health System and management capabilities, the design and success of the Health System's strategic plans, economic developments in the service area, the Hospitals' ability to control expenses, maintenance by the Health System of relationships with HMOs and other third party payor programs, costs, third-party reimbursement, legislation and governmental regulation, receipt of private contributions, continued funding by the Commonwealth of Pennsylvania for medically indigent patient care, future economic conditions, and other conditions which are impossible to predict.

No assurances can be given that patient utilization or revenues available to the Hospitals from their operations will remain stable or increase. The Hospitals expect that they will experience increases in operating costs due to inflation and other factors. There is no assurance that cost increases will be matched by increased patient revenue in amounts sufficient to generate an excess of revenues over expenses. Recent domestic and global economic developments could continue to have a number of

negative effects on the health care industry generally. Changes in the economic condition of the United States may affect operations of health care providers, including the Health System, by: increasing pressure on the federal and state governments to control funding for Medicare and Medicaid (a significant source of the revenue of the Health System); increasing pressure on payors generally (including the federal and state governments with respect to Medicare and Medicaid but also including private payors) to limit reimbursement rates, increase individuals' contributions through copays or deductibles, and reduce utilization, particularly inpatient utilization; increasing numbers of uninsured or underinsured patients due to job loss or reductions in benefits and thus increasing (at least in the short term) uncompensated care; and decreases in charitable giving.

Obligated Group Members. On the date of issuance of the 2017 Bonds, the Obligated Group Members under the Loan and Trust Agreement will be Temple University Hospital, the Parent, Jeanes, Temple Transport, TPI, AOH, ICR, FCCCMG and the Network. The Loan and Trust Agreement provides that Temple University Hospital may not withdraw from the Obligated Group while any Obligations are Outstanding. Although all of the Members of the Obligated Group are required to assume joint and several liability for the payment of the 2017 Bonds, together with all other Obligations issued under the Loan and Trust Agreement, the enforceability of such assumption of joint and several liability may be limited under the Federal Bankruptcy Code or the Pennsylvania Uniform Fraudulent Transfer Act if the Obligated Group Member was insolvent or undercapitalized or intended to, or believed it would, incur debts beyond its ability to pay such debts as they come due at the time of (or become insolvent, undercapitalized or unable to pay maturing debts by reason of) such assumption of joint and several liability and did not receive "reasonably equivalent value" therefor.

Fox Chase Entities. Fox Chase Cancer Center is a direct and pass-through recipient of National Cancer Institute ("NCI") funding. Funding from the National Institutes of Health, including NCI funding, comprised approximately 6% of operating revenues for FCCC in 2016. NCI is an Institute of the National Institutes of Health under the auspices of the United States Department of Health and Human Services ("HHS"). Fox Chase Cancer Center is one of only forty-nine institutions nationally to earn the designation of a Comprehensive Cancer Center. The Comprehensive designation and the Cancer Center Support Grant ("CCSG") were renewed for a five-year period effective August 1, 2016. The Fox Chase Cancer Center CCSG is currently in its 51st year of consecutive funding. The next CCSG renewal application is due September 25, 2020. Drafting this renewal proposal will commence in October 2019, as it typically takes a one year period to craft, edit and compose properly an application of this significance.

Cancer centers have developed in many different organizational settings, reflecting considerable diversity in the size and complexity of their research emphases. Whether organized as a freestanding center, a center matrixed within an academic institution, or a formal research based consortium under centralized leadership, all centers are judged by the same scientific, organizational, and administrative criteria. NCI recognizes two general categories of centers: (i) *Cancer Centers* have a scientific agenda primarily focused on basic laboratory, clinical, and prevention, cancer control, and population-based research; or some combination of these areas. All areas of research are linked collaboratively. While not all basic findings require a translational endpoint, basic laboratory Centers develop linkages with other institutions that will foster application of laboratory findings for public benefit where appropriate; and (ii) *Comprehensive Cancer Centers* demonstrate reasonable depth and breadth of cancer research activities in each of three major areas: basic laboratory; clinical; and prevention, control and population-based science. Comprehensive Cancer Centers also have substantial transdisciplinary research that bridges these scientific areas. They are effective in serving their catchment area, as well as the broader population, through the cancer research they support. They integrate training and education of biomedical researchers and community health care professionals into programmatic efforts to enhance the scientific mission and potential of the Center.

Fox Chase Cancer Center is also the recipient of other grants and contracts from other agencies of the U.S. Government. Grants and contracts support basic, translational and clinical research. Fox Chase Cancer Center has no assurance that it will continue to receive funding at current levels and the near-term prospects for significant increases in U.S. Government grants and contracts are doubtful. If these near term prospects do not improve over the longer term and Fox Chase Cancer Center does not increase its share of awards, or obtain other funds to support these activities, the operating losses associated with the research activities could materially increase.

Advances and Transfers to Affiliates and Other Obligations. The Loan and Trust Agreement permits the Obligated Group Members to transfer Current Assets (cash, securities and certain other assets) within the Obligated Group without restriction, and outside the Obligated Group (including transfers by Temple University Hospital to the Temple University Health System Foundation (the "System Foundation") subject to certain conditions and exceptions. See "SECURITY AND SOURCES OF PAYMENT FOR THE 2017 BONDS – Certain Transfers Under the Loan and Trust Agreement". The System Foundation is not a Member of the Obligated Group and as such its assets which consist of endowment funds are available to be transferred or pledged without any restriction relating to the 2017 Bonds.

Reimbursement from Third Parties Generally

Most of the patient service revenue of the Hospitals is derived from third party payors, which reimburse or pay for the services provided to patients covered by such third parties for such services. Such payors include, among others, the federal Medicare program ("Medicare"), the Pennsylvania Medical Assistance Program ("Medicaid"), Blue Cross, and other third-party payors such as health maintenance organizations ("HMOs"), employers under self-insurance programs, commercial insurers and preferred provider organizations. Most of these programs and payors, some of which are described in greater detail below, make payments at rates other than the provider's direct charges or at rates which are determined other than on the basis of the actual costs incurred in providing services to such patients. Accordingly, there can be no assurance that payments made under such programs and by such payors will be adequate to cover actual costs incurred. In addition, the financial performance of the Hospitals could be adversely affected by the insolvency of, or other delay in receipt of payments from, third-party payors which provide coverage for services to patients. Based upon discharges for the Fiscal Year ended June 30, 2017, the Health System's Hospital Group, inpatient acute care activity is composed of approximately 44% from Medicare, 37.4% from Medicaid, 12.2% from Blue Cross, 6.1% from HMOs/preferred provider organizations and 0.3% from other sources.

Impact of Current Economic Conditions and Recent Federal Legislation

General. In recent years, the economies of the United States and other countries have experienced severe disruption, prompting a number of banks and other financial institutions to seek additional capital, including capital provided through the federal government, to merge, and, in some cases, to cease operations. These events collectively have led to reductions in lending capacity and the extension of credit, erosion of investor confidence in the financial sector, and historically aberrant fluctuations in interest rates. This disruption of the credit and financial markets has led to volatility in the securities markets, losses in investment portfolios, increased business failures and consumer and business bankruptcies, and has been a major cause of the most recent economic recession.

In each year since 2008, federal legislation and regulatory and other initiatives have been established and or implemented by agencies of the federal government and the Federal Reserve Board with the objective of stabilizing the financial markets by enhancing liquidity, providing additional capital to the financial sector and improving the performance and efficiency of credit markets. Other legislation

is pending or under active consideration by Congress, and additional regulatory action is being considered by various federal agencies and the Federal Reserve Board and foreign governments are implementing actions, all of which are intended to continue and strengthen efforts to restore the domestic and global credit markets. It is unclear whether these legislative, regulatory and other governmental actions will have the positive effect that is intended.

The health care sector has been materially adversely affected by these developments. The consequences of these developments have generally included realized and unrealized investment portfolio losses, reduced investment income, limitations on access to the credit markets, difficulties in extending existing or obtaining new liquidity facilities, difficulties in rolling maturing commercial paper and remarketing revenue bonds subject to tender, requiring the expenditure of internal liquidity to fund principal payments on commercial paper or tenders of revenue bonds, and increased borrowing costs.

The current economic conditions may also adversely affect the operations of the Hospitals as a result of, among other factors, increases in the number of uninsured patients or deferral of elective medical procedures. Economic conditions are adversely affecting revenue available to the Commonwealth of Pennsylvania and increasing expenses under various Commonwealth programs, including Medicaid. Stresses on the Commonwealth of Pennsylvania's budget, and potential delays in approving the final budget from year to year, may result in delays of payments due under Medicaid and other state programs and reductions in payments or changes in eligibility for Medicaid or other Commonwealth programs. The Commonwealth's final budget may have a material adverse effect on the financial condition of the Hospitals.

Federal Budget Cuts. On August 3, 2011, President Obama signed the Budget Control Act of 2011 (the "Budget Control Act"), which mandated significant reductions and spending caps on the federal budget for fiscal years 2012 through 2021. The Budget Control Act also created the Joint Select Committee on Deficit Reduction (the "Committee"), which was tasked with making recommendations no later than November 23, 2011 to further reduce the federal deficit by $1.5 trillion. As a result of the failure by the Committee to act before the mandated deadline, a 2% reduction in Medicare spending, among other reductions, began in early 2013.

The Bipartisan Budget Act of 2015 further increased the discretionary spending caps imposed by the Budget Control Act for fiscal years 2016 and 2017 and authorized $80 billion in increased spending over the two years. The Bipartisan Budget Act of 2015 also extended the 2% reduction to Medicare providers and insurers to at least March 31, 2025, and suspended the limit on the federal government's debt until March 2017. Although the March 2017 deadline had passed, the Treasury Department undertook measures to allow the government to continue making debt payments until mid-October. These measures allowed the Treasury to reduce certain types of government debt and continue paying the government's bills in full. In September 2017, Congress further delayed the deadline by passing a bill that extended government funding and the federal borrowing limit until December 8, 2017.

Congress continues to debate potential adjustments to the sequestration required by the Budget Control Act and could take action to change the way that such sequestration is applied. The method for achieving federal deficit reduction has been intensely debated, with significant disagreement among the Senate, the House and the President. In May 2017, the White House released its budget proposal for the 2018 fiscal year, which contains a $610 billion cut to Medicaid over the next decade, an 18% reduction in budget for the National Institutes of Health and a 17% decrease in the Center for Disease Control and Prevention. It is uncertain whether this budget will be approved by Congress. As a result, potential Congressional actions relating to deficit reduction are uncertain at this time. Federal entitlement programs face substantial cuts due to the nature and extent of the deficit problem. Such cuts may have an adverse effect on the financial condition of the Hospitals, which effect could be material.

Regulation of the Health Care Industry

General. The Hospitals and the health care industry in general are subject to regulation by a number of federal, state and local government agencies and private agencies, including those that administer the Medicare and Medicaid programs. Changes in the structure of the Medicare and Medicaid payment systems, as well as potential limitations on payments from governmental and other third party payors, could potentially have an adverse effect on the results of operations of the Hospitals. Actions by governmental agencies concerning the licensure and certification of the facilities operated by the Hospitals or the initiation of audits and investigations concerning billing practices or physician relationships could also potentially have an adverse effect on the results of operations of the Hospitals.

ARRA. In February 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009 ("ARRA"). ARRA includes several provisions intended to provide financial relief to the health care sector and also establishes a framework for the implementation of a nationally-based health information technology program, including incentive payments to health care providers to encourage implementation of certified health information technology and "meaningful use" of electronic medical records. Health care providers demonstrate their meaningful use of electronic health records by meeting objectives specified by CMS for using health information technology and by reporting on specified clinical quality measures. Medicare payments are significantly reduced for hospitals and physicians who have not satisfied the performance and reporting criteria for demonstrating meaningful use. The Hospitals are currently in compliance with these requirements. Failure to maintain such compliance, however, could result in a significant reduction in Medicare payments for the Hospitals.

Health Care Reform. With the election of President Donald Trump in November 2016, and the Republicans maintaining control over a majority of the House of Representatives and Senate, the health care industry expects significant change to federal health care laws and regulations that will impact reimbursement and the delivery of care, including the possible repeal of all or a portion of the Patient Protection and Affordable Care Act enacted in March 2010, as amended (the "Affordable Care Act). The Affordable Care Act introduced substantial changes in the United States health care system affecting the delivery of health care services, the financing of health care costs, reimbursement of health care providers and the legal and regulatory obligations of health insurers, providers, employers and consumers. Some of the provisions of the Affordable Care Act took effect immediately, while others are phased in over time, ranging from one year to ten years. Most of the significant healthcare coverage reforms began in 2014. The Affordable Care Act also led to the promulgation of substantial regulations with significant effects on the healthcare industry. The uncertainties regarding the continuation of the Affordable Care Act creates unpredictability and corresponding risk for the strategic and business planning efforts of health care providers and payors, including the Obligated Group.

As of September 2017, the Republican Congress has introduced numerous bills and plans for the repeal and replacement of the Affordable Care Act. Those plans call for substantial reduction in federal spending over the next ten years primarily related to the termination of federal funding for the expanded eligibility for Medicaid coverage by the states provided for in the Affordable Care Act. The Congressional Budget Office has predicted that many millions of American citizens may lose their coverage if some of the plans are adopted and implemented. If and when those changes are adopted and addressed by the states, hospitals and managed care providers in urban areas serving large Medicaid populations will be deeply impacted by the federal expenditure cuts unless the states maintain the programs notwithstanding the federal reimbursement cuts.

If the efforts to repeal the Affordable Care Act are unsuccessful, health care providers will still face financial challenges. The Affordable Care Act authorizes at least two commissions that are authorized to recommend changes in Medicare services, rates, and premiums. Health care providers

likely will be further subject to decreased reimbursement as a result of implementation of recommendations of the Medicare payment advisory board, whose directive is to reduce Medicare (and Medicaid) cost growth if, beginning in 2014, the Centers for Medicare and Medicaid Services ("CMS") determines that the spending growth rate exceeds a statutorily prescribed target. The advisory board's recommended reductions would be automatically implemented unless Congress adopts alternative legislation that meets equivalent savings targets.

Many private payors, particularly Medicare Advantage Plans, base their reimbursement rates on Medicare rates. A decrease in Medicare rates could result in the decrease of other payors' rates. Industry experts also expect that government cost reduction actions may be followed by private insurers and payors. As payors increase their bargaining power by increasing the share of healthcare payments controlled by them, they are likely to seek and obtain more onerous terms from healthcare providers. The Affordable Care Act states that the antitrust laws are not modified to allow healthcare providers to respond to the payors' increased market power.

The Affordable Care Act or its replacement programs likely will affect some hospitals and other health care providers differently from others, depending, in part, on how each hospital and provider adapts to any legislation's anticipated emphasis on directing more federal health care dollars to integrated provider organizations and providers with demonstrable achievements in quality care. The Affordable Care Act proposes a value-based purchasing system for hospitals under which a percentage of payments will be contingent on satisfaction of specified performance measures related to common and high-cost medical conditions, such as cardiac, surgical and pneumonia care. These programs are also being adopted by the commercial payors and are most likely to continue in some form under any federal health care reform plan.

The Affordable Care Act authorizes many different types of demonstration programs and cost-saving measures. Various agencies are authorized to implement the measures that appear to be worthwhile (in terms of increasing quality, reducing or right-sizing services, and reducing or not increasing governmental payments). Many of the programs and measures appear to be similar to the "capitated risk model" HMOs that historically were not positively embraced by patients. The Affordable Care Act authorizes demonstration programs and pilot projects, and other voluntary programs, to evaluate and encourage new provider delivery models and payment structures, including "accountable care organizations" and bundled provider payments. Various initiatives to "bundle payments" to include activities and care provided both pre- and post-hospitalization and to include services provided by all physicians and other health care providers in the designated time period and for a designated incidence of care could have the overall effect of reducing total payments to all providers, including to hospitals. The outcomes of these projects and programs, including the likelihood of their being made permanent or expanded under further health care reform programs or their effect on providers' financial performance, cannot be predicted.

The Affordable Care Act expands criminal, civil and administrative anti-fraud statutes, and increases funding for enforcement and efforts to recoup prior federal health care payments to providers. These programs are most likely to continue under new health care reform initiatives and the enforcement may increase. Under the Affordable Care Act, a broad range of providers, suppliers and physicians are required to adopt a compliance and ethics program. While the government has already increased its enforcement efforts, failure to implement certain core compliance program features provide new opportunities for regulatory and enforcement scrutiny, as well as potential liability if an organization fails to prevent or identify improper federal health care program claims and payments.

Medicare Reimbursement and Related Federal Legislation

Congress has taken action regarding spending for these programs, limiting payments to hospitals under the programs, and encouraging competition. Further payment and similar limitations may be enacted and it is not possible at this time to predict the nature of the changes to be introduced. These and future changes could negatively affect the Hospitals.

The Affordable Care Act institutes multiple mechanisms for reducing the costs of the Medicare program, including the following:

- *Market Basket Reductions*. Generally, Medicare payment rates to hospitals are adjusted annually based on a "market basket" of estimated cost increases, which have averaged approximately 2-4% annually in recent years. The Affordable Care Act calls for reductions ranging from 0.10% to 0.75% each year through federal fiscal year 2019.

- *Market Productivity Adjustments*. The Affordable Care Act provides for "market basket" adjustments based on national economic productivity statistics. This adjustment is anticipated to result in an approximately 1% additional annual reduction to the "market basket" update.

- *Hospital Acquired Conditions Penalty*. Beginning in federal fiscal year 2015, Medicare inpatient payments to hospitals that are in the top quartile nationally for frequency of certain "hospital-acquired conditions" are reduced by 1% of what would otherwise be payable to each hospital for the applicable federal fiscal year.

- *Readmission Rate Penalty*. Medicare inpatient payments to each hospital are reduced based on the dollar value of that hospital's percentage of preventable Medicare readmissions for certain medical conditions.

- *DSH Payment*. Beginning in federal fiscal year 2014, Medicare payments to Disproportionate Share Hospitals ("DSH") (i.e. those hospitals that care for a disproportionate share of low-income beneficiaries) were modified such that 75% of DSH payments under the pre-Affordable Care Act formula were converted to a national pool (the "Uncompensated Care Pool") and the size of the pool is reduced each year to account for the reduction in the level of uninsured patients nationally. The payments from this pool are known as "Uncompensated Care" payments. By fiscal year 2017 this pool is projected to decrease by roughly 45 percent, from a pre-Affordable Care Act projected level of $10.8 billion to a projected actual fiscal year 2017 level of $6.0 billion. Consequently, Uncompensated Care payments to hospitals have and will continue to decrease. Temple University Hospital during this time period has seen its Fee-for-Service DSH payment decrease from $17,990,860 in federal fiscal year 2015 to $15,032,283 in fiscal year 2016. Medicare Advantage contracts are largely based on Medicare Fee-for-Service ("FFS") payment levels and therefore these DSH reductions impact reimbursements under those contracts as well.

Hospitals also receive payments from payors under the Medicare Advantage program. The Affordable Care Act includes significant changes to federal payments to Medicare Advantage plans. Payments to plans were frozen for federal fiscal year 2011 and thereafter reimbursement is to transition to benchmark payments tied to the level of fee-for-service spending in the applicable county. These reduced federal payments could in turn affect the scope of coverage of these plans or cause plan sponsors to negotiate lower payments to providers.

The Hospitals are analyzing the developments on both the federal and state level with respect to the Affordable Care Act and its repeal and/or replacement and will continue to do so in order to assess its effects on current and projected operations, financial performance and financial condition. However, management cannot predict with any reasonable degree of certainty or reliability any interim or ultimate effects of the legislation.

Medicare and Medicaid Reimbursement. Congress is currently engaged in intense debate over federal budget commitments, and, in particular, the extent of the government's financial commitment to the Medicare and Medicaid programs. Prospective changes in Medicare payments to hospitals, including the potential reduction of funding levels and the transition of Medicare enrollees into Medicare managed care plans, could have an adverse effect on each of the Hospitals' revenues. Medicare and Medicaid are the commonly used names for health care reimbursement or payment programs governed by certain provisions of the federal Social Security Act Amendments of 1965. The federal government, as the country's largest payer of health care services, uses reimbursement as a key tool to implement health care policies, to allocate health care resources and to control utilization, facility and provider development and expansion, and technology use and development. It is anticipated that health care reform legislation will continue these practices. These laws reflect the national policy that persons who are aged and persons who are poor should have access to medical care regardless of ability to pay.

Medicare provides certain health care benefits to beneficiaries who are 65 years of age or older, disabled, or qualify for Medicare's End Stage Renal Disease Program. Medicare Part A covers inpatient hospital, home health, nursing home care and certain other services, and Medicare Part B covers certain physicians' services, certain outpatient ancillary care services, medical supplies and durable medical equipment.

Medicare Part C, the Medicare Advantage program, enables Medicare beneficiaries to choose to obtain their benefits through a variety of private, managed care, risk-based plans.

Medicare Part D makes outpatient prescription drug benefits available to Medicare beneficiaries. The private Medicare Part D plans are funded through premium payments from enrolled Medicare beneficiaries and subsidies from the federal government. Enrollment is available on an ongoing and intermittent basis. While participation in the program is voluntary, those who wait to enroll beyond their initial point of eligibility are penalized with additional surcharges which increase over time. The Affordable Care Act includes changes to the Medicare Part D program, including the gradual reduction of the cost sharing burden by beneficiaries under Medicare Part D. Although Medicare Part D reimbursement does not cover inpatient prescriptions, changes in enrollment or program administration could affect the revenue of the Hospitals. Going forward, an expansion of coverage for outpatient pharmaceutical therapy may reduce admissions of the Hospitals or shift the characteristics of those patients that are admitted.

Medicare is administered by CMS, which delegates to the states the process for certifying those organizations to which CMS will make payment. The HHS's rule-making authority is substantial and the rules are extensive and complex. Substantial deference is given by courts to rules promulgated by HHS. Any adverse development or change in Medicare reimbursement could have a material adverse effect on the financial conditions and results of operation of the Obligated Group.

Medicare claims are processed by non-government organizations or agencies that contract to serve as the fiscal agent between providers and the federal government to locally process Medicare's Part A and Part B claims. These claims processors are known as "fiscal intermediaries" and "carriers." They apply the Medicare coverage rules to determine the appropriateness of claims. CMS selects organizations (generally insurance companies) to act as fiscal intermediaries and carriers in various states or regions,

and enters into a "prime contract" with each. Most Medicare hospital services are provided through a fixed rate per case program under the reimbursement methods described below. Some Medicare recipients, however, enroll in Medicare Advantage managed care plans, which reimburse providers on a contractually determined basis. Health care providers that participate in the Medicare program must agree to be bound by the terms and conditions of the program such as meeting the quality standards for rendering covered services and adopting and enforcing policies to protect patients from certain discriminatory practices.

The Health System participates in three payors' hospital pay-for-performance programs. While these programs are all slightly different they have the following common factors:

- They are all up-side only; there is no potential for the Health System to pay anything back to the payors under these programs.
- In each program the pool of available award dollars is based on a pre-negotiated percentage of the total annual revenue paid to each Health System hospital by that payor.
- Each program establishes a baseline performance level on the specific measurement categories that will be used at the beginning of a contract cycle; each year's results are then compared to the baseline and awards are made per the individual detailed weighting of each measure in the specific payors' program.
- Generally, these programs are negotiated at the time of contract renewal and last for the duration of the particular underlying fee-for-service contracts.
- Each program has its own metrics, but there are common metrics for all three programs including:
    - Rate of admission
    - Rate of hospital acquired infections
    - Compliance with nationally established Progression of Care Guidelines

Other measures included in these programs are:

- Total cost of care for members enrolled in the Health System's PCP practices (two out of three programs);
- Rate of avoidable admissions (two out of three);
- Length of stay (one program);
- Member satisfaction (one program); and
- Rate of low acuity emergency department visits (two out of three programs)

Based on current discussions, the Health System anticipates local third party payors will continue to expand pay for performance provisions and begin to look towards partial risk based agreements with downside risk in the near future.

Hospital Inpatient Services. Medicare payments for operating expenses incurred in the delivery of in-patient hospital services are based on a prospective payment system ("PPS") which essentially pays hospitals a fixed amount for each Medicare in-patient discharge based upon patient diagnosis and certain other factors used to classify each patient into a Diagnosis Related Group ("DRG") or a Medical Severity Diagnosis Related Group ("MS-DRG"). Each MS DRG is given a relative value from which a fixed payment can then be established. With limited exceptions, such payments are not adjusted for actual costs, variations in intensity of illness, or length of stay. MS-DRG rates are adjusted annually by the use of an "update factor" based on the projected increase in a market basket inflation index which measures changes in the costs of goods and services purchased by hospitals, but the adjustments historically have not kept pace with inflation.

If a hospital treats a patient and incurs less cost than the applicable MS-DRG-based payment, the hospital will be entitled to retain the difference. Conversely, if a hospital's cost for treating the patient exceeds the DRG based payment, the hospital generally will not be entitled to any additional payment. CMS continually attempts to adjust reimbursements to better reflect hospital costs rather than charges. If a case is unusually complex or expensive, it may qualify for an "outlier" payment, which is added to the MS-DRG-adjusted base rate payment. There can be no assurance that payments under the PPS will be sufficient to cover all actual costs of providing inpatient hospital services to Medicare patients. The MS-DRG system has undergone changes to increase and refine the classifications system, with certain classifications receiving increases in payment and others a decrease. There can be no assurance that payments under PPS will be sufficient to cover all actual costs of providing in-patient hospital services to Medicare patients.

The Deficit Reduction Act of 2005 ("DRA") continues to present several areas of uncertainty for the Health System with respect to reimbursement. The DRA, much like the revised inpatient prospective payment system, has provided for the redistribution of Medicare funds towards preferred services to the possible detriment of others. Under the DRA, reimbursement for nosocomial infections has been reduced while funds for colorectal screenings, dialysis centers and rural hospitals have been increased. The DRA has also expanded penalties for failure to participate in Medicare quality initiatives. Depending on the mix of future services delivered, the overall result of the DRA may be to reduce Medicare reimbursement to certain of the Hospitals.

Additional payments may be made to individual providers. Hospitals that treat a disproportionately large number of low-income patients (Medicaid and Medicare patients eligible to receive supplemental Social Security income) currently receive additional payments in the form of "disproportionate share" payments. The Affordable Care Act incrementally decreased the Medicare DSH payments by $22 billion from 2014 through 2019 and Medicaid DSH payments by $35 billion from 2017 through 2024, based on an assumption that the law's new individual coverage and Medicaid expansion provisions will substantially reduce uncompensated care provided by hospitals. Such payment decreases would occur even if a state fails to opt in to the expanded Medicaid program, in which event certain hospitals may receive lower reimbursements without the benefit of additional insured adults under an expanded Medicaid program. It is uncertain at this time whether these reductions will continue, or increase, if further health care reform is adopted that discontinues the Medicaid expansion provisions of the Affordable Care Act.

The most immediate challenge facing the Health System with regard to Medicare hospital inpatient services is the reductions in DSH payments required by the Affordable Care Act and the continued practice of adjusting the market basket rate index downward resulting in payment rate increases that are well below expense inflation. Among the Obligated Group, TUH is the largest beneficiary of Medicare DSH payments. As published in the CMS final regulations for Federal Fiscal Years ("FFY") 2015 and 2016, the TUH Medicare Uncompensated Care payment was $17,990,860 and $15,032,283, respectively. The FFY 2018 proposed rule (released in April of 2017) published a Fiscal Year 2017 Uncompensated Care payment to TUH of $11,562,551. Further transition to using the S 10 Worksheet in the Medicare Cost Report to calculate the distribution of the DSH pool will result in additional reductions in DSH dollars to TUH. Jeanes is also impacted by the DSH payment reductions, but to a lesser degree.

Hospital Outpatient Services. CMS uses a PPS methodology for Medicare hospital outpatient services. Under the outpatient PPS methodology, procedures, evaluations and management services, and drugs and devices in outpatient departments are classified into one of approximately 750 groups called Ambulatory Payment Classifications ("APC"). Services provided within an APC are similar clinically and in terms of the resources they require. Each APC has been assigned a weight derived from the median hospital cost of the services in the group relative to the median hospital cost of the services

included in the APC for mid-level clinic visits. CMS determines the portion of the median labor related hospital costs and adjusts those costs for variations in hospital labor costs across geographic regions.

Payment rates for each APC are calculated by multiplying the relative weight for an APC by a conversion factor to arrive at a dollar figure. Outpatient PPS includes additional adjustments for transitional pass-through payments and outlier payments. Transitional pass-through payments are costs associated with new technology items (drugs, biologicals and medical devices) that were not reflected in the data that CMS used to calculate PPS payment rates, and are intended to allow for adequate payment of new and innovative technology until there is enough data to incorporate the costs for these items into the base APC group.

APCs include payment for related ancillary services provided in conjunction with the procedure or medical visit. Although hospitals receive payment for more than one APC for an encounter, payment for multiple APC procedures is subject to substantial discounting.

Additionally, CMS has adjusted the reimbursement rates for Ambulatory Surgery Centers to reflect the reimbursement for equivalent procedures being delivered in hospital outpatient departments. Overall, these changes to the outpatient prospective payment system may result in decreased reimbursement for services, depending on the service mix that the Health System is called upon to deliver in the future.

Under PPS, a hospital with costs exceeding the applicable payment rate would incur losses on such services provided to Medicare beneficiaries. There can be no assurance that outpatient PPS payments will be sufficient to cover all of the Hospitals' actual costs of providing hospital outpatient services to Medicare patients.

Hospital Capital Expenditures. Medicare payments for capital costs are based upon a PPS system similar to that applicable to operating costs, determined based on a standardized amount referred to as the federal rate.

Under PPS, payments for capital costs are calculated by multiplying the federal rate by the DRG weight for each discharge and by a geographical adjustment factor. The payments are subject to further adjustment by a disproportionate share hospital factor that contemplates the increased capital costs associated with providing care to low income patients, and an indirect medical education factor that contemplates the increased capital costs associated with medical education programs.

There can be no assurance that payments under the PPS inpatient capital regulations will be sufficient to fully reimburse the Health System for its capital expenditures.

Medical Education Costs. Under PPS, teaching hospitals receive additional payments from Medicare for certain direct and indirect costs related to their graduate medical education ("GME") programs. Direct graduate medical education ("DGME") payments compensate teaching hospitals for the cost directly related to educating residents. Such costs include the residents' stipends and benefits, the salaries and benefits of supervising faculty, other costs directly attributable to the GME program, and allocated overhead costs. Payments for direct medical education costs are calculated based upon set formulae taking into account hospital specific medical education costs associated with each resident, the number of full-time equivalent residents, and the proportion of Medicare inpatient days to non-Medicare inpatient days. Indirect medical education payments compensate teaching hospitals for the higher patient care costs they incur relative to non-teaching hospitals. Those indirect payments are issued as a percentage adjustment to the PPS payments. The calculation for both the direct part and the indirect part

of Medicare payments for GME includes certain limitations on the number and classification of full-time equivalent residents reimbursed by Medicare.

The formula used to determine payments for medical education do not necessarily reflect the actual costs of such education, and the federal government has stated that it will continue to evaluate its policy on graduate medical education and teaching hospital payments. There can be no assurance that payments to the Hospitals under the Medicare program will be adequate to cover their direct and indirect costs of providing medical education to interns, residents, fellows and allied health professionals. Through June 30, 2017 the Health System received $17,119,000 in direct Graduate Medical Education (GME) funding and $34,366,000 in Indirect GME Funding.

Physician Payments. Payment for physician fees is covered under Part B of Medicare. Under Part B, physician services are reimbursed in an amount equal to the lesser of actual charges or the amount determined under a fee schedule known as the "resource-based relative value scale" or "RBRVS." RBRVS sets a relative value for each physician service; that value is then multiplied by a geographic adjustment factor and a nationally-uniform conversion factor to determine the amount Medicare will pay for each service.

The relative values for physician services contained in the RBRVS are based on a work component intended to reflect the time and intensity of effort required to provide the service; a practice expense component which includes costs such as office rents, allied health support salaries, equipment and supplies; and a component for the cost of malpractice insurance.

CMS uses a resource-based system of calculating practice expense relative value units ("RVUs") based on actual practice expense data to replace the historical charge-based practice expense RVU system that was previously used. The methodology for computing practice expense RVUs provides for higher practice expense RVUs for services performed in a doctor's office, the patient's home, or a facility or institution other than a hospital, skilled nursing facility ("SNF") or ambulatory surgical center ("ASC"). CMS also uses a resource-based system of calculating malpractice expense RVUs. The formulae used to calculate physician payments under the RBRVS methodology do not necessarily reflect the actual costs of such services. There can be no assurance that payments to the Health System under the Medicare program will be adequate to cover the Health System's costs of providing physician services.

Medicare limits the total amount Non-Participating Physicians may charge Medicare patients through the establishment of a limiting charge, which restricts the total amount a Non-Participating Physician may bill and recover from a Medicare patient for a procedure to 115% of the applicable Medicare reimbursement levels (the applicable Medicare reimbursement level for Non-Participating Physicians generally is 95% of the RBRVS fee schedule amount). Thus, the limiting charge is generally set at a level equal to approximately 109% of the RBRVS fee schedule amount.

Medicare requires CMS to adjust the Medicare Physician Fee Schedule ("MPFS") payment rates annually; the MPFS covers payments for more than 7,000 types of services in physician offices, hospitals, and other settings based on a formula. In each of the past several years, the annual adjustment formula (known as the sustainable growth rate) had yielded a reduction in physician payments but Congress had taken legislative action each year to prevent such reductions from taking effect. The Medicare Access and CHIP Reauthorization Act of 2015 ("MACRA") replaced the sustainable growth rate formula with statutorily prescribed physician payment updates and incentives. Under the provisions of MACRA, the sustainable growth rate formula is repealed and replaced with the following statutorily prescribed updates:

- Beginning July 1, 2015, and effective January 1 of each subsequent calendar year through 2019, Medicare physician payments will be increased 0.5%.

- Beginning January 1, 2020, and carrying through 2025, physician payments will not be updated.

- Beginning January 1, 2026, and effective January 1 of each subsequent calendar year, physician payments will be increased 0.75% for physicians who adequately participate in qualified alternative payment models, but only 0.25% for those who do not.

It is generally expected that MACRA will accelerate progress toward physician-hospital integration. MACRA also includes provisions affecting hospitals, post-acute care providers, ambulance services, payors and other health care industry stakeholders. It is not possible at this time to accurately predict the effect that these changes will have on the financial condition of the Health System.

Outlier Payments. As noted above, hospitals are eligible to receive additional payments under the Inpatient PPS for individual cases incurring extraordinarily high costs. Historically, the amount of an outlier payment was based, in part, on the hospital charges for a particular case as compared to that hospital's cost-to-charge ratio. As the hospital specific cost-to-charge ratio was calculated based on the most recently settled cost report, it was typically many months or years old and out of date.

Following an audit of aggressive pricing strategies at one of the nation's largest hospital chains, and a determination that some hospitals might be manipulating current hospital charge data to maximize reimbursement from Medicare under the outlier payment provisions, the Office of the Inspector General of HHS ("OIG") began investigating past outlier billing practices, and CMS amended the regulations on how outlier payments were to be calculated in the future.

Through June 30, 2017, the Health System received the following payments for the programs described above:

Indirect Medical Education	$34,366,000
Direct Medical Education	$17,119,000
Disproportionate Share	$7,295,000
Uncompensated Care Payment	$15,064,000

Significant reductions in these payments could have a material adverse effect on the financial condition of the Health System.

Mental Health Services. Payment for in-patient psychiatric services is provided by a case-mix adjusted prospective payment system. There can be no assurance that the Medicare psychiatric PPS payments will be sufficient to cover all of the actual costs in providing inpatient psychiatric hospital services.

Home Health. Under the prospective payment system, all home health goods and services provided during a 60-day episode of home health care are included in the PPS payment rate. The rates are case-mix adjusted by a detailed classification system called the Home Health Resource Group ("HHRG") as determined based upon patient assessment at admission. As with any prospective payment system, there can be no assurance that the payments under this system will be sufficient to cover all of the actual costs of providing home health services to Medicare patients.

Medicare Managed Care Program. Every individual entitled to Medicare Part A benefits, and who is enrolled in Medicare Part B, with the exception of individuals who suffer from End Stage Renal Disease, may elect coverage under either the traditional Medicare fee for service program (Parts A and B) or a Medicare managed care (Part C) program, known as the Medicare Advantage Program. The Medicare Advantage Program is designed to expand the number and types of private regional plans

available to beneficiaries as an alternative to traditional Parts A and B Medicare coverage. Payments for Medicare Advantage plans are based on competitive bids to the government rather than administered pricing.

Public and private health maintenance organizations, preferred provider organizations, fee for service and medical savings account plans may qualify as authorized Medicare Advantage plans. With limited exceptions, Medicare Advantage plans are risk-bearing programs that accept a fixed annual amount in return for providing beneficiaries with a defined level of benefits (basic or basic plus supplemental), either directly or through arrangements with other providers. All Medicare Advantage plans are required to provide coverage, even if out of network, for emergency services, renal dialysis services provided while the enrollee was temporarily outside of the plan's service area, post-stabilization care services (under limited circumstances) and services for which coverage was denied but, following appeal by the enrollee, were determined to be covered services. Providers wishing to participate in Medicare Advantage plans are subject to specific requirements concerning enrollee protection and accountability.

The shift of Medicare eligible beneficiaries from traditional Part A and Part B coverage to Part C Medicare Advantage programs was intended to increase competitive pressure to improve benefits, reduce premiums and generate cost reductions. However, because the cost to the Medicare program was on average 114% higher than traditional Medicare, the Affordable Care Act changed some of the Medicare Advantage payment methodologies and began paying bonuses to plans that achieve certain quality metrics in 2012. Reductions in the Medicare Part C program may have an impact on reimbursement from these insurance plans, which in turn may have a material negative impact upon the revenue of the Hospitals.

TUHS, through its member affiliates TUH and Episcopal Hospital ("Episcopal"), is a founding member and owner of Health Partners Plans, Inc. ("HPP"). HPP was formed in 1984 as a result of a strategic partnership among four Philadelphia hospitals - Episcopal, Medical College of Pennsylvania Hospital, St. Christopher's Hospital for Children and TUH. Their vision was to better manage the quality of care of their patients and to serve as a vehicle to cover as many lives in their service area as possible through integrated community health initiatives. Since its founding, HPP has expanded its coverage of product lines and services in the Philadelphia area.

Temple University Hospital, as an owner of HPP, shares in the earnings of HPP through an effective risk agreement. For the Fiscal Year ended June 30, 2017, Temple University Hospital recognized $37,066,701 in revenue from its share of HPP earnings in the Medicaid plan. In certain years the Health System has been required to help HPP meet its regulatory risk capital requirements, either through retention by HPP of operating surpluses or through the provision of letters of credit or guarantees for such facilities. Continuing changes in the funding of the Medicaid managed care plans from the Commonwealth as well as cost utilization changes result in uncertainty of future performance. For a more detailed description of the relationship with HPP and its operational and financial impact on the Health System, see Appendix "A" – "STRATEGY – 7. Review of other partnership opportunities."

In addition to the Health System's relationship with HPP, the Health System has one shared risk arrangement and a number of pay-for-performance programs. The shared risk arrangement covers the Medicare HMO enrollees of one payor that receive their care from the Temple University Physicians' primary care groups (current enrollment approximately 950). The arrangement sets a per-member-per-month medical cost target and an administrative fee to be paid to the payor by the Health System. Annually, on a calendar year basis, the parties are to settle; however, the administrative fee is fixed by contract and assessed against the Health System based on the lives in the Temple primary care groups. The medical cost target, also set by contract, is applied against the actual results. The difference

in medical cost, whether above or below, is shared 50/50 with the payor. Thus, the Health System may either gain or owe depending on the results. In this particular arrangement, the Health System is responsible for most costs, but not responsible for the cost of retail prescriptions.

PPS Exemption. AOH is currently one of eleven institutions specializing in cancer care (collectively the "Cancer Centers") that has been protected by Congress from the shortfalls of Medicare's Prospective Payment System ("PPS"). With regard to inpatient services, the Cancer Centers are exempt under inpatient PPS and paid under a system that was established under the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982. Under the TEFRA system, the Cancer Centers are paid on the basis of costs incurred in a historic base year, trended forward for inflation and subject to cost limits. In 2007, CMS agreed to update each Cancer Centers' base period to more accurately reflect the cost of providing inpatient cancer care at each facility.

In addition to the Cancer Centers' exemption from inpatient PPS, in 2000, when CMS implemented its Outpatient Prospective Payment System (OPPS), Congress also recognized the Cancer Centers' special circumstances with respect to outpatient care and afforded them payment protection in the form of an additional Transitional Outpatient Payment for services provided under outpatient PPS ("TOPPS Payment") which was intended to offset the dramatic payment reduction that would have occurred under OPPS for the cancer hospitals The TOPPS payment was initially designed to be temporary until such time Congress and CMS could substantiate its appropriateness. A few years after inception, CMS and Congress substantiated the need for the ongoing TOPPS payment and removed the temporary nature of it, although future action by Congress could change it.

As a result of this legislative action, AOH and the other Cancer Centers received additional "hold harmless" payments to ensure that their Medicare outpatient payments were not lower (as a percentage of cost) than pre-OPPS levels. Specifically, the Cancer Centers' outpatient services were assigned to the appropriate APCs and corresponding payment amounts were calculated similarly to other hospitals that are subject to OPPS. However, a floor on the payments was set so that each Cancer Center's reimbursement for covered services did not fall below its pre-Balanced Budget Act of 1997 ("BBA") amount. A Cancer Center's "pre-BBA amount" for each year was determined by multiplying the allowable costs in the respective year by its applicable payment-to-cost ratio ("PCR"), which was defined as the ratio of the Cancer Center's payments in 1996 to its allowable costs in 1996. AOH receives these additional TOPPS payments - in addition to APC payments - to arrive at this payment floor amount. As part of the Affordable Care Act, Congress directed CMS to further enhance the Cancer Centers' Medicare outpatient payments by requiring CMS to conduct a study comparing cancer care costs across all hospital types and to adjust the Cancer Centers' payments accordingly so that outpatient payment (as a percentage of cost) to the Cancer Hospitals were no less than outpatient payments (as a percentage of cost) to other acute care providers. Under this provision, CMS annually adjusts the Cancer Centers PCR to maintain relative parity.

There can be no assurance that the inpatient services provided at the Cancer Centers will continue to be exempt under inpatient PPS and be paid under the system established under TEFRA. The loss of such exemption may result in material adverse consequences to the operations or financial condition of the Cancer Centers.

In Fiscal Years 2014, 2015, and 2016, the total value of the additional inpatient and outpatient payments to AOH were $15.4 million, $12.6 million, and $12.0 million, respectively. Taking into consideration the additional payments made to AOH, AOH's Medicare reimbursement percentage relative to its cost amounted to 93.1%, 92.0%, and 93.7%, respectively, in each of the three years. Without these additional payments, AOH would have recovered 72.3%, 75.5%, and 79.8% of its cost, respectively.

Both Medicare inpatient and outpatient payments are subject to future revision by Congress and CMS. Any reduction in the level of Medicare and/or Medicaid spending or a reduction in the rate of increase of Medicare and/or Medicaid spending from these or other future statutory or regulatory provisions would have an adverse impact on the revenues of FCCC that are derived from the Medicare and Medicaid programs.

Audits, Exclusions, Fines and Enforcement Actions. Hospitals participating in Medicare are subject to audits and retroactive audit adjustments by fiscal intermediaries under the Medicare program. From an audit, a fiscal intermediary may conclude that a patient discharge has been claimed under an incorrect DRG, that services may not have been provided under the direct supervision of a physician (to the extent so required), that a patient should not have been characterized as an inpatient, that certain services provided prior to admission as an inpatient should not have been billed as outpatient services or that certain required procedures or processes were not satisfied. As a consequence, payments may be retroactively disallowed. Under certain circumstances, payments made may be determined to have been made as a consequence of improper claims subject to the Federal False Claims Act or other federal statutes, subjecting the hospital to civil or criminal sanctions.

The federal government uses a national recovery audit contractor ("RAC") program to identify overpayments and underpayments to providers under the Medicare program. The RAC auditors are compensated on a contingent fee basis. Audits typically result in far more overpayments than underpayments. Medicare contractors will recoup RAC identified overpayments unless appeals are filed timely. RAC assessments against the Obligated Group are anticipated; however, the outcome of such assessments is unknown and cannot be reasonably estimated. The Affordable Care Act expands the scope of the RAC program to include Medicare Parts C and D and Medicaid. These types of fraud and abuse detection and enforcement programs are expected to continue and grow under the current administration.

The Hospitals' Medicare Cost Reports are subject to periodic audits and retroactive adjustment. As a large Medicaid provider, Temple University Hospital receives DSH grant funding from the Commonwealth's Department of Human Services ("DHS"). Pursuant to a state plan amendment, those funds are matched by federal funds provided by the HHS. As a recipient of HHS grant funds, Temple University Hospital is subject to audits.

Other Audits. As acute care providers, the Hospitals maintain certain pharmaceutical products subject to regulation by the Federal Drug Enforcement Agency. The Hospitals, not including AOH, are currently in year two of a three year audit program with no adverse findings.

Medicaid Reimbursement

Medicaid is a jointly funded federal and state health insurance program for certain low-income and medically needy people. Under federal guidelines, each state establishes eligibility standards, scope of services, payment rates for services, and an administrative framework for management of the program. DHS administers the Medicaid program in the Commonwealth.

Medicaid is designed to pay providers for care given to the indigent and other persons who qualify based on certain conditions. Medicaid is funded by federal and state appropriations and is administered by an agency of the applicable state. Under the Affordable Care Act, states have the option to expand eligibility for Medicaid to cover individuals with income under 133% of the Federal Poverty Level ("FPL"). In Pennsylvania, this expansion began on January 1, 2015.

Under Medicaid, the federal government provides funds to states that have medical assistance programs that are consistent with (or have secured waivers from) federal standards. Within broad

national guidelines established by federal statutes, regulations, and policies, each state: (1) establishes its own eligibility standards; (2) determines the type, amount, duration, and scope of services; (3) sets the rate of payment for services; and (4) administers its own program. Thus, Medicaid policies for eligibility, services, and payment are complex and vary considerably, even among states of similar size or geographic proximity. In addition, state legislatures may change Medicaid eligibility, services, and/or reimbursement during the year.

Absent a waiver of program requirements, Medicaid compensates hospitals on a DRG-based PPS. Hospitals are grouped into payment divisions based on their own costs in a base year. A relative weight is calculated for each DRG, and standard dollar amounts are established for each payment division. With certain limited exceptions, the Medicaid payment is determined by multiplying the applicable DRG weight by the standard dollar amount of the hospital's payment division.

The Affordable Care Act made changes to Medicaid funding and substantially increases the potential number of Medicaid beneficiaries. The Affordable Care Act repeal and replacement activities in Congress to date have included substantial reductions or complete repeals of the Medicaid funding provisions in the Affordable Care Act. Management cannot predict the effect of these changes to the Medicaid program on the operations, results from operations or financial condition of the Members of the Obligated Group.

Inpatient Services. Medicaid payment for acute care services in the Commonwealth is based on a prospective payment system similar to the federal Medicare DRG-based prospective payment system explained above.

Disproportionate Share Payments ("DSH"), Medical Education Payments and Other Supplemental Payments. DSH, medical education, and other supplemental payments are paid to providers under the traditional medical assistance payment contract. Provider eligibility for inpatient DSH payments is based on an annual redetermination formula, while payments are based on prior period payouts with small increases as determined per the contract. DSH payments are subject to a federally imposed hospital specific Upper Payment Limit. Beginning in 2011 compliance with this limit is annually audited by the Commonwealth. Fiscal Year 2011 and 2013 have been audited and closed. The Commonwealth is currently auditing Fiscal Year 2014.

Capital Expenditures. Payment for capital costs (including depreciation and interest, but excluding such costs for moveable equipment) has been integrated into a comprehensive prospective payment system for both capital costs and operating costs of providing inpatient services. There is no assurance that Medicaid reimbursement levels for capital depreciation and interest will be adequate to satisfy the capital requirements of the Hospitals.

Outpatient Services. Medicaid generally pays for hospital outpatient services rendered based on the lower of the usual charge to the general public for the same service or the Medicaid maximum allowable fee, or the upper limit established by Medicare or Medicaid.

Inpatient Mental Health and Rehabilitation Services. Medicaid provides payment for inpatient mental health and rehabilitation services rendered to eligible recipients by private psychiatric hospitals and rehabilitation distinct part units at a per diem rate.

HealthChoices. The Commonwealth has instituted a program for Medicaid recipients called HealthChoices, which requires Medicaid recipients to enroll in managed care plans. Under HealthChoices, Medicaid recipients receive physical health services through one managed care organization and behavioral health services through another managed care organization, such as HPP.

The implementation of HealthChoices results in providers contracting with the managed care organizations which are responsible for providing health services to Pennsylvania Medicaid recipients. The Health System, through its subsidiaries, provides such services. Approximately 85% of all Medical Assistance services provided by the Hospital Group are covered under the HealthChoices Program and paid for through contracts with various managed care plans.

Medicaid Supplemental Funding. The Commonwealth provides supplemental funding to hospitals that provide a significant amount of uncompensated care. There are several types of supplemental funding received by the Health System:

Supplemental payments funded by State general fund revenues include payments for inpatient and outpatient disproportionate share (DSH) medical education, OB/NICU services, burn services, Uncompensated Care through the Tobacco Settlement, Community Access Funds (CAF), and a base Access to Care payment. Most of these payments are based on historic levels of care provided to indigent patients. Eligibility for participation in this funding is determined based on data provided to DHS through annual cost reports. Funding for these supplemental payments is dependent on Federal Medicare and Medicaid funding and regulations. The total estimated funding to the Health System for these programs through June 30, 2017 was $54,439,000. Another set of supplemental payments are funded through two Provider Tax Programs with one such program based on Philadelphia County and known as the Philadelphia Tax Assessment Program which carries an assessment rate of 3.45% and the second one a state wide assessment program implemented under Act 49 of the Commonwealth and known as the Pennsylvania Quality Assessment Program which carries an assessment rate of 3.71%. There can be no assurance that the two tax assessment programs or DHS's funding levels or the Hospitals' eligibility will remain at current levels. The total estimated net benefit to the Health System for these programs through June 30, 2017 was $85,625,000. A significant portion of this amount is received through Medicaid Managed Care plans under the HealthChoices program described above. In April of 2016 CMS issued final regulations regarding supplemental payments made through managed care plans. Unless supplemental payments meet one of five exceptions in the regulations, they will be eliminated over a ten year transition for payments made to hospitals, and at the end of five years for payments made to physicians.

In recent years the Commonwealth, working with TUH and the University, has federalized a portion of the Temple University Non-preferred Education and General Appropriation to create additional funding for the Health System. These additional payments include the impact of the Federal matching fund payments that are received by the Commonwealth. The total estimated net funding to the Health System for this program through June 30, 2017 was $16,596,000.

All of these payments are subject to the Hospital-specific DSH Limit established in Federal statute and implementing regulations (described in more detail below).

Finally, federal Medicaid disproportionate share allotments to each state are scheduled to be reduced starting in October 2017. The methodology for reducing the allotments is still going through notice and comment rulemaking by CMS. Historically, Congress has acted to delay these reductions each year they were scheduled to take effect. If the allotments are reduced as currently scheduled, DHS will need to decide if and how Medicaid DSH payments need to change in Pennsylvania. This is not expected to reduce DSH funding to hospitals in the Commonwealth in fiscal year 2018, but could reduce overall payments starting in fiscal year 2019.

Hospital-Specific DSH Limit. The amount of Medicaid supplemental DSH funding a hospital can receive each year is capped by a Federal program referred to as the Hospital-specific DSH Limit. The DSH Limit caps Medicaid DSH payments during a year to a qualifying hospital to the amount of eligible

uncompensated care costs (total costs for Medicaid and Uninsured patients, less payments received for those patients) during that same year. This limit is estimated prospectively by the Commonwealth DHS and is calculated retrospectively three years after the actual fiscal year ends. Federal financial participation (i.e. the "Federal match") is not available for any DSH payments found to be in excess of the DSH Limit during the final audit. The Health System closely monitors the DSH Limit for DSH-eligible hospital members, though the Medicaid coverage expansion has recently added uncertainty in estimating the DSH Limit. Further, recent legal proceedings in other States, as well as recent proposed regulations from CMS, add additional uncertainty to the DSH Limit calculation.

Third Party Reimbursement

A significant portion of the net patient service revenue of the Hospitals is received from Blue Cross and other non-governmental payors, which provide third-party reimbursement for patient care on the basis of various formulae. Renegotiations of such formulae and changes in such reimbursement systems may reduce such third-party reimbursements to the Obligated Group Members. The reimbursement currently paid by Blue Cross and other such third-party reimbursement plans may be subject to more restrictions in the future, and there can be no assurance that such payments will be adequate to cover the cost of care for the beneficiaries in the future. The Health System's Blue Cross contract is through July 2018, its contract with Aetna is effective through April 2018 and its Cigna Healthspring contract is effective through December 31, 2017.

Certain private insurance companies contract with hospitals on an exclusive or preferred-provider basis, and some insurers have introduced PPOs. Under these plans, there may be financial incentives for subscribers to use only those hospitals and physicians which contract with the plans. Under an exclusive provider plan, which includes most HMOs, private payors limit coverage to those services provided by network hospitals and physicians. With this contracting authority, private payors may direct patients away from hospitals not in the network by denying coverage for services provided by them.

Most PPOs and HMOs currently pay hospitals on a discounted fee-for-service basis, a discounted fixed rate per day of care basis, or on a fixed rate per case basis. The discounts offered to HMOs and PPOs may result in payment at less than actual cost, and the volume of patients directed to a hospital under an HMO or PPO contract may vary significantly from projections. Therefore, the financial consequences of such arrangements cannot be predicted with certainty and may be different from current or prior experience. If payment under an HMO or PPO contract is insufficient to meet the hospital's costs of care, or if use by enrollees materially exceeds projections, the financial condition of the hospital may be adversely affected.

There is no assurance that contracts of the Hospitals, or their physicians, with Blue Cross, or other HMOs, PPOs or other payors will be maintained or that other similar contracts will be obtained in the future, or that payments from such payors will be sufficient to cover all of the costs of the Hospitals, or their physicians, in providing hospital services to their beneficiaries. Failure to execute and maintain such contracts could have the effect of reducing the patient base or gross revenues of the Hospitals. Conversely, participation may maintain or increase the patient base, but may result in reduced payments. Currently, the Hospital Group is in contract renewal negotiations with Blue Cross, Aetna and Cigna Healthspring.

The Hospitals also may be affected by the financial instability of HMOs and other third-party payors with which the Hospitals contract and/or from which they receive reimbursement for furnished health care services. For example, if regulators place a financially-troubled HMO or third party obligor into rehabilitation under State law, or if a third-party payor files for protection under the federal bankruptcy laws, it is unlikely that health care providers will be reimbursed in full for services furnished

to enrollees of the HMO or third-party payor. Also, health care providers may be required by law or court order to continue furnishing health care services to the enrollees of an insolvent HMO or third-party payor, even though the providers may not be reimbursed in full for such services.

Private employers have begun to revise the way in which health care benefits are provided to their employees in order to create incentives for cost containment and to reduce their costs of providing health care benefits. Traditional health insurance programs, which pay for services on a fee-for-service basis and allow employees to elect which hospitals they utilize, are being supplemented or replaced by a wide range of health insurance programs being offered with economic incentives for employees to choose those plans which promise to be most cost efficient. These types of insurance programs are expected to cover an increasing share of health care services being provided in the future.

HMOs and other third-party payors that contract on a discounted fee-for-service or discounted fixed rate-per-day basis also exert strong controls over the utilization of health care resources. Strong utilization management by managed care plans has led to reduction in the number of hospitalizations and lengths of hospital stays, both of which may reduce patient service revenue to hospitals. Furthermore, shortened hospital lengths of stay have not necessarily been accompanied with a reduced demand for services while a patient is hospitalized and in fact may lead to more intensive hospital visits and correspondingly increased costs to hospital providers.

Per diem rates, other risk-based payment systems and discounts pose major challenges to hospital providers. In order to enter into such contracts, hospitals are required not only to anticipate the cost of rendering specific services to patients, but also to estimate the likelihood and severity of illness or injury within the population which the hospital serves. If payment under a managed care plan contract is insufficient to meet a hospital's costs of caring for the needs of the population it serves, the financial condition of the hospital may erode rapidly and significantly. Often, managed care plan contracts are enforceable for the stated term, regardless of provider losses. Furthermore, managed care plan contracts and insurance laws may require that a hospital continue to provide care for enrollees for a certain period of time irrespective of whether the managed care plan has funds to make payment to the hospital.

Increasingly, physician practice groups have become a part of the process of negotiating payment rates with managed care plans. This involvement has taken many forms but typically increases the competition for limited payment resources from managed care plans. For example, it is increasingly common for managed care plans to enter into contracts with physicians that may give physicians incentives in patient care decisions which may result in reduced hospital admissions and procedures.

Retroactive Adjustments of Payments

Funds received from Medicare, Medicaid and some third-party payors relating to certain types of services and years may be subject to audit. These audits can result in retroactive adjustments of payments received. If an audit determines that an overpayment was made, the excess amount must be repaid. If, on the other hand, it is determined that an underpayment was made, payors will make additional payments to the provider. Provisions for adjustments related to these programs are accrued on an estimated basis in the period the related services are rendered and adjusted in future periods as final settlements are determined. Final settlements may differ materially from amounts currently recorded.

Regulatory Environment

The Hospitals and the health care industry in general are subject to regulation by federal, state and local governmental agencies, including those that administer the Medicare and Medicaid programs and health care planning programs, and are subject to certain non-government agencies such as the Joint

Commission. As a result, the health care industry is sensitive to legislative and regulatory changes in such programs, and is affected by reductions and limitations in government spending for such programs as well as changing health care policies. Over the past several years, Congress has consistently attempted to curb the growth of federal spending on health care programs. In addition, Congress and governmental agencies have focused on the provision of care to indigent and uninsured patients, the prevention of the transfer of such patients to other hospitals in order to avoid the provision of uncompensated care, activities of tax-exempt institutions that are unrelated to their exempt purposes, and other issues. Some of the legislation and regulations affecting the health care industry are discussed below.

Additionally, laws and regulations require that hospitals meet various detailed standards relating to the adequacy of medical care, equipment, personnel, operating policies and procedures, maintenance of adequate records, utilization, rate setting, compliance with building codes and environmental protection laws, and numerous other matters. Failure to comply with applicable regulations can jeopardize a hospital's licenses, ability to participate in the Medicare and Medicaid programs, and ability to operate as a hospital. These laws and regulations, as well as similar laws and regulations now in effect, and the adoption of additional laws and regulations in these and other areas could have an adverse effect on the Obligated Group's ability to generate revenues in sufficient amounts to timely pay the 2017 Bonds.

Federal False Claims Act and Civil Money Penalties Law. There are multiple federal laws covering the submission of inaccurate or fraudulent claims for reimbursement and errors or misrepresentations on cost reports by hospitals and other health care providers. The coding, billing and reporting obligations of Medicare providers are extensive, complex and highly technical. In some cases, errors and omissions by billing and reporting personnel may result in liability under one of the Federal False Claims Act or similar laws, exposing a health care provider to civil and criminal monetary penalties, as well as exclusion from participation in the Medicare and Medicaid programs.

The Federal False Claims Act prohibits knowingly submitting a false or fraudulent claim for payment to the United States. This statute is violated if a person acts with actual knowledge, or in deliberate ignorance or reckless disregard of the falsity of the claim. Penalties under the False Claims Act include fines of up to $11,000 per claim, plus treble damages, potentially resulting in penalties aggregating millions of dollars for ongoing claims submission errors. Anyone who knowingly makes a false statement or representation in any claim to the Medicare or Medicaid programs may be subject to criminal penalties, including fines and imprisonment.

The False Claims Act includes "whistleblower" provisions under which a person who believes that someone is violating the False Claims Act can file a sealed complaint against the alleged violator in the name of the United States government. The nature of the allegations is not revealed to the target during the time the United States Justice Department investigates the complaint and determines whether to join in the suit. If the Justice Department decides not to join in the suit, the original whistleblower nonetheless can proceed. If the case is successful, the whistleblower is entitled to between 15% and 30% of the proceeds of any fines or damages paid. Although the False Claims Act has been in effect for many years, in recent years there has been a significant increase in the number of whistleblower allegations filed under the False Claims Act, a large number of which involve the health care and pharmaceutical industries. In 2009, President Obama signed into law the Fraud Enforcement Recovery Act ("FERA") which authorized increased funding for fraud investigation and prosecution, and expanded the scope of the False Claims Act. In addition, the Affordable Care Act significantly amended the False Claims Act. These amendments include expanding the scope of False Claims Act liability, particularly to include liability for the retention of overpayments, providing for new investigative tools, and increasing the ability of and protection for qui tam relators to bring whistleblower suits on behalf of the government under the False Claims Act.

In addition, the Civil Money Penalties Law under the Social Security Act ("CMP Law") provides for the imposition of civil money penalties against any person who submits a claim to Medicare, Medicaid or any other federal health care program that the person knows or should know: (a) is for items or services not provided as claimed; (b) is false or fraudulent; (c) is for services provided by an unlicensed or uncertified physician or by an excluded person; (d) represents a pattern of claims that are based on a billing code higher than the level of service provided; or (e) is for services that are not medically necessary. Penalties under the CMP Law include up to $50,000 for each item or service claimed, and damages of up to three times the amount claimed for each item or service, and exclusion from participation in the federal health care programs. The CMP Law also provides for the imposition of penalties against a hospital that knowingly makes a payment to a physician as an inducement to reduce or limit services provided to federal program beneficiaries.

The threats of large monetary penalties and exclusion from participation in Medicare, Medicaid and other federal health care programs, and the significant costs of mounting a defense, create serious pressures on providers who are targets of false claims actions or investigations to settle. Therefore, an action under the False Claims Act, FERA or CMP Law could have an adverse financial impact on the Hospitals, regardless of the merits of the case.

Fraud and Abuse Laws and Regulations. Federal law (known as the "Anti-Kickback Law") prohibits the knowing and willful offer, payment or receipt of remuneration in exchange for or as an inducement to make or influence a referral of a patient for the provision of goods or services that may be reimbursed under federal health benefit programs. The scope of the Anti-Kickback Law is very broad, and it potentially implicates many practices and arrangements common in the health care industry, including space and equipment leases, personal services contracts, purchase of physician practices, joint ventures, and relationships with vendors. Penalties for violation of the Anti-Kickback Law include criminal prosecution, criminal fines of up to $25,000, civil penalties of up to $50,000 per violation, as well as exclusion from the federal health care programs.

The Affordable Care Act amended the intent requirement to provide that a person need not have actual knowledge of the Anti-Kickback law or specific intent to commit a kickback violation, to violate the statute. Penalties for the failure to grant timely access of information to HHS were also added by the Affordable Care Act.

Federal "safe harbor" regulations describe certain arrangements that will not be deemed to violate the Anti-Kickback Law. However, the safe harbors are narrow and do not cover a wide range of economic relationships that many hospitals, physicians and other health care providers historically have considered to be legitimate business arrangements not prohibited by the Anti-Kickback Law. Because the safe harbor regulations do not purport to describe comprehensively all lawful or unlawful economic arrangements or other relationships between health care providers and referral sources, it is uncertain whether hospitals, physicians and other health care providers that have these arrangements or relationships may need to alter them in order to ensure compliance with the Anti-Kickback Law. Failure to comply with a safe harbor, however, does not mean an arrangement necessarily violates the Anti-Kickback Law.

Because the safe harbor exceptions are narrowly drawn, there can be no assurances that the Hospitals will not be found to be in violation of the Anti-Kickback Law. If such a violation were found, any sanctions imposed could have a material adverse effect upon the future operations and financial condition of the Hospitals.

Restrictions on Referrals. Current federal law (the "Stark Law") prohibits a physician (or an immediate family member of the physician) who has a financial relationship with an entity that provides

certain designated health services from referring Medicare patients to that entity for the provision of such designated health services, with limited exceptions. The Stark Law designated health services include physical therapy services, occupational therapy services, radiology or other diagnostic services (including MRIs, CT scans and ultrasound procedures), durable medical equipment, radiation therapy services, parenteral and enteral nutrients, equipment and supplies, prosthetics, orthotics and prosthetic devices, home health services, outpatient prescription drugs, inpatient and outpatient hospital services, clinical laboratory services and diagnostic and therapeutic nuclear medicine services. The Stark Law also prohibits an entity that receives a prohibited referral from filing a claim or billing for the services arising out of that prohibited referral.

The Stark Law strictly prohibits specific referral arrangements and the accompanying claims for payment from Medicare or Medicaid by the provider unless an exception applies. Sanctions for violations of the Stark Law include refunds of the amounts collected for services rendered pursuant to a prohibited referral, civil money penalties of up to $15,000 for each claim arising out of such referral, plus up to three times the reimbursement claimed, and exclusion from the Medicare and Medicaid programs. The Stark Law also provides for a civil penalty of up to $100,000 for entering into an arrangement with the intent of circumventing its provisions. In addition, knowing violation of the Stark Law may also serve as the basis for liability under the False Claims Act. The types of financial arrangements between a physician and an entity that trigger the self-referral prohibitions of the Stark Law are broad, and include ownership and investment interests and compensation arrangements.

As required under the Affordable Care Act, CMS released a protocol under which health care providers can make self-disclosures of actual and potential Stark Law violations, with reduced penalties for self-disclosed violations. CMS released this protocol on September 23, 2010. In addition, CMS has made several changes to existing Stark regulations in the final 2016 Physician Fee Schedule, affecting hospital-physician recruitment arrangements, timeshare arrangements, Stark's writing and signature requirements, requirements concerning term of agreements and holdover leases, as well as changes in the regulatory definitions of "remuneration" and "stand in the shoes."

Because of the complexity of the Stark Law and the evolving nature of quality improvement and cost-reduction efforts, there can be no assurances that the Hospitals will not be found to have violated the Stark Law. If such violation were found to have occurred, any sanctions imposed could have a material adverse effect upon the future operations and financial condition of the Hospitals.

Emergency Medical Treatment and Active Labor Act. The Emergency Medical Treatment and Active Labor Act ("EMTALA"), was enacted in response to allegations of inappropriate hospital transfers of indigent and uninsured emergency patients. EMTALA imposes strict requirements on hospitals in the treatment and transfer of patients with emergency medical conditions.

EMTALA requires hospitals to provide a medical screening examination to any individual who comes to the hospital's emergency department for treatment, without regard to ability to pay, to determine whether the individual suffers from an emergency medical condition within the meaning of EMTALA. A participating hospital may not delay providing a medical screening examination in order to inquire about method of payment or insurance status. If an emergency medical condition is present, the hospital must provide such additional medical examination and treatment as may be required to stabilize the emergency medical condition. If the hospital deems it in the best interest of the individual to transfer the individual to another medical facility, the treating physician must execute a transfer certificate complying with the standards of EMTALA and must provide a medically appropriate transfer.

EMTALA imposes significant costs on hospitals, including the costs of treatment of individuals who may not be able to pay for required services, costs of development and implementation of protocols

concerning medical screening examinations and stabilization and appropriate transfers and, in some cases, costs associated with assuring on-call availability of specialty physicians. In addition, the subsequent expansion of the requirements of EMTALA to off-campus departments has resulted in additional costs in the training of personnel and the development of protocols for screening, stabilization and transportation of patients.

If a hospital violates EMTALA, whether knowingly and willfully or negligently, it is subject to a civil money penalty of up to $50,000 per violation. Failure to satisfy the requirements of EMTALA may also result in termination of the hospital's provider agreement with Medicare. In addition, EMTALA creates a private cause of action for individuals who suffer personal harm as a result of an EMTALA violation, and for any hospital that suffers financial loss as a result of another hospital's violation of EMTALA. Enforcement activity with respect to EMTALA violations has increased dramatically in recent years, and because of the broad interpretation of the reach of EMTALA, there can be no assurance that the Hospitals will not have been found to have violated EMTALA, and if such a violation were found, that any sanctions imposed would not have a material adverse effect upon the future operations and financial condition of the Hospitals.

Expanded Enforcement Activity. Congress enacted The Health Insurance Portability and Accountability Act of 1996 ("HIPAA") as part of a broad health care reform effort. Among other things, HIPAA established a program administered jointly by the Secretary of HHS and the United States Attorney General designed to coordinate federal, state and local law enforcement programs to control fraud and abuse in connection with the federal health care programs. In addition, Congress greatly increased funding for health care fraud enforcement activity, enabling the OIG to substantially expand its investigative staff and authorizing the Federal Bureau of Investigation to quadruple the number of agents assigned to health care fraud. The result has been a dramatic increase in the number of civil, criminal and administrative prosecutions for alleged violations of the laws relating to payment under the federal health care programs, including the Anti-Kickback Law and the False Claims Act. This expanded enforcement activity, together with the whistleblower provisions of the False Claims Act, has significantly increased the likelihood that health care providers, including the Hospitals, could face inquiries or investigations concerning compliance with the many laws governing claims for payment and cost reporting under the federal health care programs.

Enforcement Affecting Clinical Research. In addition to increasing enforcement of laws governing payment and reimbursement, the federal government has also heightened enforcement of laws and regulations governing the conduct of clinical trials at hospitals and other research organizations. HHS elevated and strengthened its Office of Human Research Protections, one of the agencies with responsibilities for monitoring federally funded research. In addition, the National Institutes of Health significantly increased the number of facility inspections that these agencies perform. The Food and Drug Administration ("FDA") also has authority over the conduct of clinical trials performed in hospitals and other research organizations when these trials are conducted on behalf of sponsors seeking FDA approval to market the drug or device that is the subject of the research. The FDA's inspection of facilities has increased significantly in recent years. These agencies' enforcement powers range from substantial fines and penalties to exclusions of researchers and suspension or termination of entire research programs.

HIPAA's Administrative Simplification Provisions. In addition to the expanded enforcement activity noted above, the "Administrative Simplification" provisions of HIPAA mandate the use of uniform standard electronic formats for certain administrative and financial health care transactions, the adoption of minimum security standards for individually identifiable health information maintained or transmitted electronically, and compliance with privacy standards adopted to protect the confidentiality of personal health information. The Administrative Simplification provisions apply to health care providers, health plans, and healthcare clearinghouses, and their agents and subcontractors referred to as Business

Associates (collectively "Covered Entities"). HHS issued final regulations strengthening many aspects of the privacy and security rules under HIPAA so that they are more aligned with the Health Information Technology for Economic and Clinical Health Act ("HITECH Act"). The final rules change certain requirements for covered entities and establish rules that now apply directly to their vendors that handle protected health information (PHI) and qualify as business associates under HIPAA. A Covered Entity and its business associates must make reasonable efforts to use, disclose and request only the minimal amount of protected health information needed to accompany the intended use. HIPAA confidentiality provisions extend not only to patient medical records, but also to a wide variety of healthcare clinical and financial settings where patient privacy restrictions often impose new communication, operational, accounting and billing restrictions. These confidentiality provisions add costs and create potentially unanticipated sources of legal liability.

Various requirements of HIPAA apply to virtually all healthcare organizations, and significant civil and criminal penalties may result from a failure to comply with the Administrative Simplification regulations. On-going financial costs of compliance with the Administrative Simplification regulations are substantial.

Covered Entities are now required to conduct certain electronic transactions in compliance with the applicable transactions and code sets standards published by HHS. HIPAA also established, among other things, a program to address the confidentiality and security of individuals' health information. Disclosure of certain broadly defined protected health information is prohibited unless expressly permitted under the provisions of the HIPAA statute and regulations or authorized by the patient.

HIPAA imposes civil monetary penalties for violations and criminal penalties for knowingly obtaining or using individually identifiable health information without authorization. The penalties range from $50,000 to $250,000 and/or imprisonment if the information was obtained or used with the intent to sell, transfer or use the information for commercial advantage, personal gain or malicious harm.

The Hospitals are actively engaged in maintaining compliance with the HIPAA regulations on an ongoing basis. However, in light of the complexity of the regulations, and the absence of further guidance from HHS with respect to numerous provisions of the regulations, it is impossible to accurately assess the financial and operational impact HIPAA will have on the Hospitals.

HITECH Act. The HITECH Act contains additional privacy and security provisions. The HITECH Act requires health care providers to notify individuals and HHS of unauthorized acquisition, access, use or disclosure of certain protected health information and extends enforcement authority to state attorneys general. The provisions of the HITECH Act could result in increased costs of compliance.

Covered Entities that use an "electronic health record" are required to account for disclosures of information that are currently not subject to the accounting requirements, including disclosures for treatment, payment and health care operations. In addition, if a Covered Entity maintains an electronic health record, individuals have a right to receive a copy of the protected health information maintained in the record in an electronic format. Again, the Secretary of HHS is charged with developing guidance and implementing regulations for these requirements.

The HITECH Act includes provisions requiring Covered Entities to agree to a patient request to restrict disclosure of information to a health plan, if the information pertains solely to an item or service for which the provider was paid out of pocket in full. The HITECH Act also includes a prohibition on the payment or receipt of remuneration in exchange for protected health information without specific patient authorization, except in limited circumstances, and places additional restrictions on the use and

disclosures of protected health information for marketing communications and fundraising communications.

In the event of an unauthorized disclosure of protected health information, Covered Entities now are required to notify the affected individuals, HHS and sometimes the media of the unauthorized disclosure, depending on the nature of the breach, the type of unauthorized disclosure and its scope.

The HITECH Act revises the civil monetary penalties associated with violations of HIPAA, and provides state attorneys general with authority to enforce the HIPAA privacy and security regulations in some cases, through a damages assessment of $100 per violation or an injunction against the violator. The revised civil monetary penalties range: (a) in the case of violations due to willful neglect, from a minimum of $10,000 or $50,000 per violation depending on whether the violation was corrected within 30 days of the date the violator knew or should have known of the violation, and (b) in the case of all other violations, from a minimum of $100 to $1,000 per violation.

The Office of Civil Rights ("OCR") of HHS is required to perform periodic audits to ensure covered entities and business associates are complying with HIPAA. In 2011, OCR piloted a program to perform 115 audits of covered entities to assess privacy and security compliance. In 2016, OCR began "Phase 2" desk audits of covered entities, with desk audits of business associates and on-site audits to follow. Phase 2 will focus on areas of greater risk to the security of protected health information and on pervasive non-compliance based on OCR's initial audit findings and observations, rather than a comprehensive review of all of the HIPAA Standards. Covered entities and their business associates can expect continued audit activity by OCR in the future.

Over the past few years OCR has been increasing its enforcement for HIPAA / HITECH violations with respect to the protection of protected health information. The year 2016 marked high levels of enforcement actions, fines and, as a result, aggregate HIPAA penalties being assessed. The OCR also published a guidance on "Ransomware" (a type of hacker attack by which a third-party program or user encrypts a computer's data and then the hacker demands payment from the computer owner before decrypting the data) and on the use of cloud service providers to store or transmit protected health information. This trend has been continuing and is expected to continue.

Environmental Laws Affecting Health Care Facilities. Hospitals are subject to a wide variety of federal, state and local environmental and occupational health and safety laws and regulations that address, among other things, hospital operations or facilities and properties owned or operated by hospitals. In their role as owners and/or operators of properties or facilities, hospitals may be subject to liability for investigating and remedying any hazardous substances that have come to be located on the property, including any such substances that may have migrated off the property. Typical hospital operations include the handling, use, storage, transportation, disposal and/or discharge of hazardous, infectious, toxic, radioactive, flammable and other hazardous materials, wastes, pollutants, or contaminants. For these reasons, hospital operations are particularly susceptible to the practical, financial, and legal risks associated with compliance with such laws and regulations. Such risks may result in damage to individuals, property, or the environment; may interrupt operations and/or increase their cost; may result in legal liability, damages, injunctions or fines; or may trigger investigations, administrative proceedings, penalties or other governmental agency actions. There can be no assurance that the Hospitals will not encounter such risks in the future, and such risks may result in material adverse consequences to the operations or financial condition of the Hospitals.

Future Federal Legislation. Future legislation, regulation, and other actions by the federal government are expected to continue the trend toward reduced reimbursement for hospital services and more pervasive regulation of operations. At present, no determination can be made concerning whether,

or in what form, such legislation could be introduced and enacted into law. Similarly, the impact of future cost control programs and future regulations upon the forecasted financial performance of the Hospitals cannot be determined at this time.

Any future changes to the Medicare and Medicaid programs could result in substantial reductions in the amounts of Medicare and Medicaid payments to hospital providers in the future, which could substantially reduce the revenues available to the Hospitals, and any reduction in the levels of payment in these government payment programs could substantially adversely affect the financial condition of the Hospitals and the ability of the Obligated Group to fulfill its obligations with respect to the 2017 Bonds.

Medical Care Availability and Reduction of Error Act. In 2002, the Pennsylvania General Assembly enacted the Medical Care Availability and Reduction of Error Act (the "MCare Act"). The MCare Act includes significant patient safety initiatives, professional liability tort reforms, professional liability insurance reforms, and administrative requirements. Although the new law was initially intended to address the malpractice insurance crisis that was developing in Pennsylvania, it was substantially revised by the Pennsylvania Senate before being signed into law, and the law as signed imposes numerous requirements on health care providers in Pennsylvania.

Under the MCare Act, hospitals are required to develop and implement patient safety plans, appoint patient safety officers, form patient safety committees, and engage in mandatory reporting of serious events, incidents, and infrastructure failures in the hospital. Furthermore, hospitals are required to provide written notice to patients affected by serious events. Hospitals, ambulatory surgical centers, and birth centers are subject to administrative fines of $1,000 per day for failure to comply with the patient safety requirements of the MCare Act. The administrative provisions under the MCare Act require physicians in the Commonwealth of Pennsylvania to report to the appropriate licensing board each time they are named in a lawsuit, and provide for additional civil penalties of up to $10,000 for violations of the MCare Act by licensees.

The MCare Act also eliminated the Pennsylvania Medical Professional Liability Catastrophe Loss Fund (the "CAT Fund") and established the Medical Care Availability and Reduction of Error Fund (the "MCare Fund"). The liabilities of the CAT Fund, which were estimated at over two billion dollars, were transferred into the MCare Fund and were paid through the imposition of annual assessments on health care providers in the Commonwealth of Pennsylvania until all liabilities were satisfied. The MCare Fund provides coverage for professional liability claims in excess of a basic limit of insurance, and participation in the MCare Fund is mandatory for licensed health care providers. The administrative and financial burdens imposed on health care providers by the MCare Act are substantial, and there can be no assurance that compliance with the MCare Act will not have a material adverse effect upon the future operations and financial condition of the Hospitals.

Foreign Corrupt Practices Act. The Foreign Corrupt Practices Act (the "FCPA") prohibits corrupt payments to foreign officials for the purpose of obtaining or keeping business. The United States Department of Justice is the chief enforcement agency, with a coordinate role played by the Securities and Exchange Commission. The Health System may be subject to the FCPA in connection with its dealings with officials in foreign countries.

Regulatory Inquiries

The laws and regulations governing federal reimbursement programs and the laws governing the healthcare industry generally (such as the False Claims Act, the Civil Money Penalties Law, the Anti-Kickback Law and the Stark Law) are complex and subject to varying interpretations, and the Hospitals are subject to contractual reviews and program audits in the normal course of business. Penalties for

violations of federal regulations governing healthcare providers can be severe, including treble damages, fines, and suspension from federal reimbursement programs such as Medicare and Medicaid. Federal agencies have initiated nationwide investigations into several areas of concern, including, among others: (i) teaching hospitals, (ii) outlier payments for inpatient hospital stays, (iii) home healthcare services, (iv) investigational devices, (v) laboratory billing, (vi) cost reporting and (vii) the FCPA. The Hospitals expect that the level of review and audit to which they and other healthcare providers are subject will increase. The Hospitals have compliance programs that are designed to detect and correct potential violations of laws and regulations applicable to its programs. Regulatory authorities have discretion to assert claims for noncompliance with applicable requirements based upon their interpretation of those requirements. Because these complex program requirements are subject to varying interpretations and because, in some instances (e.g., the Anti-Kickback Law and the Stark Law), there is little clear regulatory or judicial guidance, there can be no assurance that regulatory authorities will not challenge the compliance by the Hospitals with these requirements and assert claims or penalties, and it is not possible to determine the impact (if any) any such claims or penalties would have upon the Hospitals.

Deficit Reduction Act of 2005 Quality Reporting Requirements

The Deficit Reduction Act of 2005 ("DRA") has established requirements for states participating in the Medicaid program to impose obligations on health care providers and others that receive at least $5 million annually in Medicaid payments to establish written policies and procedures to educate their employees (and certain contractors and agents) and to provide detailed information about the Federal False Claims Act, the Federal Program Fraud Civil Remedies Act, various other federal and state laws pertaining to civil or criminal penalties for false claims and statements, any whistleblower protections provided under such laws, the role of such laws in preventing and detecting fraud, waste and abuse, and the provider (or other party's) policies and procedures that are in place for the prevention and detection of fraud, waste and abuse. Additionally, covered health care providers and other applicable parties are required to make specific revisions to their existing employee handbooks to incorporate the above items, and to specifically disseminate pertinent information regarding these items to all employees and certain categories of contractors and agents making sure that covered contractors and agents agree to the adoption of certain policies and procedures. Because compliance with these DRA requirements is a condition of payment under Medicaid, providers and other covered parties that do not adequately update their compliance policies, handbooks and other training materials or otherwise abide by these requirements run the risk of losing their entitlement to receive Medicaid reimbursements to which they otherwise would be entitled and/or risk potential liability under the False Claims Act and other federal and state fraud and abuse authorities.

Tax Exemption of Nonprofit Corporations

Loss of tax-exempt status by any of the Obligated Group Members could result in loss of tax exemption of interest on the 2017 Bonds or other tax-exempt debt issued for the benefit of the Obligated Group Members, and defaults in covenants regarding the 2017 Bonds and other related tax-exempt debt could be triggered. Such an event would have material adverse consequences on the financial condition of the Obligated Group.

The maintenance by the Qualified Members of their respective tax-exempt status depends, in part, upon maintenance of their status as an organization described in Section 501(c)(3) of the Code. Maintaining that status is contingent upon compliance with general rules promulgated in the Code and related regulations regarding the organization and operation of tax-exempt entities, including their operation for charitable and educational purposes and their avoidance of transactions that would cause their assets to inure to the benefit of private persons. The Internal Revenue Service ("IRS") has closely scrutinized transactions between nonprofit organizations and for-profit entities, and has issued expanded

audit guidelines for tax-exempt hospitals. Although specific activities of hospitals, such as medical office building leases and compensation arrangements and other contracts with physicians, have been the subject of interpretations by the IRS in the form of private letter rulings, many activities have not been addressed in any official opinion, interpretation or policy of the IRS. Because the Hospitals conduct diverse operations involving private parties, there can be no assurances that certain of their transactions would not be challenged by the IRS.

The IRS has taken the position that hospitals that are in violation of the Anti-Kickback Law may also be subject to revocation of their federal tax-exempt status. As a result, tax-exempt entities such as the Hospitals that have, and will continue to have, extensive transactions with physicians are subject to an increased degree of scrutiny and perhaps enforcement by the IRS.

Code Section 4958 (the "Intermediate Sanctions Law") allows the IRS to impose "intermediate sanctions" against certain individuals in circumstances involving the violation by tax-exempt organizations of the prohibition against private inurement. Prior to the enactment of the Intermediate Sanctions Law, the only sanction available to the IRS was revocation of an organization's tax-exempt status.

Intermediate sanctions may be imposed in situations in which a "disqualified person" (such as an "insider") (i) engages in a transaction with a tax-exempt organization on other than a fair market value basis, (ii) receives unreasonable compensation from a tax-exempt organization, or (iii) receives payment in an arrangement that violates the prohibition against private inurement. These transactions are referred to as "excess benefit transactions."

A disqualified person who benefits from an excess benefit transaction will be subject to an excise tax equal to 25% of the amount of the excess benefit. Organizational managers who participate in the excess benefit transaction knowing it to be improper are subject to an excise tax equal to 10% of the amount of the excess benefit, subject to a maximum penalty of $10,000. A second penalty, in the amount of 200% of the excess benefit, may be imposed on the disqualified person (but not on the organizational manager) if the excess benefit is not corrected within a specified period of time.

The IRS revenue rulings provide guidance on joint ventures between nonprofit and for-profit health care entities. The revenue ruling provides generally that a nonprofit hospital must retain control over certain of the key aspects of such a joint venture (e.g., control of the governing body of the joint venture, change in types of services offered, etc.) in order to assure that the joint venture's activities are treated as primarily furthering the exempt purposes of the nonprofit, charitable organization. It is not possible at this point to determine whether the IRS guidelines for joint ventures will restrict the ability of the Hospitals to enter into joint ventures with for-profit entities.

The IRS has stepped up its oversight activities of nonprofit corporations, particularly health care systems and hospitals. IRS Form 990 requires nonprofit hospitals to report additional information about joint ventures, compensation arrangements and the charitable benefits that the hospital provides to the community. The IRS's enforcement efforts on issues applicable to tax-exempt organizations such as excessive compensation, private inurement, unrelated business tax and political intervention are expected to increase. The Affordable Care Act imposes additional requirements for tax-exempt organizations, including obligations to: adopt and publicize a financial assistance policy; limit charges to patients who qualify for financial assistance to the lowest amount charged to insured patients; and control the billing and collection processes. Additionally, tax-exempt hospitals must conduct periodic community needs assessments and adopt an implementation strategy to meet needs identified in the assessment. Failure to satisfy these conditions may result in the imposition of fines, including an excise tax of $50,000 per year, and the loss of tax-exempt status.

The tax-exempt status of nonprofit corporations, and the exclusion of income earned by them from taxation, has been the subject of review by various federal, state and local legislative, regulatory and judicial bodies. This review has included proposals to broaden and strengthen existing federal tax law with respect to unrelated business income of nonprofit corporations.

Bills have been introduced from time to time in Congress that would require a nonprofit hospital to provide a certain amount of charity care and care to Medicare and Medicaid patients in order to maintain its tax-exempt status and avoid the imposition of an excise tax.

The Subcommittee on Oversight of the United States House of Representatives Ways and Means Committee has considered options and recommendations in the area of taxation of unrelated business income of nonprofit organizations. Hearings have been held on these options and recommendations and legislation may be drafted to clarify and strengthen existing law with respect to the unrelated business income tax. The scope and effect of legislation, if any, that may be adopted at the federal and state levels with respect to unrelated business income cannot be predicted. Any such legislation could have the effect of subjecting a portion of a hospital's income to federal or state income taxes.

It is not possible to predict the scope or effect of future legislative or regulatory actions with respect to federal, state or local taxation of nonprofit corporations. There can be no assurance that future changes in the laws and regulations of the federal, state or local governments or audits or examinations of the activities of the Hospitals by one or more taxing authorities will not materially and adversely affect the operations and revenues of the Hospitals by requiring them to pay income, sales or real estate taxes or to make payments in lieu of such taxes.

Tax-Exempt Status of 2017 Bonds

The tax-exempt status of the 2017 Bonds is based on the continued compliance by the Authority and the Obligated Group with certain covenants contained in the Tax Certificate, to be delivered by the Authority and the Obligated Group in connection with the issuance of the 2017 Bonds. These covenants relate generally to restrictions on use of facilities financed with proceeds of the 2017 Bonds, arbitrage limitations, and rebate of certain excess investment earnings to the Federal government. Failure to comply with such covenants could cause interest on the 2017 Bonds to become taxable to the holders thereof. See "TAX EXEMPTION AND OTHER TAX MATTERS" herein. The IRS has an ongoing program of examining tax-exempt obligations to determine whether interest on such obligations is properly excluded from gross income tax for Federal income tax purposes.

Potential Changes in Federal Tax Law. From time to time, there are presidential proposals, proposals by various federal committees and legislative proposals in Congress that, if enacted, could alter or amend the tax matters referred to herein or adversely affect the marketability or market value of the 2017 Bonds or otherwise prevent holders of the 2017 Bonds from realizing the full benefit of the tax exemption of interest on the 2017 Bonds. Further, such proposals may impact the marketability or market value of the 2017 Bonds simply by being proposed. It cannot be predicted whether or in what form any such proposals may be enacted or whether if enacted such proposals would apply to bonds issued prior to enactment. In addition, regulatory or other actions are from time to time announced or proposed which, if implemented or concluded in a particular manner, could adversely affect the market value, marketability or tax status of the 2017 Bonds. It cannot be predicted whether any such regulatory action will be implemented or whether the 2017 Bonds would be impacted thereby.

Purchasers of the 2017 Bonds should consult their tax advisors regarding any pending or proposed legislation or regulations. The opinions expressed by Co-Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of

issuance and delivery of the 2017 Bonds, and Co-Bond Counsel have expressed no opinion as of any date subsequent thereto or with respect to any proposed or pending legislation or regulations.

Other Legislative and Regulatory Actions

The Hospitals are subject to regulation, certification and accreditation by various federal, state and local government agencies and by certain nongovernmental agencies such as the Joint Commission. No assurance can be given as to the effect on future hospital operations of existing laws, regulations and standards for certification or accreditation or of any future changes in such laws, regulations and standards.

Legislative proposals which could have an adverse effect on the Hospitals include: (a) any change in the taxation of not for profit corporations or in the scope of their exemption from income or property taxes; (b) limitations on the amount or availability of tax-exempt financing for charitable organizations described in Section 501(c)(3) of the Code; (c) regulatory limitations affecting the ability of the Hospitals to undertake capital projects or develop new services; and (d) a requirement that not for profit health care institutions pay real estate property tax and sales tax on the same basis as for-profit entities.

Antitrust. The Hospitals, like other providers of health care services, are subject to antitrust laws. Those laws generally prohibit agreements that restrain trade and prohibit the acquisition or maintenance of a monopoly through anticompetitive practices. The legality of particular conduct under the antitrust laws generally depends on the specific facts and circumstances and cannot be predicted in advance. Antitrust actions against health care providers have become increasingly common in recent years. Antitrust liability can arise in a number of different contexts, including medical staff privilege disputes, third-party payor contracting, joint ventures and affiliations between health care providers, and mergers and acquisitions by health care providers. Actions can be brought by federal and state enforcement agencies seeking criminal and civil penalties and, in some instances, by private plaintiffs seeking damages for harm from allegedly anticompetitive behavior.

The United States Department of Justice and the Federal Trade Commission (the "Federal Antitrust Agencies") issued "Statements of Antitrust Enforcement Policy in the Health Care Area." The statements, which have been revised from time to time, generally describe certain analytical principles which the agencies will apply to certain factual situations and also establish certain "antitrust safety zones." Conduct within the safety zones will not be challenged by the agencies, absent extraordinary circumstances. Many activities frequently engaged in by health care providers fall outside of the zones but are not challenged, and failure to fall within a safety zone does not mean that a participant will be investigated or prosecuted, or even that the activity violated the antitrust laws.

Recently, the Federal Antitrust Agencies issued a "Final Statement of Antitrust Policy Enforcement Regarding Accountable Care Organizations." In relation to ACO's, the final statement builds upon the earlier statements in terms of creating a safety zone for such organizations and providing guidance regarding the antitrust analysis to be employed by the Federal Antitrust Agencies in reviewing and investigating the competitive effects of such organizations. As with their prior statements, the Federal Antitrust Agencies reiterated their policy of vigilantly protecting consumers from anticompetitive harm of health care provider collaborations and affiliations, while still allowing providers to achieve the significant efficiencies from such collaborations and affiliations that can lead to pro-competitive benefits. There cannot be any assurances that enforcement authorities or private parties will not assert that the Hospitals, or any transaction in which any of them is involved, is in violation of the antitrust laws.

Corporate Compliance. The sentencing of organizations for federal health care crimes is governed by the U.S. Sentencing Guidelines, which permit the imposition of extremely large fines in

many instances. The Guidelines permit the fine to be reduced significantly if the provider had in place at the time of the crime an effective corporate compliance program and/or accepts responsibility for its actions. As a result of the current environment of increased enforcement against health care fraud and abuse, health care organizations have established compliance programs to prevent or detect violations of federal law. The OIG issued a Compliance Program Guideline for Hospitals in 1998 and a Supplemental Compliance Program Guidance for Hospitals in 2005 to assist hospitals in the development and implementation of effective controls and to promote adherence to applicable federal and state laws and program requirements of federal, state and private health plans.

In July 1996, the Health System adopted for itself and its affiliates a Billing Compliance Plan that was drafted in accordance with the Guidelines. A fulltime compliance officer oversees the billing activities of the Health System in coordination with compliance liaisons at each affiliate.

The Health System has also voluntarily adopted certain provisions of the Sarbanes Oxley Act, the corporate governance law that applies predominantly to publicly-held companies.

Licensing, Surveys and Accreditations. Health care facilities, including the Hospitals, are subject to numerous legal, regulatory, professional and private licensing, certification and accreditation requirements. Those requirements include, but are not limited to, requirements relating to Medicare and Medicaid participation and payment, state licensing agencies, private payors, the Joint Commission, the National Labor Relations Board and other federal, state and local government agencies. Renewal and continuance of certain of these licenses, certifications and accreditations is based on inspections, surveys, audits, investigations or other reviews. These activities are generally conducted in the normal course of business of health care facilities. Nevertheless, an adverse result could be the cause of loss or reduction in a facility's scope of licensure, certification or accreditation or reduce payments received. The Hospitals currently expect to renew or maintain all currently held licenses, certifications and accreditations. However, there can be no assurance that the requirements of present or future laws, regulations, certifications, and licenses will not materially and adversely affect the operations of the Hospitals.

Medical Professional Liability Insurance Market

A rise in claim severity nationwide coupled with lower investment returns available to insurers has resulted in some instability in medical professional liability insurance pricing. In addition, recent industry consolidation may impact competitive pressures on pricing. Health care entities that have self-funded programs are also experiencing similar difficulties with respect to fronting carriers, reinsurance on their captive insurance companies with respect to insurance placements in excess of the primary coverage layers. The effect of these developments has been to increase the operating costs of hospitals. There can be no assurance that the unpredictability and increasing severity of jury awards and claims payouts, the reduction of coverage availability, and/or the rising cost of professional liability insurance coverage will not adversely affect the operations or financial condition of the Hospitals.

The Health System's Professional Liability program consists of a primary layer of coverage, the MCare Fund, a self-insurance buffer and an excess program. The primary insurance for TUH, Jeanes and AOH, of $500,000 for each claim and $2,500,000 annual aggregate and for employed physicians of both TPI and FCCCMG of $500,000 for each claim and $1,500,000 annual aggregate is insured by Lexington Insurance Company. This exposure is 100% reinsured to a Bermuda domiciled captive insurance company wholly-owned by the Parent. The PA MCare fund attaches above the primary with individual coverage of $500,000 and aggregate of $1,500,000. Above the MCare Fund, the Health System retains the risk up to $10,000,000 each and every claim. For the Fox Chase entities there is an excess policy that attaches above a $4,000,000 attachment with a limit of liability of $6,000,000. Excess coverage through

$85,000,000 attaches at $10,000,000 and is fully insured. A judgment in excess of such coverage could have a material adverse effect on the Parent, the Hospitals or physicians practices.

Cybersecurity Risk

In the provision of the Hospitals' services, equipment, networks and corporate systems are stored and processed in an effort to protect health information and other personally identifiable information. The Hospitals share such information with third parties servicers. This subjects the Hospitals to potential risks in connection with the information which include the following:

- **Outside threats**: As other healthcare institutions, the Hospitals may be routinely targeted by outside third parties, including technically sophisticated and well-resourced state-sponsored actors, attempting to access or compromise systems and to steal patient data. This can include hacks and malware. Outside parties may attempt to fraudulently induce the Hospitals' employees, partners, or other parties to disclose sensitive information or take other actions to gain access to data (including patients' data). This can take the form of ransomware. In addition, the Hospitals' employees, some of whom have access to protected health information and other personally identifiable information, have in the past received "phishing" emails intended to trick recipients into surrendering their user names and passwords. Phishing is a fraud method in which the perpetrator sends out legitimate-looking emails in an attempt to gather personal, business, financial or other information from recipients.

- **Internal threats**: The Hospitals' workforce may also constitute a threat due to inadvertent, negligent or malicious disclosure of information. Such unauthorized access or conduct may continue undetected for an extended period of time.

- **Defective third party software or services**: Hardware, software, or applications the Hospitals procure from third parties to enable them to process protected health information or personally identifiable information, or which are connected to systems that hold such information, may contain defects in design or manufacture or other problems that could unexpectedly compromise network and data security. Alternatively, such problems could be the result of faulty implementation due to human error or malicious acts. In addition, if third party providers who process protected health information or personally identifiable information on the Hospitals' behalf, including cloud service providers, fail to adopt or adhere to adequate data security practices, or otherwise incur a breach of their networks, the Hospitals' data or patients' data may be improperly accessed, used, or disclosed.

The Hospitals take steps to prevent unauthorized data disclosure or access to their systems; however, because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event, the Hospitals may be unable to anticipate these techniques or implement adequate preventative measures.

While the Hospitals are not aware of any security incident implicating patient data on their systems to date, the fact that the Hospitals are a primary target of security breaches or other unauthorized access or actions exposes them to a risk of theft of patient data, regulatory actions, litigation, investigations, remediation costs, damage to reputation and brand, loss of patient or investor confidence in the security of systems and resulting fees, costs, and expenses, loss of revenue, and other potential liability that could have a significantly adverse effect on the business of the Hospitals. Successful

ransomware attacks which restrict access to patient files and records also carry the risk of slowing down or even temporarily stopping the Hospitals' ability to provide patient care.

- **Legislative risks**: In addition to the sections cited above with respect to HIPAA enforcement, the Hospitals may also be subject to other federal, state and foreign legislation governing privacy, data retention, data transfer and data protection issues, including laws or regulations mandating disclosure to law enforcement bodies and individuals. A breach of such regulation can lead to regulatory enforcement as well as litigation, including class actions lawsuits, which could adversely impact the Hospitals' business and reputation.

Exposure to Professional Liability

Due to the nature of their business, the Hospitals from time to time become involved as defendants in medical malpractice lawsuits, and are subject to the attendant risk of substantial damage awards. The Hospitals maintain professional liability insurance on a claims-made basis and general liability insurance on an occurrence in amounts deemed appropriate by management, based upon historical claims and the nature and risks of their business. There can be no assurance, however, that an existing or future claim or claims will not exceed the limits of available insurance coverage.

The Hospitals' contracts with third party payors generally require the Hospitals to indemnify such other parties for losses resulting from their own negligence or the negligence of their agents.

Insurance Coverage Limits

The Hospitals may be required to maintain prescribed levels of professional liability and property hazard insurance. The Hospitals believe that present insurance coverage limits are sufficient to cover any reasonably anticipated malpractice or property hazard exposures. No assurance can be given, however, that the Hospitals will always be able to procure or maintain such levels of insurance in the future.

The Hospitals are occasionally named as defendants in malpractice actions and there remains a risk that individual or aggregate judgments or settlements will exceed the Hospitals' coverage limits, or that some allegations or damages will not be covered by the Hospitals' existing insurance coverages. To the extent that the professional liability insurance coverage maintained by the Hospitals is inadequate to cover settlements or judgments against them, claims may have to be discharged by payments from current funds and such payments could have a material adverse impact.

Nursing Shortage

The health care industry is facing a nationwide shortage of nursing professionals, including registered nurses, a result primarily of nurses' retirements and the general population's aging. A shortage of nursing staff could result in escalating labor costs, delays in providing care, and patient care management issues, among other adverse effects. The shortage of nurses and other primary care healthcare practitioners may be exacerbated if the increase in access to coverage provided under the Affordable Care Act leads to an increase in demand for medical care. There can be no assurance that a nursing or other non-physician health care practitioner shortage in the future would not adversely affect the operations or financial condition of the Hospitals.

Fluctuations in Market Value of Investments

General. Earnings on investments have historically provided the Hospitals an important source of cash flow and capital appreciation to support programs and services, to finance capital expenditure investments and to build cash reserves. Historically the value of both debt and equity securities has fluctuated and, in some instances, the fluctuations have been significant. No assurances can be given that the market value of the investments of the Hospitals will grow, or even remain at the current level and there is no assurance that such market value will not decline.

Pension Funding Impact. Temple University and the affiliates of the Health System constitute a controlled group for the purpose of several defined benefit plans of the Health System. Changes in market values of investment securities potentially could have an impact on the Temple University Hospital pension fund liabilities and their requirements for funding their related pension expenses. See Appendix "A." Like other entities with pension fund liabilities, increases or decreases in interest rates could have an effect on the Hospitals' assumed earnings rates on pension fund assets needed to satisfy pension fund liabilities, which in turn could have the effect of increasing the Hospitals' current pension funding requirements. No assurance can be given that the Hospitals will not be required to make increased pension funding payments in this or other circumstances. The Health System continues to support various legacy defined benefit plans established at individual entities prior to benefits consolidation across TUHS. These plans are all frozen to new participants and future benefit accruals. Only one plan (Jeanes Hospital Retirement Income Plan) has approximately seven grandfathered employees continuing to accrue benefits. See Appendix "A"-"PERSONNEL - Benefits" herein.

Potential Effects of Bankruptcy

If the Hospitals were to file a petition for relief under the federal Bankruptcy Code, the filing would act as an automatic stay against the commencement or continuation of judicial or other proceedings against the petitioner and its property. Any petitioner for relief may file a plan for the adjustment of its debts in a proceeding under the federal Bankruptcy Code which could include provisions modifying or altering the rights of creditors generally, or any class of them, secured or unsecured. The plan, when confirmed by the court, would bind all creditors who had notice or knowledge of the plan and discharge all claims against the petitioner provided for in the plan. No plan may be confirmed unless certain conditions are met, including that the plan is in the best interests of creditors, is feasible and has been accepted by each class of claims impaired thereunder. Each class of claims will be deemed to have accepted the plan if at least two-thirds in dollar amount and more than one-half in number of the allowed claims of the class that are voted with respect to the plan are cast in its favor. Even if the plan is not so accepted, it may be confirmed if the court finds that the plan is fair and equitable with respect to each class of non-accepting creditors impaired thereunder and does not discriminate unfairly.

Factors Affecting Real Estate Tax Exemption

In recent years various state and local legislative, regulatory and judicial bodies have reviewed the exemption of nonprofit corporations from real estate taxes. Various state and local government bodies have challenged with increasing frequency and success the tax-exempt status of such institutions and have sought to remove the exemption of property from real estate taxes of part or all of the property of various nonprofit institutions on the grounds that a portion of such property was not being used to further the charitable purposes of the institution. Several of these disputes have been determined in favor of the taxing authorities or have resulted in settlements. No assurance can be given that the Hospitals will retain their real estate tax exemptions without challenge throughout the term of the 2017 Bonds.

Competition and Integrated Delivery Systems

One of the primary effects of health care reform has been an increase in competition among providers and the initiation of alternative forms of health care delivery by payors. The Obligated Group could face additional competition in the future from other hospitals, providers and managed care organizations offering similar or new services to the population now being served by the Obligated Group. This could include the initiation of new health care services and the construction or renovation of hospitals, skilled nursing or subacute care facilities; primary care centers staffed by physicians; ambulatory surgical centers; and private laboratories and imaging centers. Alternative and new forms of health care services are being pursued by providers and payors as a way to reduce costs and improve quality and utilization controls. No assurance can be given that activities of other providers or managed care organizations will not adversely affect the operations or financial condition of the Obligated Group.

Affiliations, Mergers and Acquisitions

The Health System evaluates and pursues potential acquisition, merger and affiliation candidates as part of the overall strategic planning and development process. As part of its ongoing planning and property management functions, the Health System reviews the use, compatibility and business viability of many of the operations of the Health System, and from time to time the Health System may pursue changes in the use of, or disposition of, their facilities. Likewise, the Health System occasionally receives offers from, or conducts discussions with, third parties about the potential acquisition of operations and properties which may become subsidiaries or Obligated Group Members of the Health System in the future or about the potential sale of some of the operations or property which are currently conducted or owned by the Health System. From time to time, the Health System has engaged strategic advisors to assess the future strategic direction of the Health System. Discussions with respect to affiliation, merger, acquisition, disposition or change of use of facilities, including those which may affect the Health System, are held from time to time with other parties. As a result, it is possible that the current organization and assets of the Obligated Group may change from time to time.

In addition to relationships with other hospitals and physicians, the Health System may consider investments, ventures, affiliations, development and acquisition of other health care-related entities. These may include home health care, long-term care entities or operations, infusion providers, pharmaceutical providers, and other health care enterprises that support the overall operations of the Health System. In addition, the Health System may pursue transactions with health insurers, HMOs, preferred provider organizations, third-party administrators and other health insurance-related businesses. Because of the integration occurring throughout the health care field, management will consider these arrangements if there is a perceived strategic or operational benefit for the Health System. Any initiative may involve significant capital commitments and/or capital or operating risk (including, potentially, insurance risk) in a business or have implications for Tax Exempt Status. There can be no assurance that these projects, if pursued, will not lead to material adverse consequences to the Health System.

Interest Rate Risk

Through Obligations Outstanding under the Loan and Trust Agreement, the Obligated Group is exposed to interest rate risk. A large increase in short term interest rates may cause the Obligated Group's debt service to be materially higher than it currently estimates. At such time, the Obligated Group's invested assets may not be able to earn a yield which would be sufficient to offset these higher debt service costs. As a result, the Obligated Group's operating margins could be materially adversely effected by these higher short term interest rates.

Limitations on Security Interests in the Members of the Obligated Group's Gross Receipts

The effectiveness of the security interest in the members of the Obligated Group's Gross Receipts created by the Loan and Trust Agreement may be limited by a number of factors, including: (1) provisions of the Social Security Act that may limit the ability of the Trustee to enforce directly the security interest in any of the Gross Receipts in the form of reimbursement due under the Medicaid or Medicare program and any other statutory or contractual provisions, grant award conditions, regulations or judicial decisions which may have a comparable effect with respect to any of the Gross Receipts in the form of governmental appropriations, or governmental or private research services; (2) commingling of some or all of the Gross Receipts and other moneys of the members of the Obligated Group not so pledged; (3) present and future statutory liens; (4) rights arising in favor of the United States of America or any agency thereof; (5) rights of third parties in revenues not yet expended; (6) constructive trusts, equitable or other rights impressed or conferred by federal or state courts in the exercise of equitable jurisdiction; (7) the factors described herein under "Enforceability of Obligations Under the Federal Bankruptcy Code"; and (8) rights of third parties in Gross Receipts not in possession of the Trustee.

Limitation on Mortgages from AOH and ICR

Reversionary clauses contained in the deeds to the two parcels which form the Fox Chase Cancer Center campus substantially limit the Trustee's ability to realize value through a foreclosure sale of such mortgaged premises. The deed restrictions provide that upon any change in the ownership or use of the property from a cancer research and treatment facility, the Friends Fiduciary Corporation can compel a reconveyance of the land to it. Since any potential buyer at foreclosure would be at risk of losing its land to the Friends Fiduciary Corporation, the ability of the Trustee to realize value through enforcement of the mortgage on the Fox Chase Cancer Center campus is limited.

Substitution of Security

The Amendments to the Loan and Trust Agreement authorize and direct the Trustee to accept a Substitute Security for the 2017 Bonds, which Substitute Security must provide for the full and timely repayment of the 2017 Bonds on substantially the same repayment terms as the 2017 Bonds, subject to the satisfaction of certain conditions set forth therein. See "SUBSTITUTION OF SECURITY." Such Substitute Security would likely be issued under a master indenture or similar financing document containing terms and provisions that vary significantly from the terms and provisions of the Loan and Trust Agreement, and the operations of the obligated entities under such Substitute Security Document could vary significantly from the operations of the Obligated Group. In connection with the delivery of the Substitute Security, the provisions relating to the security interest in the Gross Receipts and certain restrictions on the Obligated Group, including but not limited to those relating to, additional indebtedness, the rate covenant, the Days-Cash-On-Hand covenant and transfers of Current Assets, will be terminated and one or more of the Mortgages may be released.

Additional Factors

Additional factors that may affect future operations of the Hospitals to an extent that cannot be determined at this time include the following:

(i) Adverse labor actions that could result in a substantial reduction in revenues without corresponding decreases in cost.

(ii) Reduced demand for hospitalization or other services arising from future medical and scientific advances, e.g. cures for the types of cancer treated or a reduction in the incidence of the

types of cancer treated by Fox Chase Cancer Center, which could reduce the need for research of the kind carried out by Fox Chase Cancer Center.

(iii) Increased competition in the future from other research facilities, including, but not limited to, competition for limited federal funds for sponsoring research of the kind carried out by Fox Chase Cancer Center and for researchers likely to be awarded grants of such funds.

(iv) Reduced demand for the services of the Hospitals that might result from decreases in population of the service area of the Hospitals.

(v) Increased unemployment or other adverse economic conditions in the service area of the Hospitals which could increase the proportion of patients who are unable to pay fully for the cost of their care. In addition, increased unemployment caused by a general downturn in the economy of the Hospitals' service areas or the Commonwealth or by the closing of operation of one or more major employers in such service area may result in a loss of health insurance benefits for a portion of the Hospitals' patients.

(vi) Cost, availability and sufficiency of any insurance such as medical malpractice, fire, automobile and general comprehensive liability and property damage that health care facilities of a similar size and type generally carry.

(vii) Efforts by insurers and governmental agencies to limit the cost of hospital services and to reduce utilization of inpatient hospital facilities by such means as preventive medicine, increased emphasis on managed care, improved occupational health and safety, and outpatient care.

(viii) Availability of nurses and other qualified health care technicians and personnel.

(ix) Inability of the Hospitals to obtain future governmental approvals to undertake projects necessary to remain competitive as to rates and charges as well as quality and scope of care.

(x) Adoption of legislation proposing a national health insurance program.

(xi) Cost and availability of energy.

(xii) Potential depletion of the Medicare trust fund.

(xiii) The occurrence of terrorist activities or natural disasters, including floods and earthquakes, may damage the facilities of the Hospitals and the Health System, interrupt utility service to the facilities, or otherwise impair the operation of the Hospitals and the generation of revenues from the facilities.

(xiv) The occurrence of cyber-attacks by terrorists or hackers seeking ransom rewards on the Hospitals' electronic health record or information systems may result in substantial disruption and costs or otherwise impair the operation of the Hospitals.

(xv) The facilities of the Hospitals are covered by general property insurance in an amount which management considers to be sufficient to provide for the replacement of such facilities in the event of a natural disaster.

(xvi) Technological advances in recent years have accelerated the trend toward the use of sophisticated diagnostic and treatment equipment in hospitals. The availability of certain equipment

may be a significant factor in hospital utilization, but purchase of such equipment may be subject to health planning agency approval and to the ability of the Hospitals to finance such purchases.

(xvii) Changes in the governmental requirements concerning how patients are treated. These regulations are embodied in patients' bills of rights and similar programs being promulgated with greater frequency, and changes in licensure requirements. All of these programs can increase the cost of doing business and consequently adversely affect the financial condition of the Health System.

(xviii) Increase in federal regulating initiatives by the Office of Inspector General regarding compliance with Medicaid regulations.

(xix) Potential depletion of or unavailability of the federalized portion of the Temple University Non-preferred Education and General Appropriation, as more fully described in Appendix "A" hereto.

FORWARD-LOOKING STATEMENTS

Information included under the heading "BONDHOLDERS' RISKS" above and elsewhere in the other sections in this Official Statement and Appendix "A" hereto includes forward-looking statements about the future that are necessarily subject to various risks and uncertainties (the "Forward-Looking Statements"). These Forward-Looking Statements are (i) based on the beliefs and assumptions of management of each Member of the Obligated Group and on information currently available to such management and (ii) generally identifiable by words such as "estimates," "expects," "anticipates," "plans," "believes" and other similar expressions.

Any number of events could cause future results to differ materially from those expressed in or implied by Forward-Looking Statements or historical experience. These events include the impact or outcome of many factors that are described throughout this Official Statement and Appendix "A" hereto, including, without limitation, the discussion under "BONDHOLDERS' RISKS" in this Official Statement and "SUMMARY FINANCIAL AND OPERATING INFORMATION" in Appendix "A" hereto. Although the ultimate impact of such factors is uncertain, they may cause future performance to differ materially and adversely from results or outcomes that are currently sought or expected by the Obligated Group.

TAX EXEMPTION AND OTHER TAX MATTERS

Federal Tax Exemption

Co-Bond Counsel will each deliver, concurrently with the issuance of the 2017 Bonds, their opinion to the effect that under existing statutes, regulations, rulings and court decisions, interest on the 2017 Bonds will not be includible in the gross income of the holders thereof for federal income tax purposes and will not be a specific preference item for purposes of calculating individual or corporate alternative minimum taxable income. Interest on the 2017 Bonds is included in the adjusted current earnings of corporations for purposes of computing the alternative minimum tax imposed on corporations. In addition, interest on the 2017 Bonds may be included in a foreign corporation's effectively connected earnings and profits upon which certain foreign corporations are required to pay the foreign branch profits tax imposed under Section 884 of the Code. See Appendix "D"- "FORM OF OPINION OF CO-BOND COUNSEL."

Certain of the 2017 Bonds have been offered at a premium ("original issue premium") over their principal amount. For federal income tax purposes, original issue premium is amortizable periodically

over the term of such bond through reductions in the holder's tax basis for the 2017 Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Amortizable premium is accounted for as reducing the tax-exempt interest on the 2017 Bond rather than creating a deductible expense or loss. Holders should consult their tax advisers for an explanation of the amortization rules.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2017 Bonds. Ongoing requirements include, among other things, the provisions of Section 148 of the Code which prescribe yield and other limits within which the proceeds of the 2017 Bonds are to be invested and which may require that certain excess earnings on investments made with the proceeds of the 2017 Bonds be rebated on a periodic basis to the United States. The Members and the Authority have made certain representations and undertaken certain agreements and covenants in the Loan and Trust Agreement and in a tax compliance agreement to be delivered concurrently with the issuance of the 2017 Bonds designed to ensure compliance with the applicable provisions of the Code. Any inaccuracy of these representations or the failure on the part of the Members or the Authority to comply with such covenants and agreements could result in the interest on the 2017 Bonds being included in the gross income of the holder for federal income tax purposes, in certain cases retroactive to the date of original issuance of the 2017 Bonds.

The opinions of Co-Bond Counsel assume the accuracy of these representations and the future compliance by the Members and the Authority with their respective covenants and agreements. Moreover, Co-Bond Counsel have not undertaken to evaluate, determine or inform any person, including any holder of the 2017 Bonds, whether any actions taken or not taken or events occurring or not occurring in the future, or other matters that might come to the attention of Co-Bond Counsel, would adversely affect the value of, or tax status of the interest on, the 2017 Bonds.

Each of the Qualified Members has represented that it is an organization described in Section 501(c)(3) of the Code exempt from federal income tax under Section 501(a) of the Code, except for unrelated business income subject to taxation under Section 511 of the Code, and is not a "private foundation" within the meaning of Section 509(a) of the Code. In delivering their opinions as to the tax status of the 2017 Bonds for federal income tax purposes, Co-Bond Counsel will rely upon representations of each Qualified Member that such Qualified Member is a charitable organization described in Section 501(c)(3) of the Code. The failure of any Qualified Member to be organized and to remain qualified as a so-called "501(c)(3) organization" and to conduct its activities (and particularly its activities with respect to the facilities financed or refinanced with the proceeds of the 2017 Bonds) in a manner that is substantially related to its charitable purpose could also result in the interest on the 2017 Bonds being included in gross income for federal income tax purposes, in some cases retroactive to the date of their original issuance.

There can be no assurance that currently existing or future legislative proposals by the United States Congress limiting or further qualifying the excludability of interest on tax-exempt bonds from gross income for federal tax purposes, or changes in federal tax policy generally, will not adversely affect the market for the 2017 Bonds.

Pennsylvania Tax Exemption

Co-Bond Counsel will also each deliver an opinion to the effect that under existing law as enacted and construed on the date of such opinion, the 2017 Bonds are exempt from personal property taxes in Pennsylvania, and interest on the 2017 Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax. However, under the laws of the Commonwealth as presently enacted and construed, any profits, gains or income derived from the sale, exchange or other disposition

of obligations of the Authority, such as the 2017 Bonds, will be subject to Pennsylvania taxes within the Commonwealth.

The 2017 Bonds and the interest thereon may be subject to state or local taxes in jurisdictions other than the Commonwealth under applicable state or local tax laws.

PROSPECTIVE PURCHASERS OF THE 2017 BONDS SHOULD CONSULT THEIR OWN TAX ADVISORS WITH RESPECT TO THE FEDERAL, STATE AND LOCAL INCOME TAX CONSEQUENCES OF OWNERSHIP OF THE 2017 BONDS AND ANY CHANGES IN THE STATUS OF PENDING OR PROPOSED TAX LEGISLATION.

Other Tax Matters

Ownership of the 2017 Bonds may result in collateral federal tax consequences to certain tax payers, including, without limitation, financial institutions, S corporations with excess net passive income, property and casualty companies, individual recipients of social security or railroad retirement benefits and taxpayers who may be deemed to have incurred indebtedness to purchase or carry the 2017 Bonds. Co-Bond Counsel will express no opinion with respect to these or any other collateral tax consequences of the ownership of the 2017 Bonds. The nature and extent of the tax benefit to a taxpayer of ownership of the 2017 Bonds will generally depend upon the particular nature of such taxpayer or such taxpayer's own particular circumstances, including other items of income or deduction. Accordingly, prospective purchasers of the 2017 Bonds should consult their own tax advisors.

Future legislation, if enacted into law, or clarification of the Code may cause interest on the 2017 Bonds to be subject, directly or indirectly, to federal income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such future legislation or clarification of the Code may also affect the market price for, or marketability of, the 2017 Bonds. PROSPECTIVE PURCHASERS OF THE 2017 BONDS SHOULD CONSULT THEIR OWN TAX ADVISERS REGARDING ANY PROPOSED FEDERAL TAX LEGISLATION.

The opinions of Co-Bond Counsel are based on current legal authority, cover certain matters not directly addressed by such authorities, and represent Co-Bond Counsel's judgment as to the proper treatment of the 2017 Bonds for federal income tax purposes. They are not binding on the IRS or the courts.

LEGAL MATTERS

Legal matters incident to the authorization, issuance and sale of the 2017 Bonds will be passed upon on the date of delivery of the 2017 Bonds by Dilworth Paxson LLP of Philadelphia, Pennsylvania, and Stevens & Lee, P.C., of Philadelphia, Pennsylvania, Co-Bond Counsel. Certain legal matters regarding the 2017 Bonds will be passed upon for the Authority by its counsel, Austin J. McGreal, Esquire, Philadelphia, Pennsylvania, for the Obligated Group by Beth C. Koob, Esquire, Chief Counsel of the Parent, and for the Underwriters by their counsel, Ballard Spahr LLP, Philadelphia, Pennsylvania.

INDEPENDENT AUDITORS

The financial statements of Temple University Health System, Inc. as of and for the years ended June 30, 2017, 2016 and 2015, included in Appendix "B" to this Official Statement, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their reports appearing therein.

VERIFICATION

Chris D. Berens, CPA, P.C., Omaha, Nebraska (the "Verification Agent"), will deliver on or before the date of issuance of the 2017 Bonds its verification report indicating that it has examined, in accordance with standards established by the American Institute of Certified Public Accountants, certain information provided to it with respect to the Refunded Bonds and the 2017 Bonds. Included in the scope of its examination will be a verification of the accuracy of the mathematical computations relating to the adequacy of the maturing principal of and interest earned on the government obligations and any initial cash balances to be held in escrow to provide for the payment of the principal of and accrued interest and redemption premium, if any, on the Refunded Bonds when due, which computations support certain opinions of Co-Bond Counsel. The Verification Agent will express no opinion on the assumptions provided to it, nor as to the exclusion from gross income of the interest on the 2017 Bonds.

LITIGATION

There is no litigation of any nature pending or, to the Authority's knowledge, threatened seeking to restrain or enjoin the issuance, sale, execution or delivery of the 2017 Bonds, or in any way contesting or attempting to contest the validity of the 2017 Bonds or any proceedings of the Authority with respect to the issuance or sale thereof, or the pledge or application of any money or security provided for the payment of the 2017 Bonds or the existence of the Authority, or any of the transactions contemplated by the 2017 Bonds or the Loan and Trust Agreement.

There are various legal actions pending against Members of the Obligated Group. For a discussion of these matters, see "LITIGATION" in Appendix "A."

FINANCIAL ADVISOR

PFM Financial Advisors LLC (the "Financial Advisor") has served as financial advisor to the Obligated Group with respect to the 2017 Bonds. The Financial Advisor assisted the Obligated Group on matters relating to the planning, structuring and issuance of the 2017 Bonds and provided other financial advice. The Financial Advisor is an independent financial advisory and consulting firm and is not engaged in the underwriting, marketing or trading of municipal securities or other negotiable instruments. The Financial Advisor is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information contained in the Official Statement.

CERTAIN RELATIONSHIPS

Dilworth Paxson LLP, Co-Bond Counsel, provides certain legal services for members of the Obligated Group from time to time. Samuel H. Lehrer, Esquire, an of counsel lawyer at Dilworth Paxson LLP, also serves on the Board of Governors of Temple University Hospital.

Stevens & Lee, P.C., Co-Bond Counsel, currently provides certain other legal services for one or more of the members of the Obligated Group.

Ballard Spahr LLP, which is serving as counsel to the Underwriters, currently provides certain legal services for one or more of the members of the Obligated Group from time to time.

UNDERWRITING

The 2017 Bonds are being purchased by the underwriters listed on the cover page of this Official Statement (the "Underwriters"), for which Morgan Stanley & Co. LLC is acting as Representative, at a price of $260,152,911.12, which represents the par amount of the 2017 Bonds, plus original issue premium of $27,365,237.35, and less an underwriting discount of $2,452,326.23. The Bond Purchase Agreement for the 2017 Bonds (the "Purchase Agreement") provides, among other things, that the Underwriters will purchase all the 2017 Bonds, if any are purchased. The Purchase Agreement also provides that the Obligated Group will indemnify the Underwriters against losses, claims and liabilities arising out of any materially incorrect statement or information contained in or material information omitted from this Official Statement pertaining to the Obligated Group. The initial public offering price set forth on the inside cover page of this Official Statement may be changed by the Underwriters from time to time without any requirement of prior notice. The Underwriters reserve the right to offer to sell 2017 Bonds to certain dealers and others at prices lower than those offered to the public.

The Representative has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of this arrangement, the Representative may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, the Representative may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the 2017 Bonds.

RATINGS

Moody's Investors Service, Inc., S&P Global Ratings, a division of S&P Global Inc. and Fitch Ratings have assigned ratings to the 2017 Bonds of "Ba1" with a stable outlook; "BBB-" with a stable outlook; and "BB+" with a stable outlook, respectively.

Any ratings assigned to the 2017 Bonds reflect only the views of the respective rating agencies at the time the ratings are issued, and any explanation of the significance of such rating may only be obtained from the rating agency furnishing the same. Ratings are not a recommendation to buy, sell or hold the 2017 Bonds; and there is no assurance that such rating will be maintained for any given period of time or that it may not be revised downward or withdrawn entirely by the rating agency if, in its judgment, circumstances so warrant. Any downward change in or withdrawal of such rating may have an adverse effect on the price at which the 2017 Bonds may be resold by the owner of such 2017 Bonds.

CONTINUING DISCLOSURE UNDERTAKING

Each Member of the Obligated Group has undertaken the responsibility for providing certain annual and quarterly financial information and operating data and for any material event disclosure pursuant to a Continuing Disclosure Agreement in the form attached hereto as Appendix "E."

The Continuing Disclosure Agreement provides, among other things, that the Obligated Group will hold telephonic conference calls in order to provide certain information on the Health System. The frequency of the telephonic conference calls is based upon the rating of the 2017 Bonds. At its current credit rating and until the 2017 Bonds carry two published ratings of "Baa1/BBB+" or their equivalent, such calls will be held on a quarterly basis. See Appendix "E" attached hereto.

In addition, the Parent has agreed in the Continuing Disclosure Agreement to make certain financial information with respect to the Health System available on the Health System Finance Department's website and to deliver such information to the Dissemination Agent and to Bondholders requesting copies of such information. By purchasing a 2017 Bond, each Holder, including holders from

time to time of a book-entry credit evidencing an interest in the 2017 Bonds, acknowledges and agrees that Temple University and the Non-Members are not obligated persons within the meaning of Rule 15c2-12, and that the delivery of such information shall not create any agreement or admission, express or implied, that any such entities are obligated persons, and that no recourse shall be had for any payment or security for the 2017 Bonds against Temple University, Non-Members, or their respective assets, revenues or income. See Appendix "E" for the complete text of the form of the Continuing Disclosure Agreement.

Members of the Obligated Group entered into continuing disclosure agreements in connection with the issuance of the 2007A Bonds, the 2007B Bonds, the 2012A Bonds and the 2012B Bonds. From 2011 to 2016, Jeanes and TUH did not file certain operating data related to their medical staff as required by the continuing disclosure agreements. In 2012, Jeanes and TUH also did not file a medical staff summary as required by the continuing disclosure agreements. From 2013 to 2016, AOH did not file certain operating data related to its medical staff as required by the continuing disclosure agreements. AOH, Jeanes, and TUH also did not file failure to file notices related to this operating data. AOH, Jeanes and TUH have updated their EMMA filings to include this operating data and a failure to file notice. AOH, Jeanes, and TUH have also updated their continuing disclosure policies and procedures to help ensure future compliance with their continuing disclosure obligations.

OTHER MATTERS

The references herein to the Loan and Trust Agreement are brief outlines of certain provisions thereof. Such outlines do not purport to be complete. For full and complete statements of such provisions, reference is made to the Loan and Trust Agreement.

The attached Appendices are integral parts of this Official Statement and should be read together with all foregoing statements.

All estimates and assumptions herein have been made on the best information available and are believed to be reliable, but no representations whatsoever are made that such estimates or assumptions are correct or will be realized. So far as any statements herein involve matters of opinion, whether or not expressly so stated, they are intended merely as such and not as representations of fact.

The information hereinabove set forth, and that which follows in the Appendices, should not be construed as representing all the conditions affecting the Authority, the Obligated Group or the 2017 Bonds.

The Authority and the Obligated Group have authorized the execution and distribution of this Official Statement. The Authority has not assisted in the preparation of this Official Statement, except for the statements under the sections captioned "THE AUTHORITY" and "LITIGATION" herein and except for those sections, the Authority is not responsible for any statements made in this Official Statement, including the Appendices.

Except for the authorization, execution and delivery of documents required to effect the issuance of the 2017 Bonds, the Authority assumes no responsibility for the disclosures set forth in this Official Statement.

THE HOSPITALS AND HIGHER EDUCATION FACILITIES AUTHORITY OF PHILADELPHIA

By: /s/ James P. Baker, Jr.
Name: James P. Baker, Jr.
Title: Interim President

Approved:

TEMPLE UNIVERSITY HEALTH SYSTEM, INC.

By: /s/ Robert H. Lux
Name: Robert H. Lux
Title: Chief Financial Officer

TEMPLE UNIVERSITY HOSPITAL, INC.

By: /s/ Gerald Oetzel
Name: Gerald Oetzel
Title: Chief Financial Officer

JEANES HOSPITAL

By: /s/ Ray Lefton
Name: Ray Lefton
Title: Chief Financial Officer

TEMPLE HEALTH SYSTEM TRANSPORT TEAM, INC.

By: /s/ Robert H. Lux
Name: Robert H. Lux
Title: Chief Financial Officer

TEMPLE PHYSICIANS, INC.

By: /s/ Marc Prizer
Name: Marc Prizer
Title: Chief Financial Officer

THE AMERICAN ONCOLOGIC HOSPITAL

By: /s/ Ray Lynch
Name: Ray Lynch
Title: Chief Financial Officer/Treasurer

THE INSTITUTE FOR CANCER RESEARCH

By: /s/ Ray Lynch
Name: Ray Lynch
Title: Chief Financial Officer/Treasurer

FOX CHASE CANCER CENTER MEDICAL GROUP, INC.

By: /s/ Ray Lynch
Name: Ray Lynch
Title: Chief Financial Officer/Treasurer

FOX CHASE NETWORK, INC.

By: /s/ Ray Lynch
Name: Ray Lynch
Title: Chief Financial Officer/Treasurer

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APPENDIX A

CERTAIN INFORMATION CONCERNING
TEMPLE UNIVERSITY HEALTH SYSTEM, INC. AND THE UNIVERSITY

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OVERVIEW OF THE HEALTH SYSTEM

Temple University Health System, Inc. (the "Parent" or "TUHS") is a Pennsylvania non-profit corporation, the sole member of which is Temple University – Of The Commonwealth System of Higher Education ("Temple University" or the "University"). The University incorporated the Parent in August 1995 and under a Plan of Division effective June 30, 1996 (the "Plan of Division"), the Parent became the sole member of certain University-affiliated entities that provide health care services. For certain information regarding the University, see "THE UNIVERSITY" herein. The Parent serves principally to coordinate the activities and plans of its operating subsidiaries and other affiliates as described herein. THE PARENT DOES NOT HAVE ANY SIGNIFICANT OPERATING ASSETS OR REVENUES OF ITS OWN.

The Parent is the sole member of, and serves principally to, coordinate the activities and plans for, Temple University Hospital, Inc. ("Temple University Hospital" or "TUH"), Jeanes Hospital ("Jeanes" or "Jeanes Hospital"), The American Oncologic Hospital d/b/a The Hospital of Fox Chase Cancer Center ("AOH"), Temple Health System Transport Team, Inc. ("Temple Transport") and Temple Physicians, Inc. ("Temple Physicians" or "TPI") and various other TUHS affiliated entities that provide health care services (all such affiliated entities, including those named here, are hereinafter referred to collectively as the "Temple Health Affiliates"). AOH is the sole member of The Institute for Cancer Research d/b/a The Research Institute of Fox Chase Cancer Center ("ICR"), Fox Chase Network, Inc. ("Network") and Fox Chase Cancer Center Medical Group, Inc. ("FCCCMG"). The Parent, the Temple Health Affiliates, ICR, the Network and FCCCMG are referred to hereinafter collectively as the "Health System."

THE PARENT, TEMPLE UNIVERSITY HOSPITAL, JEANES, AOH, ICR, NETWORK, FCCCMG, TEMPLE TRANSPORT AND TEMPLE PHYSICIANS ARE THE ONLY MEMBERS OF THE OBLIGATED GROUP (THE "OBLIGATED GROUP"), WHICH WAS CREATED UNDER THE LOAN AND TRUST AGREEMENT REFERRED TO IN THE FOREPART OF THIS OFFICIAL STATEMENT. THESE ENTITIES, AND ONLY THESE ENTITIES, ARE JOINTLY AND SEVERALLY LIABLE FOR ALL OBLIGATIONS ISSUED OR TO BE ISSUED UNDER THE LOAN AND TRUST AGREEMENT.

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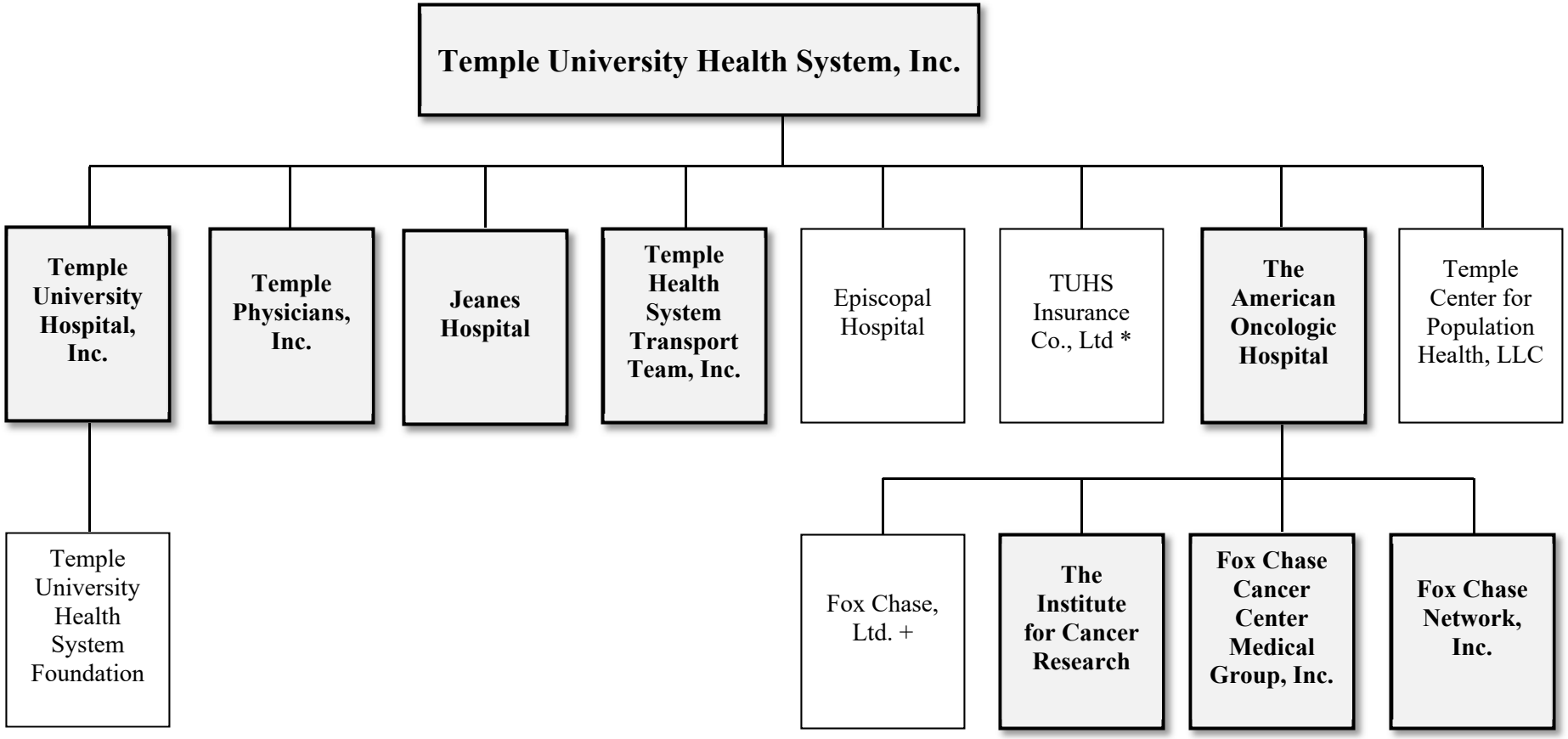
CORPORATE ORGANIZATION

Corporate Structure



Note: Entities in BOLD TEXT and BOX denote members of the Obligated Group
* Stock corporation whose shares are owned by TUHS
\+ Stock corporation whose shares are owned by AOH

The Obligated Group

The following is a brief description of the activities and operations of the Obligated Group. The members of the Obligated Group are the only entities obligated to make payments on the 2017 Bonds.

Temple University Hospital, Inc.

TUH is a Pennsylvania non-profit corporation that owns and operates a 732-bed teaching hospital operating inpatient locations on two campuses in North Philadelphia, one located at TUH, 3401 North Broad Street, Philadelphia (Health Science Center campus); the other at TUH-Episcopal campus located at 100 East Lehigh Avenue, Philadelphia, and a bone marrow treatment unit located at Jeanes, 7600 Central Avenue, Philadelphia. Founded in 1892, TUH provides a comprehensive range of medical services to a population residing in the surrounding areas of North Philadelphia and a broad spectrum of secondary, tertiary and quaternary care services to patients referred from throughout the East Coast of the United States. Temple University Hospital's physical facilities include inpatient units, diagnostic and therapeutic facilities and ambulatory care facilities. Temple University Hospital's Health Science Center campus serves as the site for much of the clinical training at the Lewis Katz School of Medicine at Temple University ("LKSOM" or the "School of Medicine"). The TUH-Episcopal campus is a behavioral health facility consisting of a 21-bed medical surgical unit, a 118-bed psychiatric unit, an emergency room and crisis response center. The 18-bed bone marrow transplantation unit operates on the campus of Jeanes Hospital described below.

For the Fiscal Year ended June 30, 2017, TUH generated operating revenues of $1,116,606,000, and an operating loss of $5,770,000 largely due to the implementation of an inpatient electronic health record ("EPIC") system, which through June 30, 2017 added $30,913,000 of directly related costs and an additional $12,400,000 related to the impact of the transition on patient length of stay and overall productivity of the clinical staff. (Included in these amounts are funds totaling $6,229,000 received by TUH as revenue and transferred to the University as part of the Temple University Non-Preferred appropriation from the Commonwealth of Pennsylvania (the "Commonwealth")[*]). At that date, TUH had total assets of $737,213,000 and net assets of $193,741,000.

The mission of TUH is to provide access to the highest quality of health care in an academic setting, to support the highest quality teaching and training programs for health care students and professionals, and to support the highest quality research programs. From its founding until August 1995, TUH was an unincorporated operating division of the University. Pursuant to the Plan of Division, the University divided itself into three corporations: the University, Temple University Hospital and Temple University Children's Hospital, Inc. Temple University Children's Hospital, Inc. was subsequently merged into TUH in 2008 and the building operated by Temple University Children's Hospital, Inc. was closed and converted to additional bed capacity at TUH. Under the Plan of Division, all of the assets and liabilities related to the operations of the division which constituted Temple University Hospital were vested in and assumed by Temple University Hospital. Members of the TUH medical staff who are also faculty of the LKSOM are employed by Temple University. For a brief description of the University see "THE UNIVERSITY" herein. For a discussion of the Temple University physicians see "MEDICAL STAFF AND PHYSICIAN RELATIONS" herein.

The Commonwealth owns the land on which the main Temple University Hospital facilities and certain of the Temple University Hospital buildings are located, which it leases to the University for a

[*] Under the Medical Assistance Academic Medical Center program the Commonwealth federalizes a portion of the Non-Preferred Appropriation for Temple University and pays it to Temple University Hospital. This payment is paid to Temple University through an equity transfer.

term ending December 31, 2043 for a nominal rent. The University, in turn, subleases these facilities to Temple University Hospital for an identical term for a nominal rent.

Temple Physicians Incorporated

TPI is a Pennsylvania non-profit corporation, the sole member of which is the Parent. TPI was formed by the Health System to develop a primary care physician network through acquiring and managing physician practices for the benefit of the communities served by the Health System. TPI employs community-based primary care physicians and certain specialty and sub-specialty physician practices located in the service area of the Health System that provide services to the Temple Health Affiliates. TPI operates practices in 67 locations, including four urgent care sites, located primarily in the Philadelphia market. As of June 30, 2017, TPI employed 94 physicians and 47 physician extenders. In Fiscal Year 2016, 18,417 of TUHS's 38,836 inpatient discharges (47%) were treated by TPI in a hospital or physician office setting. For the Fiscal Year ended June 30, 2017, TPI generated operating revenues of $67,089,000, and an operating loss of $5,227,000. At that date, TPI had total assets of $22,916,000 and net assets of $6,249,000.

Temple Health System Transport Team

Temple Transport is a Pennsylvania non-profit corporation, the sole member of which is the Parent. Temple Transport is an air and ground intensive care transport system serving the hospitals within the Health System as well as surrounding health care providers. Temple Transport capabilities include specialty training in complex cardiac, pulmonary, neurologic, orthopedic, trauma care and helicopter transport. In the Fiscal Year ended June 30, 2017, Temple Transport transported 1,115 patients from non-TUHS hospitals to TUH. For the Fiscal Year ended June 30, 2017, Temple Transport generated operating revenues of $5,065,000, and an operating loss of $2,687,000. At that date, Temple Transport had total assets of $1,652,000 and net assets of $352,000.

The American Oncologic Hospital d/b/a The Hospital of Fox Chase Cancer Center

AOH is a Pennsylvania non-profit corporation, the sole member of which is the Parent. AOH is located immediately adjacent to Jeanes. AOH owns and operates a 100 licensed bed specialty hospital that provides advanced inpatient and outpatient care to cancer patients. Founded in 1904 in West Philadelphia, AOH was among the first cancer hospitals in the nation. In 1967, AOH relocated to its present location on the Fox Chase campus. This move was prompted by the belief that the pace of medical progress in cancer treatment and cure would be quickened if medicine and science worked together. A portion of patients treated at AOH receive new drugs or new therapies under clinical trial agreements not generally available in its service area. As a specialty cancer hospital, AOH is exempt from the Medicare Prospective Payment System. AOH provides support funding to ICR. For the Fiscal Year ended June 30, 2017, AOH generated operating revenues of $341,113,000, and operating income of $40,638,000. At that date, AOH had total assets of $169,447,000 and net assets of $33,078,000.

The Institute for Cancer Research d/b/a the Research Institute of Fox Chase Cancer Center

ICR is a Delaware non-profit corporation, the sole member of which is AOH. ICR was founded in 1925 as part of the Lankenau Hospital Research Institute, and separately incorporated in 1944. In 1949, ICR moved to its present site on the AOH campus. ICR is the research entity at Fox Chase and is primarily engaged in basic, clinical, and translational cancer research, including programs in cancer biology, molecular therapeutics, blood cell development and function, cancer epigenetics, and cancer prevention and control and maintains common research resources for the benefit of all Fox Chase research activities. ICR is one of 49 National Cancer Institute designated Comprehensive Cancer Centers.

For the Fiscal Year ended June 30, 2017, ICR generated operating revenues of $48,773,000, and an operating loss of $27,394,000. At that date, ICR had total assets of $142,029,000 and net assets of $105,142,000. The shortfall funding for ICR is provided by AOH.

Fox Chase Cancer Center Medical Group, Inc.

FCCCMG is a Pennsylvania non-profit corporation, the sole member of which is AOH. FCCCMG employs physicians that provide services to the Fox Chase family of organizations and its affiliates. At June 30, 2017, FCCCMG employed 156 physicians. For the Fiscal Year ended June 30, 2017, FCCCMG generated operating revenues of $60,212,000, and operating income of $3,788,000. At that date, FCCCMG had total assets of $23,096,000 and net assets of $7,788,000. The shortfall funding for FCCCMG is provided by AOH.

Fox Chase Network, Inc.

The Network is a Pennsylvania non-profit corporation, the sole member of which is AOH. The Network provides cancer related clinical and administrative services to cancer programs of community hospitals and physicians, as well as cancer related consulting services to various entities in the United States and abroad. For the Fiscal Year ended June 30, 2017, the Network generated operating revenues of $567,000, and an operating loss of $541,000. At that date, the Network had total assets of $2,624,000 and net assets of $2,200,000.

Jeanes Hospital

Jeanes is a Pennsylvania non-profit corporation, the sole member of which is the Parent. Jeanes owns and operates an acute care hospital facility licensed for 146 beds in the Fox Chase section of Northeast Philadelphia. Jeanes provides a full range of clinical services including advanced cardiac care to its community. 62% of the active medical staff of Jeanes are employed physicians of either Temple Physicians or the University. The land that Jeanes sits on is owned by the Friends Fiduciary Corporation, a Quaker organization, and is leased to Jeanes under a ground lease with a renewable term that currently expires on June 30, 2046. The lease is renewable in 10 year increments not to exceed a 50 year term so long as Jeanes is a tenant in good standing. For the Fiscal Year ended June 30, 2017, Jeanes generated operating revenues of $155,942,000, and an operating loss of $3,706,000. At that date, Jeanes had total assets of $87,299,000 and net deficit of $13,772,000.

Other Affiliated Entities

Certain members of the Obligated Group serve as a member or shareholder of a number of subsidiary entities; none of these subsidiary entities are members of the Obligated Group. These include the following:

Episcopal Hospital

Episcopal Hospital ("Episcopal Hospital") is a Pennsylvania non-profit corporation, the sole member of which is the Parent. Episcopal Hospital is the owner of the real property that previously comprised the Episcopal Hospital. Most of these assets are leased to TUH which provides clinical care under its license on the TUH-Episcopal campus. Episcopal Hospital holds a board seat along with TUH in Health Partners Plans ("HPP"), an organization described in more detail under the heading "STRATEGY." For the Fiscal Year ended June 30, 2017, Episcopal Hospital generated operating revenues of $2,052,000, and an operating loss of $1,197,000. At that date, Episcopal Hospital had total

assets of $36,220,000 and a net deficit of $16,951,000. Episcopal Hospitals' negative net asset value is largely the result of a legacy frozen defined benefit pension plan.

Temple University Health System Foundation

The Temple University Health System Foundation (the "TUHS Foundation") is a Pennsylvania non-profit corporation, the sole member of which is Temple University Hospital. The TUHS Foundation was formed to support the health-care-related activities of the Health System. For the Fiscal Year ended June 30, 2017, TUHS Foundation did not generate operating revenues, and generated an operating loss of $13,000. At that date, TUHS Foundation had total assets of $36,865,000 and net assets of $36,865,000.

TUHS Insurance Company, Ltd.

TUHS Insurance Company, Ltd. ("TUHIC") is a foreign captive insurance company established to reinsure the professional liability claims of certain subsidiaries of the Health System.

Temple Center for Population Health, LLC

Temple Center for Population Health, LLC ("TCPH") is a Pennsylvania limited liability company whose sole member is the Parent. TCPH was formed on January 1, 2014. Currently, the relationship with HPP is accounted for directly on the books of TUH and Episcopal Hospital. TCPH participates in accountable care, coordinated care, shared savings, and other similar programs or initiatives with or implemented by governmental payors, commercial payors or other parties. For the Fiscal Year ended June 30, 2017, TCPH generated operating revenues of $2,584,000. TCPH did not generate operating income. At that date, TCPH had total assets of $3,357,000 and a net deficit of $179,000.

Fox Chase, Ltd.

Fox Chase, Ltd. ("Limited") is a Pennsylvania business corporation, the sole stockholder of which is AOH. For the Fiscal Year ended June 30, 2017, Limited did not generate operating revenues or operating income. At that date, Limited had total assets of $17,000. Limited did not have any net assets.

AWARDS AND RECOGNITION

Temple University Hospital

Among TUH's many recognitions are the following:

- Recently named by The Joint Commission as one of the nation's Top Performers on Key Quality Measures for three straight years.
- TUH is one of only three hospitals nationwide to earn the 2015 Rising Star Award, an honor presented by the University Health System Consortium ("UHC") to academic medical centers that have made significant improvements in their annual rankings in UHC's annual Quality and Accountability Study.
- Recently earned the status of a Blue Distinction Center for Transplants by Blue Cross Blue Shield, in recognition of the Temple University Hospital Bone Marrow Transplant ("BMT") Program's expertise in performing adult bone marrow transplants.
- TUH's Burn Center, the only burn center in the region at a Level 1 trauma hospital, earned re-verification by the American Burn Association and the American College of Surgeons Committee on Trauma – a national mark of distinction for superior care.

- Certification in Lung Volume Reduction Surgery, Palliative Care, Stroke, and Ventricular Assistive Device by The Joint Commission.
- Accreditation by the Foundation for the Accreditation of Cellular Therapy for the Bone Marrow Transplant Program.
- Ranked 60th in the nation in *U.S. News & World Report* Best Hospitals ranking and recognized for high performance in six specialties: cardiology and heart surgery, gastroenterology and GI surgery, gynecology, nephrology, neurology and neurosurgery, and pulmonology.
- Recipient of the American Heart Association/American Stroke Association's Get With The Guidelines–Resuscitation Gold Quality Achievement Award, and Gold Plus/Target Stroke Quality Achievement Award.
- Recently earned the status of a Blue Distinction Center for Maternity Care by Blue Cross Blue Shield.
- The Joint Commission has officially certified TUH as a Primary Stroke Center. This certification recognizes TUH's comprehensive, multidisciplinary Stroke Program as having put into place national best-practice standards and performance measurement expectations to achieve optimal patient outcomes. TUH's Ventricular Assist Device ("VAD") program has been granted certification by The Joint Commission. TUH's VAD program offers advanced circulatory support to patients with debilitating heart failure, dramatically improving their survival and quality of life, either on a permanent basis or as a bridge to heart transplantation.
- TUH provides transplantation services in BMT, lung, heart, heart-lung, liver, kidney and pancreas. In the Fiscal Year ended June 30, 2017, TUH performed 326 transplants.
- Healthgrades' Distinguished Hospital Award for Clinical Excellence; only 5% of U.S. hospitals share this distinction.
- Three TUH physicians were honored as "Doctors of Distinction" by the Philadelphia Business Journal.
- Recognized by the District 1199C Training & Upgrading Fund with the Outstanding Education Partner Award.
- Recognized by the American Heart Association for superior outcomes for patients who suffer the most deadly type of heart attack, ST Elevation Myocardial Infarction.
- Mission: Lifeline Silver Receiving Quality Achievement Award and the Mission: Lifeline Silver-Plus Award from the American Heart Association. Mission: Lifeline is AHA's system of evidence-based guidelines to coordinate the care delivered by first responders, hospitals, and other health care providers to patients suffering from acute coronary syndrome.
- TUH, TUH-Episcopal Campus and Jeanes Hospital were three of the six Philadelphia hospitals honored at Philadelphia's City Hall for their efforts to reduce and prevent chronic disease by serving fresh, local, healthy food to their patients, employees and visitors (won in September 2016).
- TUH-Episcopal Campus received the Guardian of Excellence Award from Press Ganey for sustained performance in the 95th percentile for patient satisfaction.
- TUH's Turning Point program earned the Hospital & Healthsystem Association of Pennsylvania's Community Champions Award, part of the statewide organization's Annual Achievement Awards to honor hospitals for their innovation, creativity and commitment to patient care by showcasing innovations and best practices in a variety of areas (won in August 2016).
- TUH, LKSOM, and TUHS were recognized with the ICON award by the Germination Project, a leadership development and civic engagement program for future leaders of Philadelphia, endowed by the Raju Foundation. The ICON Award celebrates

"unparalleled leadership and tenacious dedication in making a positive impact in the greater Philadelphia area community."

Seventy-six Temple entity physicians have been named to Philadelphia magazine's "Top Doctors" list for 2017 covering 30 different medical specialties, including: Cardiovascular Disease; Pulmonary Disease; Medical Oncology; Gynecologic Oncology; Radiation Oncology; Thoracic & Cardiac Surgery; Vascular Surgery; Neurological Surgery; General Surgery; Orthopaedic Surgery; Colon & Rectal Surgery; Plastic Surgery; Hand Surgery; Cardiac Electrophysiology; Rheumatology; Urology; Gastroenterology; Neurology; Obstetrics & Gynecology; Otolaryngology; Pediatrics; Endocrinology, Diabetes & Metabolism; Physical Medicine & Rehabilitation; Vascular & Interventional Radiology; Diagnostic Radiology; Pathology; Pain Medicine; Pediatric Otolaryngology; Hospice & Palliative Medicine; and Hematology.

LKSOM was listed as one of the top-ranked medical schools in the nation by *U.S. News & World Report* in its "Best Medical Schools" ranking for 2018. LKSOM was ranked #60 nationally in research among accredited medical schools; and third among the Commonwealth's medical schools. To earn its position on the "Best Medical Schools" list, LKSOM has demonstrated excellence in a variety of ways, including its selectivity in student admissions, its reputation among peer institutions and residency directors, and its level of research activity. In 2017, LKSOM received 10,883 applications for the upcoming class' 210 M.D. program spaces.

TUH-Episcopal and Northeastern Campuses

TUH-Episcopal Campus, a 139-bed facility, is the main location for Temple Behavioral Health services including 118 psychiatric beds of which 44 are long term acute psychiatric beds where the average length of stay is excess of one year due to the limited long-term housing options available in the City of Philadelphia. In addition the TUH-Episcopal Campus includes a 21-bed inpatient medical unit, a Behavioral Health emergency Crisis Response Center, and a full-service Emergency Department. TUH-Episcopal Campus earned the Guardian of Excellence Award in Behavioral Health from Press Ganey for sustained performance in 95th percentile for patient experience. Episcopal offers patients the latest in radiology services, including digital mammography, and CT scans; a full-service laboratory; and selected specialty physicians including cardiologists and ophthalmologists. The Emergency Department provided services to 45,528 patients during the Fiscal Year ended June 30, 2017. In addition, the Crisis Response Center provided 10,951 patients with emergent psychiatric services.

TUH-Northeastern Campus is an ambulatory medical care facility offering a variety of outpatient medical services including primary care; prenatal care; Family Health and wellness; Women's Health; and specialty cancer, cardiac, orthopaedic, and GI care. Available diagnostics include full-service radiology, cardiac, and vascular testing services. Located adjacent to TUH-Northeastern is one of TPI's ReadyCare urgent care centers providing treatment for common illnesses and injuries that do not require a trip to an emergency room.

Fox Chase Entities

Fox Chase received national accreditation with silver commendation from the Commission on Cancer of the American College of Surgeons.

In July 2016, Fox Chase received a four-star rating from the Centers for Medicare and Medicaid Services in its latest Hospital Care report.

AOH, ICR and FCCCMG (collectively referred to as "Fox Chase" or "FCCC" for the purpose of this section) is one of 49 Cancer Centers in the nation to be designated by the National Cancer Institute ("NCI") as a Comprehensive Cancer Center. To achieve this highest level of designation, FCCC is deemed by NCI to have reasonable depth and breadth of research activities in each of three major areas: laboratory research, clinical research and prevention, and population-based research; and to have substantial trans-disciplinary research that bridges these three main scientific areas. FCCC's Comprehensive designation was reviewed and successfully renewed for a five year period in Fiscal Year 2016. It received a merit descriptor of "high impact" via the peer review process. FCCC consistently ranks among the top Cancer Centers in the nation in *U.S. News & World Report*.

Fox Chase researchers and clinicians have won the highest awards in their fields, including two Nobel Prizes, a Kyoto Prize in basic sciences, a Lasker Clinical Research Award, an Albert Szent-Gyorgyi Prize for Progress in Cancer Research, multiple John Scott Awards, American Cancer Society Medals of Honor, an American Association for Cancer Research Award for Lifetime Achievement in Cancer Research, a Distinguished Achievement Award from the American Society of Clinical Oncology, memberships in the National Academy of Sciences, and an induction into the National Inventors Hall of Fame, among others.

In 2000, Fox Chase became the first U.S. cancer center and the first hospital in Pennsylvania to earn the Magnet Award for Nursing Excellence, the highest honor of the American Nurses Association. Today, Fox Chase is among only 2% of the nation's hospitals to have received four subsequent renewals of the designation, which recognizes a nursing program's innovation in addition to its ability to deliver first-rate care.

Fox Chase clinicians have also been recognized for excellence locally, continually ranking among the best in the region in *Philadelphia* magazine. Most recently, 37 Fox Chase physicians, or a quarter of the total clinical faculty, were named in the 2017 "Top Doctors" issue of *Philadelphia* magazine. Fox Chase's expertise in dealing with difficult cancer cases was acknowledged by the Blue Cross Blue Shield Association and Independence Blue Cross, who designated Fox Chase a Blue Distinction Center® for Complex and Rare Cancers for esophageal, pancreatic, gastric, rectal, bladder, head and neck, and thyroid cancers, as well as soft tissue sarcoma.

At any given time, more than 225 clinical trials are underway at Fox Chase, which has the largest Phase I clinical trial program in the Delaware Valley researching new drugs not yet approved by the U.S. Food and Drug Administration. Fox Chase is one of only a handful of institutions worldwide using advanced robotics and laparoscopy to treat patients with nearly all types of cancer. *The Scientist*, a prominent life sciences magazine, ranked Fox Chase among the top three best places in the country for postdoctoral researchers to work, according to its 2012 annual survey.

Jeanes Hospital

Jeanes Hospital has received the HealthGrades Patient Safety Excellence Award for the last three consecutive years. In addition, HealthGrades recognized Jeanes Hospital as a Top Performer in 2016 in its annual report on hospital performance. Jeanes Hospital was one of only two hospitals in the Philadelphia region to achieve the highest rating in four of six categories noted in the annual report, including total hip replacement, coronary artery bypass graft, pacemaker procedures, and bariatric surgery.

Jeanes Hospital earned Blue Distinction™ Center for Quality and Cost-Efficiency in Knee and Hip Replacement Surgeries in 2016. Jeanes is also the 2016 recipient of the American Heart Association/American Stroke Association's Get With The Guidelines™-Stroke Gold Plus Quality

Achievement Award. Jeanes is Joint Commissioned Certified as Primary Stroke Center and American Society for Metabolic and Bariatric Surgery. The Jeanes Hospital Emergency Room recorded 39,792 visits as of June 30, 2017 and is the host location for the TUH Bone Marrow Transplant Program, which received internationally-recognized reaccreditation by the Foundation for the Accreditation of Cellular Therapy.

In 2016, Jeanes Hospital received an "A" rating from Leapfrog, a national nonprofit organization dedicated to providing health care purchasers with hospital quality and safety data. More than 1,800 hospitals annually complete the Leapfrog Hospital Survey, which collects safety, quality, and resource use information.

Publishing in partnership with the Society of Thoracic Surgeons, *Consumer Reports* ranked Jeanes Hospital among the best hospitals in the Northeast for coronary artery bypass surgery and aortic valve replacement surgery in May 2017. Jeanes was the only Philadelphia hospital in the Northeast to receive a score of "Better than Expected" (the highest score attainable) in both categories. *Consumer Reports* rated 500 hospitals nationwide on how they perform on open heart surgery, using a three-point scale of "worse than expected," "as expected," or "better than expected."

STRATEGY

The leadership team of TUHS has regularly refined a strategic vision for the Health System looking at both local market dynamics and the implications of national healthcare reform. Initially in 2011, and most recently in 2016, management outlined an evolving multi-step strategic approach geared towards positioning the organization for future success and growth. Since 2011, the Health System has successfully implemented many components of the strategic plan, and has made progress towards achieving its strategic vision. The guiding principles of the Health System's strategic plan are, that it is transformative and forward-looking, rather than preserving the status quo, and that it is supportive of the University's mission, goals and plans. In particular, the strategic plan was designed to enhance the academic mission and enterprise, protect and improve the financial position of the University, and create a sustainable clinical partner for the University.

The Health System must enhance and stabilize its core operations through carefully placed investments in order to position itself optimally to respond to the changes sweeping the healthcare industry. In this light the Health System has established a series of goals to meet these challenges. These goals include: (1) transformation of the academic physician enterprise, (2) recruitment of exceptional physicians providing innovative care, (3) continuation and expansion of the TUHS ambulatory care network, (4) operations improvement, (5) enhance population health management strategies, (6) continue Commonwealth funding and investment strategies, and (7) review of other partnership opportunities. These strategies have allowed the Health System to attain profitable operations in Fiscal Years 2015 and 2016. The additional costs of implementing the EPIC system at TUH is the principal cause for the Health System incurring a loss for the Fiscal Year ended June 30, 2017.

The key tenets of the new strategic plan are the following:

1. ***Transformation of the academic physician enterprise***: Over the past five years, the physician enterprise of the LKSOM Faculty Practice Plan (the "Practice Plan" or "Faculty Practice Plan") has grown dramatically (See, "MEDICAL STAFF AND PHYSICIAN RELATIONS - Temple University Hospital" herein). This growth is a result of strong leadership, organizational and operational improvements, and a commitment to achieving high-performing, specialty-specific productivity metrics. As a result, faculty productivity as of June 30, 2017 was at the 61st percentile of national Medical Group Management Association work RVU benchmarks, an increase of five percentage points over the June 30,

2015 average of 56 despite the increase in the number of faculty. More importantly, annual growth in ambulatory visits for the past three years has averaged 7.1%, while annual growth in the number of faculty has averaged 5.3%.

2. ***Recruitment of exceptional physicians providing innovative care***: As discussed further in "SERVICE AREA, DEMOGRAPHICS AND COMPETITION," below, demand for high acute inpatient services has remained steady in TUHS's service area. Strategically this trend has indicated a need to strengthen high acuity services that tend to be surgical procedures. As payers move towards bundled payments, high volume surgical programs will have an advantage.

Since the hiring in April of 2011 of Larry Kaiser, M.D. as the Health System Chief Executive Officer and Senior Executive Vice President for Health Affairs and Dean of the School of Medicine, the academic practice plan has increased in size from 374 full-time faculty in Fiscal Year 2012 to 510 full-time faculty as of June 30, 2017 – an increase of 136 physicians or 36.4%. This included the hiring of several outstanding faculty members from such prestigious institutions as Harvard, Johns Hopkins, and University of Pennsylvania, as well as individuals specializing in high-end tertiary and quaternary services. Several of these individuals have regional and national reputations for innovations in clinical care, education and research. As a result of these exceptional hires, TUH – the main academic facility for TUHS, has increased its case mix index (a measure of the severity of its patients), from 1.58 in Fiscal Year 2012 to 1.91 as of June 30, 2017 – an average annual increase of 4.4%. In a competitive market such as Philadelphia, this is a significant achievement and is reflective of the investments made in clinical programs at TUH as set forth in the table below.

TABLE A-1:
TUH ACUITY TREND

Discharge Year	Case Management Index ("CMI")	TUH CMI Ranking*
2013	1.62	64/104
2014	1.73	68/104
2015	1.79	56/104
2016	1.85	56/104
2017	1.91	48/104

3. ***Continuation and Expansion of the TUHS Ambulatory Care Network***: TUHS has sought to expand ambulatory access points as a part of its strategic plan. This has included the development by TUHS, through its member affiliate TPI, of urgent care facilities (known as ReadyCare centers) in four locations in the Greater Philadelphia Area: Port Richmond (Allegheny Avenue), Jenkintown (Old York Road), the Lower Northeast (Cottman Avenue), and the Far Northeast (Roosevelt Blvd). The centers are strategically located in densely populated and frequently traveled areas, in proximity to TUHS facilities, and treat low acuity conditions such as sprains, burns, broken bones, allergic reactions and coughs, colds and flu. TPI's ReadyCare sites are staffed by physicians, and supplemented by midlevel providers when targeted volume thresholds are met.

During Fiscal Year 2017, the aggregate ReadyCare centers posted a net profit of $702,000, against a budget of $753,000. This variance was substantially attributable to the unbudgeted re-negotiation of provider compensation plans, adjusted to ensure competiveness within the market. As of June 30, 2017, the centers had an aggregate visit volume of 58,400, representing a 3% favorable variance

* The TUH CMI ranking shows TUH as compared to the total number of academic medical centers (104) in the University Healthsystem Consortium/Vizient database.

to budget and a 7% increase when compared to Fiscal Year 2016. Recognition of this market has been made by several local insurers, who now offer enhanced rates for urgent care services.

TPI's Fiscal Year 2018 budget assumes the opening of a fifth center. Initial investigations regarding real estate opportunities and physician recruiting are currently underway.

4. ***Operations Improvement***: Over the last five years, TUHS and its operating subsidiaries have engaged in a continuous Operations Improvement Program ("OI") that is directed at identifying cost efficiencies and revenue enhancements to provide overall value to the enterprise. The OI Program was devised during Fiscal Year 2012 and begun in earnest during Fiscal Year 2013. Since Fiscal Year 2013 TUHS has confirmed $139,712,000 of value creation broken down between $122,009,000 of expense savings and $17,379,000 of revenue. Some examples of this are outlined below:

- A major focus of this effort has been the continued improvement in clinical practice for the treatment of inpatients. Known as "Cost to Treat," this aspect of the OI Program is composed of nine multidisciplinary clinical teams who, working with information provided by the TUHS Business Intelligence Group on the historical cost to treat patients, are redesigning clinical treatment protocols to shorten overall length of stay and remove variability of the use of ancillary services during the inpatient stay. The "Cost to Treat" efforts comprise $20,117,000 of the savings noted to date.
- In Fiscal Year 2016, TUHS entered into a long-term radiology agreement with GE Healthcare and GE Capital (collectively, "GE"). This agreement was designed to lower the operating costs and improve ambulatory revenues of the Health System's radiology departments. The savings generated from this agreement with GE are used to fund an ongoing strategic upgrade of radiology technology. In Fiscal Year 2016 and through June 30, 2017, the GE partnership has added $7,307,000 of operational improvement.
- On June 16, 2015, TUHS entered into an agreement with Accolade to help manage employee health benefits. Accolade is a healthcare concierge service that assists members with any healthcare needs or questions. Accolade navigates members to effective and efficient outcomes throughout the healthcare system which reduces unnecessary medical costs. Cumulatively, from July 1, 2015 through June 30, 2017, the Health System has received $2,400,000 of savings.
- Over the last five years, TUHS has accumulated Supply Chain savings of over $19,700,000. The current program, known as "Excelerate," is a collaborative effort to reduce cost via variation reduction, sole source agreements and the engagement of physicians and administration to support these supply chain activities. Within this same time frame, efforts to reduce full-time employees and overtime resulted in a savings of $46,536,000. The majority of these savings were at Temple University Hospital and Fox Chase.

The ability to continue to generate expense savings has been negatively impacted during Fiscal Years 2015 and 2016 by the accelerated increase of pharmaceutical costs related to specialty drugs, the increase in cost of generic drugs and drug shortage for selected pharmaceuticals. In addition, cost to treat was negatively impacted during Fiscal Year 2017 due to the implementation of the EPIC system.

5. ***Enhance population health management strategies***: To meet the new paradigm of value-based health care, the Temple Center for Population Health, LLC ("TCPH") was formed in 2014 as a service organization within TUHS. TCPH has implemented programs to address quality, utilization and cost effectiveness, chronic disease management, health and wellness and transitions of care. The deployment of community health workers and nurse navigators into ambulatory practices has resulted in improved clinical outcomes and cost containment.

Collaboration with third party payers has enhanced pay-for-performance and at-risk payer contract outcomes which reflect the delivery of high value care. Integration with community entities to address unmet health-related social needs has become an integral part of the TCPH approach and will continue to expand, providing value to the patients, the Health System and payers. TCPH takes a leadership role in the clinical and business management of the TUHS advanced managed care contracts that include value based reimbursement up to and including full risk capitation for selected lives covered by the Medical Assistance and Medicare Advantage Programs.

TUHS, through TUH and Episcopal Hospital, holds two of six Owner/Members governing seats (additional voting seats for HPP include three independent members) of HPP, a not-for-profit insurance company offering insurance to the Medical Assistance and Medicare populations. The Medicare line of business had 19,745 lives and the Medicaid line of business had 246,452 lives, both as of June 30, 2017. Contained within both populations are medically complex individuals. The Medical assistance population includes a high mix of HIV and Hepatitis C members and within the Medicare Advantage population, 60% of the members are dually eligible. From Fiscal Year 2008 through Fiscal Year 2017, the arrangement with HPP has contributed $88,234,000 of excess revenues through distribution of operating profits and an additional $41,099,000 from the sale of a Medicare Advantage Plan in Fiscal Year 2008. Also, TUHS participates in shared risk arrangements with Cigna Healthspring ("CHS"), Independence Blue Cross ("IBC"), Aetna and Keystone First. The risk arrangements with CHS and IBC include both cost and quality measures and as such cover approximately 985 and 12,370 lives, respectively. Through June 30, 2017, net performance from those contracts totaled $5,520,000.

6. ***Continue Commonwealth funding and investment strategies***: The Medical Assistance program is jointly funded by the state and federal governments. In order for the federal government to participate in the cost of the Medical Assistance program, the state must appropriate the state share of the total payment which is then matched by the federal government. A state provides the state funding either through its general appropriation budgets or through federally-approved assessment programs whereby hospitals and other providers are taxed with such tax payments constituting the state share of the payment. In many cases, including the Philadelphia Quality Assessment Program and the Pennsylvania Act 49 Quality Assessment Program, the state's general fund budget will benefit from these programs through retention of a portion of the proceeds of the tax paid by the providers.

The Commonwealth funds services to Medical Assistance patients through discharge-based payments, direct contracts with managed care plans, supplemental payments, and tax program payments. Given the location of TUH and the absence of a local public hospital, TUH currently serves a disproportionate share of Medical Assistance patients within the City of Philadelphia. In recognition of this, the Commonwealth has utilized a number of different programs to provide additional financial support to TUH and other safety net hospitals to offset the unfunded costs of serving this population.

Currently, supplemental Commonwealth funding comes to TUH through a series of supplemental payments such as medical education, disproportionate share, tobacco funding, and through the Philadelphia Tax Assessment Program and the Pennsylvania Quality Assessment Program (collectively, the "Assessment Programs"). Both of the Assessment Programs subject hospital providers to a County of Philadelphia and/or the Commonwealth tax thus providing funding to the Commonwealth to make additional payments to hospitals in support of their clinical missions.

Finally, in recent years the Commonwealth, working with TUH and the University, has federalized a portion of the Temple University Non-Preferred Education and General Appropriation to create additional funding for the Health System. The structure of this transaction ensures that the University receives its full Non-Preferred Appropriation from the Commonwealth.

TUHS, and primarily TUH, has consistently received significant supplemental Commonwealth funding over the last decade. All of these payment venues are conditioned upon the annual Commonwealth budget process as well as statutory renewal dates for the Assessment Programs. There can be no assurance that TUHS, primarily TUH, will continue to receive the same levels of supplemental Commonwealth funding in the future.

As of June 30, 2017, the Health System, primarily through TUH and LKSOM medical faculty, recognized as revenues Commonwealth supplemental funding through the programs discussed above, net of taxes and assessments paid, totaling an estimated $145,155,868. These revenues, referred to as "Supplemental Funds," are received by many hospitals throughout the Commonwealth and are accounted for as Net Patient Service Revenue.

As noted above, a portion of these moneys went directly to the University's School of Medicine for its medical faculty to ensure access to care for the Medical Assistance insured population in North and Northeast Philadelphia. Both the Commonwealth and the City of Philadelphia benefit economically from the Assessment Programs as both governmental bodies retain various amounts of taxes received under the Assessment Programs for their general budgetary needs. The Commonwealth tax assessment and the City of Philadelphia programs are scheduled to sunset on June 30, 2018 and June 30, 2019, respectively. These programs have been reauthorized every prior year they were due to expire.

Additional Supplemental Medical Assistance payments have been received from the Commonwealth by the University's School of Medicine for its medical faculty to assist in ensuring that the Medical Assistance insured population in North and Northeast Philadelphia have access to all of the physician specialties that are part of the Faculty Practice Plan.

In April of 2016, the Centers for Medicare and Medicaid Services ("CMS") issued final regulations dealing with supplemental payments made through Medicaid managed care plans. As of June 30, 2017, $38,101,000 and $60,210,131 was recognized from Medicaid managed care plans as supplemental payments made to the LKSOM medical faculty and TUHS, primarily TUH, respectively. Unless these supplemental payments meet one of five exceptions in the regulations, they will be eliminated. TUHS's supplemental payments from Medicaid managed care plans currently meet the new regulation's requirements. The current LKSOM medical faculty supplemental payments made through Medicaid managed care plans do not. The regulation permits LKSOM medical faculty's payments to continue under the current methodology for five years through calendar year 2022, after which they will cease. TUHS and LKSOM medical faculty leadership are exploring alternatives with the Commonwealth that may meet one of the new regulation's exceptions.

TABLE A-2:
HISTORICAL TREND OF COMMONWEALTH FUNDING
($000s)

Fiscal Year	Amount of Funding
2011	$113,687
2012	116,707
2013	130,865
2014	130,024
2015	131,133
2016	138,245
2017	145,156

The level of Medicaid supplemental funding for TUHS has remained stable or grown year-over-year since 2011. TUHS has been successful working with the Commonwealth and the Pennsylvania hospital trade association to increase payment levels or create new payments to support TUHS during this time period.

Medicare also provides additional supplemental payments to hospitals in support of medical education activities and for those hospitals that serve a large number of poor and uninsured patients which is known as disproportionate share payments. Through June 30, 2017, the Health System received $51,565,000 for medical education activities and $22,358,000 for disproportionate share activities. CMS has proposed altering the allocation formula for disproportionate share dollars to be based on the Medicare Cost Report Worksheet S-10 which is a source of information on the amount of uninsured care a hospital provides. If implemented and when fully phased in TUHS expects to see the current disproportionate share funding decline by approximately $6,000,000.

7. ***Review of other partnership opportunities***: The Health System evaluates and pursues potential acquisition, merger and affiliation candidates as part of the overall strategic planning and development process. As part of its ongoing planning and property management functions, the Health System reviews the use, compatibility and business viability of many of the operations of the Health System, and from time to time the Health System may pursue changes in the use of, or disposition of, its facilities. Likewise, the Health System occasionally receives offers from, or conducts discussions with, third parties about the potential acquisition of operations and properties which may become subsidiaries or Obligated Group Members of the Health System in the future or about the potential sale of some or all of the operations or property which are currently affiliated with the Health System. From time to time, the Health System has engaged strategic advisors to assess the future strategic direction of the Health System. Discussions with respect to affiliation, merger, acquisition, disposition or change of use of facilities, including those which may affect the Health System, are held from time to time with other parties. As a result, it is possible that the current organization and assets of the Obligated Group may change in the future.

One recent example of a prior successful partnership was the Health System's affiliation with Fox Chase in 2012. Since this date, Fox Chase has right-sized the organization's expense structure; significantly increased patient volumes, in part through physician recruitment/productivity; enhanced revenue cycle performance; and negotiated favorable managed care contracts.

As described above in "4. Operations Improvement," TUHS entered into a Strategic Alliance Agreement (the "Strategic Agreement") with GE in Fiscal Year 2016 that promotes purchasing efficiencies, cost reduction and infrastructure investment. The Strategic Agreement was for a period of seven years with an overall goal of significant savings over the term of the Strategic Agreement. As part of the strategic relationship, the Health System agreed to purchase or lease certain GE products and services in exchange for discounted pricing with a goal of modernizing the Radiology equipment across the Health System. Funding for such modernization would be generated by the operational efficiencies identified during the term of the Strategic Agreement and by the guaranteed service savings TUHS received from GE. Year two of the Strategic Agreement has just finished and savings goals (both for service and operational efficiencies) were in excess of targets.

As described above, TUHS, through its member affiliates, TUH and Episcopal Hospital, is a founding member and owner of HPP. HPP was originally formed in 1984 as a result of a strategic partnership between four Philadelphia hospitals - Episcopal Hospital, Medical College of Pennsylvania Hospital, St. Christopher's Hospital for Children and TUH. Their vision was to better manage the quality of care of their patients and to serve as a vehicle to cover as many lives in their service area as possible through integrated community health initiatives.

Over the succeeding years, the HPP Board expanded to six Owner/Member seats and three independent seats. TUHS member affiliates, TUH and Episcopal Hospital, continue to hold two of the nine seats; Tenet Healthcare holds two seats through its Hahnemann University Hospital and St. Christopher's Hospital for Children; Albert Einstein Medical Center holds one seat; and Aria Health, a Jefferson Health affiliate, holds one seat. On January 1, 2014, HPP reentered the Medicare Advantage Program with four Owner/Members; each with a 25% share of the plan. Those Owner/Members are TUH, Episcopal Hospital, Albert Einstein Medical Center and Aria Health.

HPP currently serves more than 277,000 members among all product lines in Pennsylvania consisting of 246,000 Medicaid Health Choices enrollees, 20,000 Medicare Advantage enrollees, 60% of which are dually eligible for Medicaid, and 11,000 CHIP members.

From Fiscal Year 2008 through Fiscal Year 2017, the arrangement with HPP has contributed $88,234,000 of risk contracting income to TUHS. Additionally, $41,099,000 was recognized as income from the gain on the sale of a Medicare Advantage Plan in Fiscal Year 2008.

TABLE A-3:
TUHS' SHARE OF HEALTH PARTNER PLANS REVENUES

	Fiscal Year Ended June 30,			
	2014	**2015**	**2016**	**2017**
CHIP	$917,741	$563,056	($6,486)	($78,674)
Medicare	(4,894,198)	(4,855,916)	(7,582,680)	(8,720,486)
Medicaid	1,934,986	6,900,942	16,300,403	37,066,702
Total HPP	**($2,041,471)**	**$2,608,082**	**$8,711,237**	**$28,267,542**

HPP experienced strong operating performance during the Fiscal Year ended June 30, 2017. However, as a result of continued growth in membership combined with increasing regulatory requirements for capital sufficiency, HPP is unable to make any distributions of these surpluses to their Owner/Members.

In the ordinary course of business, HPP evaluates potential affiliations, mergers, acquisitions or dispositions of all or a portion of its assets as part of its ongoing strategic planning process, particularly as it relates to the regulatory risk-based capital requirements. It is possible that the current ownership of HPP or its assets may change. In the event HPP or its assets were sold in their entirety, TUH and Episcopal Hospital would receive an estimated 35% of the proceeds representing the monetization of their interest in HPP, including their share of HPP's anticipated future cash flows. At this time, there is no assurance that any transaction involving HPP will take place.

GOVERNANCE AND MANAGEMENT

Health System Board of Directors

The management of TUHS is governed by a Board of Directors (the "Board of Directors"), all of whom are elected by the Board of Trustees (except for Ex Officio Directors) of the University (the "University Trustees"). Certain members of the Board of Directors are nominated by subsidiaries of the Parent pursuant to agreements entered into at the time such subsidiaries joined the Health System.

The table below lists the current members of the Board of Directors.

TABLE A-4:
HEALTH SYSTEM BOARD OF DIRECTORS

Name	Position	Occupation	Year Appointed	Term Expires
Lon R. Greenberg	Chairperson	Retired, Former Chairman and Chief Executive Officer, UGI Corporation	2006	October 2019
Honorable Theodore Z. Davis	Director	Retired, Presiding Judge of Chancery Division/General Equity	1995	October 2017
Honorable Ronald R. Donatucci	Director	Register of Wills, City of Philadelphia	2007	October 2019
Edward A. Glickman	Director	Professor and Consultant	2012	October 2018
Lewis F. Gould, Jr.	Director	Partner, Duane Morris LLP	2006	October 2019
Dr. Sandra R. Harmon-Weiss	Director	Retired, Former Physician Executive, Aetna, Inc.	2016	October 2017
Thomas W. Hofmann	Director	Retired, Former Senior Vice President, Chief Financial Officer, Sunoco, Inc.	2015	October 2019
Robert H. LeFever	Director	Financial and Management Consultant	1996	October 2018
Dr. Charles W. Lockyer	Director	Retired Attorney	2014	October 2017
Dr. Solomon C. Luo	Director	Partner, Progressive Vision Institute	2006	October 2017
Daniel H. Polett	Director	President, Chief Executive Officer and Dealer Principal, Lexus of Chester Springs	1995	October 2018
Jane Scaccetti	Director	Shareholder, Drucker & Scaccetti, Tax and Financial Services Consulting	1995	October 2018
Dr. Richard M. Englert	Ex-officio	President, Temple University	2016	By position
Patrick J. O'Connor	Ex-officio	Chairman, Board of Trustees, Temple University	2009	By position
Dr. Larry R. Kaiser	Ex-officio	Dean, Temple University School of Medicine, President and Chief Executive Officer, TUHS	2011	By position

Health System Officers

TABLE A-5:
HEALTH SYSTEM OFFICERS

Name	Office	Age
Lon R. Greenberg	Chairperson	66
Vacant	Vice Chair	-
Dr. Larry K. Kaiser	President/Chief Executive Officer	64
Dr. Verdi J. DiSesa	Chief Operating Officer	67
Beth C. Koob	Secretary	57
Charna B. Wright	Assistant Secretary	36
Robert H. Lux	Treasurer	61
Lisa L. Corbin	Assistant Treasurer	52
Herbert P. White	Assistant Treasurer	56

Health System Senior Leadership

Dr. Larry R. Kaiser was engaged in April of 2011 by the Board of Trustees of the University to serve as Chief Executive Officer of TUHS and the Dean of the School of Medicine. Dr. Kaiser recruited Dr. Verdi DiSesa to serve as both Chief Operating Officer of TUHS and Vice Dean of clinical affairs of the School of Medicine. Dr. DiSesa is currently also serving as the Chief Executive Officer and President of TUH. They bring to the organization a physician-focused strategic perspective allowing for greater alignment of strategic planning, recruiting, and operations. The current management team also benefits from the presence of several long-standing TUHS professionals who provide the institutional knowledge necessary to support the implementation of new strategies and initiatives. Biographies for key members of the TUHS leadership team are provided below.

Larry K. Kaiser, M.D., President and Chief Executive Officer of TUHS, Dean of The Lewis Katz School of Medicine at Temple University and Senior Executive Vice President for Health Sciences of Temple University. Dr. Kaiser was appointed to serve TUHS and Temple University in April, 2011. Dr. Kaiser serves as Chief Executive Officer of TUHS, Senior Executive Vice President for the Health Sciences, and Dean of LKSOM. Dr. Kaiser graduated from Tulane University School of Medicine in 1977 and completed his internship and residency in General Surgery as well as a fellowship in Surgical Oncology at the University of California (Los Angeles). He then completed a residency in cardiovascular surgery and thoracic surgery at the University of Toronto. Following that, he served as a thoracic surgeon at Memorial Sloan-Kettering Cancer Center and Assistant Professor of Surgery at Cornell University Medical College (New York) and was then recruited to Washington University School of Medicine (St. Louis) where he was promoted to Associate Professor of Surgery in 1990. In 1991, Dr. Kaiser was recruited to the University of Pennsylvania (Philadelphia) where he held a succession of positions of increasing responsibility, including Associate Professor of Surgery, Chief of General Thoracic Surgery, Founder and Director of the university's lung transplantation program, and Director of its Center for Lung Cancers and Related Disorders. In 1995, he was promoted to Professor of Surgery and in 1996 was named the Eldridge Eliason Professor of Surgery. In 2001, he was named the John Rhea Barton Professor and Chairman of the Department of Surgery at Penn. In 2008, Dr. Kaiser was named President of the University of Texas Health Science Center at Houston. Dr. Kaiser's research and clinical interests include lung cancer, malignant mesothelioma and mediastinal tumors. He is the author or co-author of 14 books and over 250 original papers. Dr. Kaiser has served in a number of leadership

capacities for professional societies and associations, and has been a director of the American Board of Surgery and the American Board of Thoracic Surgery. In 2004, he was elected to the Institute of Medicine of the National Academy of Sciences. His recent honors include citations in Castle Connolly's "America's Top Doctors for Cancer" 6th edition, Who's Who in the World, and *Philadelphia Magazine's* "Top Docs," among others.

Verdi J. DiSesa, M.D., M.B.A., Chief Operating Officer and Vice Dean for Clinical Affairs of Temple University School of Medicine and Chief Executive Officer and President of TUH. Dr. DiSesa was appointed in 2011 and is responsible for managing the strategic direction of clinical services, strengthening the Faculty Practice Plan, overseeing physician recruitment, and aligning medical staff with clinical service operations. Dr. DiSesa works to enhance patient access throughput, improve clinical outcomes, reduce costs, and increase patient and referring-physician satisfaction, review of patient-care and clinical research programs to ensure the School of Medicine offers a fully integrated system of services. Dr. DiSesa has held leadership posts at the Hospital of the University of Pennsylvania, Johns Hopkins, and the Cleveland Clinic. Prior to joining TUHS, Dr. DiSesa served as the Chair of the Department of Surgery at the University Hospital and Harvard Medical School Dubai Center in the United Arab Emirates. He also assumed increasingly significant faculty and clinical appointments at major teaching hospitals, including Harvard affiliate Brigham & Women's Hospital. Dr. DiSesa also served as a consultant to the Professional Staff in the Department of Thoracic and Cardiovascular Surgery at the Cleveland Clinic. Effective March 1, 2016, Dr. DiSesa was appointed President and Chief Executive Officer of TUH and is serving in this role simultaneously. Dr. DiSesa's specialties include adult cardiac surgery, valve repair and replacement, surgery for heart failure, and transplantation. Dr. DiSesa graduated from the University of Pennsylvania School of Medicine. Dr. DiSesa completed residencies in cardiothoracic surgery and surgery at Brigham & Women's Hospital in Boston. He also was a resident in internal medicine at the Hospital of the University of Pennsylvania. Board certified in Cardiothoracic Surgery, general surgery and Internal Medicine, Dr. DiSesa is a fellow of the American College of Cardiology, American College of Chest Physicians, American College of Surgeons, American Heart Association, and American Surgical Association, and has been a member of many other national and international medical societies, including the America Association of Immunologists, American College of Healthcare Executives and the Society of University Surgeons. Dr. DiSesa will maintain his duties as Chief Operating Officer of TUHS and Senior Vice Dean for Clinical Affairs at LKSOM.

Robert H. Lux, C.P.A., FHFMA, Senior Vice President, Treasurer and Chief Financial Officer. Mr. Lux is responsible for financial reporting, cash and debt management, financial planning, patient access and patient billing, accounts payable, payroll, capital planning, budgeting managed care contracting, supply chain and information services and technology for TUHS. Mr. Lux has served in this position since the formation of the Parent in July 1996. Previously, he served as Associate Vice President and Chief Financial Officer for Temple University Hospital, Hospital Finance from 1987 to 1996. Prior to 1987, Mr. Lux served as Controller (1983-1987) and Assistant Controller (1981-1983) of Temple University Hospital. From 1978 to 1981, Mr. Lux was a supervisor in the Assurance Practice for KPMG Peat Marwick. Mr. Lux holds a Bachelor of Sciences in Accounting from LaSalle University, is a Fellow of the Healthcare Financial Management Association, is a member of the American Institute of Certified Public Accountants, and is a member of the Pennsylvania Institute of Certified Public Accountants, and has served on the Hospital Association of Pennsylvania Medical Assistance Advisory Committee, Public Payor Policy Committee and the Committee on Finance and the Delaware Valley Hospital Association Financial Management Committee. Mr. Lux is also the Chairman of the Finance Committee of HPP. Mr. Lux serves on the Executive Board and is the Treasurer of the Cradle of Liberty Council of the Boy Scouts of America. Mr. Lux has indicated that he intends to retire on July 31, 2018. TUHS expects to conduct a national search for a successor to Mr. Lux at the appropriate time.

Beth C. Koob, B.S.N., J.D., Chief Counsel and Corporate Secretary. Ms. Koob is responsible for the day-to-day legal affairs of the Health System. Ms. Koob joined the University in 1988 and was named Chief Counsel of the Parent in January 1997. Ms. Koob received her Bachelor of Science degree in Nursing and Developmental Psychology from Cedar Crest College in Allentown, Pennsylvania and her Juris Doctor degree from Temple University School of Law. She has held faculty positions in the School of Law and College of Allied Health Professions at Temple University and has lectured regionally on many health law subjects. Ms. Koob is a member of the bar in Pennsylvania and New Jersey, and is admitted to practice in the Third Circuit Court of Appeals. She is a member of the National Association of College and University Attorneys, American Health Lawyers Association, former chair of the Medico-Legal Committee of the Philadelphia Bar Association and served on the Philadelphia Bar Association – Philadelphia County Medical Society Interdisciplinary Code Task Force Committee, which drafted the code of conduct governing member attorneys and physicians and served on the MCare Commission Advisory Task Force, a state-wide panel tasked with advising the state commission on phase-out plans for the Commonwealth's statutorily mandated excess professional liability coverage.

Marc P. Hurowitz, D.O., M.B.A., FAAFP, Chief Executive Officer of Jeanes Hospital and Chief Executive Officer, Chief Medical Officer of TPI. Dr. Hurowitz was appointed Chief Executive Office of Jeanes Hospital in March 2015. This appointment is simultaneous with his role as Chief Executive Office and Chief Medical Officer of TPI. Prior to this appointment at Jeanes and TPI, Dr. Hurowitz served in a variety of roles within the Health System, including Chief Medical Officer / Patient Safety Officer at TUH from 2009 to 2012. In 2012, Dr. Hurowitz became an Associate Professor of Family and Community Medicine at LKSOM. Before transitioning to healthcare administration, Dr. Hurowitz managed a large private practice for 14 years. Trained as a family physician, he cared for several generations of patients in a neighborhood setting. Dr. Hurowitz is board-certified by the American Board of Family Practice and is a Fellow of the American Academy of Family Physicians. Dr. Hurowitz continues to see patients at his private practice. Dr. Hurowitz is a graduate of the University of Pennsylvania (B.A. 1982), the College of Osteopathic Medicine and Surgery in Iowa (1986), Fox School of Business, Temple University (2006), and became board-certified in Family Practice in 1986. As Chief Executive Officer and Chief Medical Officer of TPI, Dr. Hurowitz is responsible for the clinical, financial, and strategic leadership of Temple University Hospital's community-based physician group practice. Dr. Hurowitz became the Chief Executive Officer for TPI in April 2013, and simultaneously served as the Medical Director for TUH's medical management programs.

Richard I. Fisher, M.D., Ph.D., President and Chief Executive Officer – Fox Chase Cancer Center. Dr. Fisher originally joined Temple Health as Executive Vice President and Physician-in-Chief of the Fox Chase entities, Deputy Director for the Cancer Center Support Grant and Senior Associate Dean for Cancer Programs in March 2013. In August of 2013, he was appointed as President and Chief Executive Officer of the Fox Chase entities and Cancer Center Director. Dr. Fisher serves as the principal investigator on the Cancer Center Support Grant ("CCSG") from the National Cancer Institute. Additionally, he is the Robert C. Young, M.D., chair in cancer research at Fox Chase. Before joining Fox Chase, Dr. Fisher was vice president for strategic and program development at the University of Rochester Medical Center, where he was also the Samuel E. Durand Professor of Medicine. For 11 years, Dr. Fisher served as director of the James P. Wilmot Cancer Center at the University of Rochester School of Medicine and Dentistry and director of cancer services for the Strong Health System in Rochester, N.Y. Dr. Fisher earned his undergraduate degree in chemistry and physics at Harvard University before obtaining his M.D., cum laude, from Harvard Medical School in 1970. Over his career, Dr. Fisher has held a number of important leadership positions in oncology at the national level - including Chair of the Lymphoma Committee of the Southwest Oncology Group ("SWOG") from 1985-2013; Deputy Group Chair of SWOG from 2005-2013; and Chair of the Lymphoma Research Foundation Scientific Advisory Board from 2008-2010. He also has served as a member of the Board of Scientific Advisors for the V Foundation from 2003-present, a member of the National Cancer Institute ("NCI") Lymphoma Steering

Committee from 2009-present, and Chair of the NCI Specialized Programs of Research Excellence review committee in 2010. Along with his administrative leadership duties, Dr. Fisher sees patients at Fox Chase.

Susan L. Freeman, M.D., M.S., FACPE, FACE, President and Chief Executive Officer, Temple Center for Population Health, LLC; Chief Medical Officer, Temple University Health System; Vice Dean of Health Care Systems; Professor of Clinical Medicine, Lewis Katz School of Medicine at Temple University. Dr. Freeman joined Temple Health in 2006 as the Chief Medical Officer of TUH, a role she served in until 2014, when she was promoted to the corporate Chief Medical Officer position, at which time she also assumed the role as President of the newly-founded Temple Center for Population Health. Dr. Freeman holds her medical degree from Michigan State University College of Human Medicine, and completed both her residency in internal medicine and fellowship in endocrinology and metabolism at the Mayo Clinic Graduate School of Medicine, Rochester, Minnesota. She holds two Master of Science degrees: Preventive and Administration Medicine (University of Wisconsin, Madison) and Biochemistry (Wayne State University, Detroit). Dr. Freeman is Board certified in internal medicine; endocrinology and metabolism; and medical management. She has extensive leadership experience in urban health care delivery systems, hospital administration, and consumer-driven health care. As the President of the Temple Center for Population Health, Dr. Freeman is working with health system, payer and community leaders to create a sustainable model of health care delivery in North Philadelphia through clinical and business integration, community engagement and academic distinction to promote healthy populations and improve health outcomes. As the Chief Medical Officer of the Health System, she is working to create the infrastructure on which the shift to high value care has been constructed across the continuum of care for TUHS and the community. Prior to becoming the Chief Medical Officer at Temple University Hospital, Dr. Freeman served as the Chief Medical Officer for Saint Francis Hospital and Medical Center in Hartford, Connecticut, where she was an Assistant Dean at the University of Connecticut Medical School and taught healthcare quality and safety classes for the executive MBA program at the University of Hartford. Dr. Freeman held the same position at Regions Hospital and HealthPartners in Minnesota, where she was also the Chief of Endocrinology. Dr. Freeman is a Fellow of the American College of Physician Executives (now the American Association of Physician Leadership) and served a three-year term on its Board of Directors. She is a Fellow of the American Association of Clinical Endocrinologists and a Member of the American College of Medical Quality. Dr. Freeman serves on the Population Health Work Group for the Pennsylvania Department of Health State Innovation Model Initiative; on the Health Technology Assessment External Advisory Committee at the ECRI Institute, and on the Physician Advisory Group at the Hospital Association of Pennsylvania. She represents America's Essential Hospitals on the Population Health Committee of the National Quality Forum. She currently teaches population health, quality and patient safety at LKSOM.

Henry A. Pitt, M.D., Chief Quality Officer of TUHS and Associate Vice Dean for Clinical Affairs, Lewis Katz School of Medicine at Temple University. Dr. Pitt joined Temple Health in March 2013. In his roles for the Health System and LKSOM, he oversees quality and safety for TUH, LKSOM medical faculty, Jeanes, TPI, FCCCMG, and the Fox Chase Medical Group. He has implemented the University Health System Consortium ("UHC") and National Surgical Quality Improvement Program platforms and has standardized the gathering and reporting of patient satisfaction across the Health System. He also has created five system-wide teams focused on Patient Survival, Effectiveness, Safety, Satisfaction and Efficiency each of which report regularly to a senior leadership Patient Value Council. In 2015, TUH received a "Rising Star Award" from the UHC and ranked 17th among 102 Academic Medical Centers in Quality Leadership. Dr. Pitt graduated from Cornell University Medical College in 1971. He trained in surgery at Johns Hopkins and began his career as a hepato-pancreato-biliary ("HPB") surgeon at UCLA in 1979. In 1985, he returned to Johns Hopkins as vice Chairman of Surgery and rose to the rank of Professor. In 1997, he was appointed Chairman of Surgery at the Medical College of Wisconsin and Surgeon-in-Chief at the Froedert Memorial Hospital. In 2004 he joined colleagues from

Johns Hopkins at Indiana University where he helped to grow a premier HPB clinical and training program and became the University Hospital's Chief Quality Officer. Dr. Pitt has been the President of the Society of Clinical Surgery, the AHPBA, the IHPBA and the Kenneth Warren Foundation. He has received peer-reviewed funding for 30 years, has served on multiple Editorial Boards, has published more than 440 manuscripts and 120 book chapters and also has edited 18 books. He is a Fellow of the Royal College of Surgeons of Edinburg and an Honorary Professor of three Chinese medical schools.

David Kamowski, M.B.A., Vice President and Chief Information Officer of TUHS. Mr. Kamowski joined TUHS in January 2012, where he has formed an IT executive group that was integral in the development of IT strategic and tactical plans with the goal of creating a fully integrated IT environment across the Health System. Since his arrival at TUHS, Mr. Kamowski has affected the integration of AOH into TUHS, guided the implementation of ICD-10, implemented an enterprise-wide laboratory information system across all TUHS entities, and recently completed the implementation of a fully-integrated EMR and clinical information system at TUH and TUH-Episcopal Campus. Within the Information Services & Technology function, he has strengthened the management team, improved budgetary management, improved service, and enhanced cyber security policies and practices. Prior to TUHS, Mr. Kamowski served for six years as the Senior Vice President and Chief Information Officer at Rochester General Health System in Rochester, New York where he developed the business case for an integrated EMR and revenue cycle solution for the acute and ambulatory care settings for the entire health system and directed the implementation. Mr. Kamowski's prior experience includes over 14 years of experience in consulting at First Consulting Group and at Ernst & Young providing consulting services including IT strategic planning, large system implementations, and IT organizational turnarounds to healthcare provider organizations. During that time he also served over four years as interim chief information officer in a consulting capacity at organizations such as Baptist Health System (Jacksonville, FL), Catholic Healthcare West – Bay Area Region (seven hospitals, San Francisco, CA), and SSM Healthcare (16 hospitals, St. Louis, MO). In addition, he served five years as the Chief Information Officer and Vice President for Operations at the Joint Commission. Mr. Kamowski has over five years of experience in executive recruiting, having started and run the CIO search practice at Witt/Kieffer. Mr. Kamowski received a B.A. degree from Northwestern University in 1976, and an M.B.A. from the University of Chicago in 1990. He is an active member of the College of Healthcare Information Management Executives.

John Lasky, Vice President/Chief Human Resources Officer for Temple University Health System. John Lasky has served as TUHS's Chief Human Resources Officer since 2013. In that role he leads the "people" strategy for Health System entities, including recruitment, learning & organizational development, compensation, human resources information systems, benefits, retirement, labor & employee relations, and Human Resources operations. Prior to joining the Parent, John was the senior vice president/chief human resources officer of The Brooklyn Hospital Center in Brooklyn, New York; vice president/chief human resources officer of West Penn Allegheny Health System in Pittsburgh, Pennsylvania; and secretary and chief examiner of the civil service commission of the City of Pittsburgh. As an attorney he practiced at Reed Smith, LLP an international firm where he provided strategic planning, consultation, litigation services and day-to-day counsel to corporate-level and in-facility clients regarding the full range of employment/labor law and issues. John graduated from Duquesne University with a Bachelor of Arts degree and a Juris Doctor. He has taught graduate-level coursework in human resources and labor relations at the University of Pittsburgh's Graduate School of Public and International Affairs and lectured at Carnegie Mellon University's Masters in Medical Management program. He has contributed to many organizations as a board member, including Philadelphia Works, Pittsburgh's Workforce Investment Board, Neighborhood Learning Alliance (president), the United Way of Allegheny County, and the 1199C Training & Development Fund, among others.

Conflict of Interest Policy

The "Conflicts of Interest Policy-Voting Directors/Governors, Officers, and Members of Decision-making Committees" applies to all transactions and arrangements between TUHS and its voting Directors and its Officers. Each voting Director and each Officer must execute an annual Disclosure Statement disclosing facts relating to any actual or potential financial interest or lack thereof. Financial interest is defined as directly or indirectly, through business, investment or family having: An ownership or investment interest in any entity with which TUHS has a transaction or arrangement; a compensation agreement with TUHS or any entity or individual with whom TUHS has a transaction or agreement; or a potential ownership or investment interest in, or compensation agreement with, any entity or individual with whom TUHS is negotiating a transaction or arrangement. Disclosure of the existence and nature of any financial interest and all material facts must be made to the Governance, Nominating & Conflicts Committee prior to the consideration of a proposed transaction or arrangement by the Board. The Committee will determine if there is a conflict of interest, make recommendations to the Board regarding appropriate actions to be taken if a conflict exists, and recommend appropriate disciplinary or corrective action for a violation of the policy.

The "Conflict of Interest and Receipt of Gifts Policy-All Employees" is maintained for the purpose of avoiding any conflict, or appearance of conflict, between an employee's personal interest and the interest of TUHS in dealing with any organization or individual having, or seeking to have, any business relationship with TUHS or with any organization or individual whose objectives or interest may be adverse to TUHS interests. Pursuant to this policy a conflict of interest may arise when an employee or an employee's family member accepts compensation or a substantial gift or favor from a vendor in exchange for access to, information about, or other business advantages related to TUHS. Specifically, no TUHS employee may accept a gift which exceeds the value of $100.00 from any firm or individual doing business with TUHS. The Chief Counsel is responsible for making a determination of whether an action is appropriate and for consistently interpreting this policy.

The "Financial Conflicts of Interest in Research" policy addresses the complex relationships between research investigators, institutions, and the myriad Federal rules and regulations governing them. The purpose of the policy is to promote objectivity in research by establishing standards that provide a reasonable expectation that the design, conduct, and reporting of research occurring at TUHS is free from bias resulting from individual conflicts of interest.

Investment Policy

The Board of Directors of TUHS established the Finance & Investment Committee to oversee certain policies and procedures related to TUHS' budget, financing and investment related matters for TUHS and its Affiliates. The combined funds are broadly segmented into the following investment categories: (i) Operating Portfolios includes bank accounts for TUHS and its affiliates that are meant to provide an orderly cash flow for near-term operating needs (approximately 20 days of cash for each entity); (ii) Intermediate Portfolios represent a necessary bridge between near-term operating requirements and long-term capital needs of each entity; (iii) Long-Term Growth and Endowment Portfolios ("LTGE") primarily to support the long-term capital and operating needs of the entities; (iv) Defined Benefit Pension Portfolios to provide for long-term retirement benefits for Plan participants and their beneficiaries; and (v) Other Investment Portfolios to cover investments in which restrictions are imposed such as Defined Contribution Plans, Professional Liability Self-Insurance portfolios, applicable bond indentures and funding agencies. Such portfolios are governed by separate and distinct investment policy statements.

On January 24, 2008, the Finance & Investment Committee adopted the TUHS Master Investment Policy Statement, which is routinely reviewed. The last revision approved on February 15, 2017, reflects the current target asset allocation and is set forth in the table below. Investment consultants are retained to assist in the strategy development for all of the investment pools. The consultants also monitor investment performance and compliance with the investment policies. For all pools of investments, professional external investment managers and pooled vehicles have been employed to manage within specific asset classes as defined by the investment policies. Each investment strategy utilizes the "total return" approach for calculating investment returns and a long-term target return goal has been established for each portfolio.

TABLE A-6:
INVESTMENT POLICY

Type of Target Return Goal	**Operating 90 Day T-Bill**	**Intermediate CPI + 1.5%**	**LTGE CPI + 4.5%**	**Defined Benefit Actuarial ROR**
U.S. Equity	-	-	31.0%	30.0%
International	-	-	28.0%	25.0%
Global Tactical Asset Allocation	-	-	10.0%	8.0%
Fixed Income	-	100.0%	0.0%	15.0%
Absolute Return	-	-	15.0%	10.0%
Real Return	-	-	5.0%	5.0%
Real Estate	-	-	10.0%	5.0%
Private Equity	-	-	1.0%	0.0%
Cash Equivalents	100.0%	-	0.0%	2.0%

Source: The Health System.

The Cash Equivalents identified in the table above consist primarily of highly liquid investments, such as money market funds and debt instruments with original maturity dates of three months or less at the time of purchase. The intermediate portfolio must have an average credit quality of "A" or better, with no more than 20% of the total portfolio invested in sub-investment grade bonds. The majority of the equity securities within the LTGE and Defined Benefit portfolios are investments with readily determinable fair values. Only 1% of the LTGE portfolio is held in limited partnerships/private equity funds. Such investments are accounted for on the equity basis of accounting, which approximates fair value as determined by the fund managers. The investments of the Health System are diversified in structure in an effort to reduce market risk while striving to achieve target returns.

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SERVICE AREA, DEMOGRAPHICS AND COMPETITION

Service Area

The Health System's service area consists of the Philadelphia Metropolitan Statistical Area ("MSA"), which is composed of Philadelphia, Bucks, Montgomery, Delaware, and Chester Counties in Pennsylvania. In addition to these counties, the Health System also provides services to Burlington, Camden, Gloucester and Mercer Counties in New Jersey. Within the MSA, Temple University Hospital's Primary Service Area comprises the following neighborhoods within the City of Philadelphia: Olney, Richmond, Fairmount North, North Philadelphia West, North Philadelphia East and Nicetown.

TABLE A-7
SERVICE AREA

County	Population 2010	% Change 2000 to 2010	Median Household Income	% Below Poverty Level
Philadelphia	1,567,442	2.7%	$37,460	25.8%
Bucks	627,367	0.3%	$76,824	6.6%
Chester	515,939	3.4%	$86,093	7.3%
Delaware	563,894	0.9%	$64,174	11.0%
Montgomery	819,264	2.4%	$79,926	7.1%
Pennsylvania Total	12,802,503	0.8%	$53,115	13.6%

Source: US Census Bureau: State and County Quickfacts.

The map below presents the location of the current major TUHS acute and ambulatory care facilities. As discussed in "CORPORATE ORGANIZATION – The Obligated Group", the Fox Chase facilities are located on land adjacent to the Jeanes campus, and AOH is physically attached to Jeanes via an enclosed pedestrian bridge.

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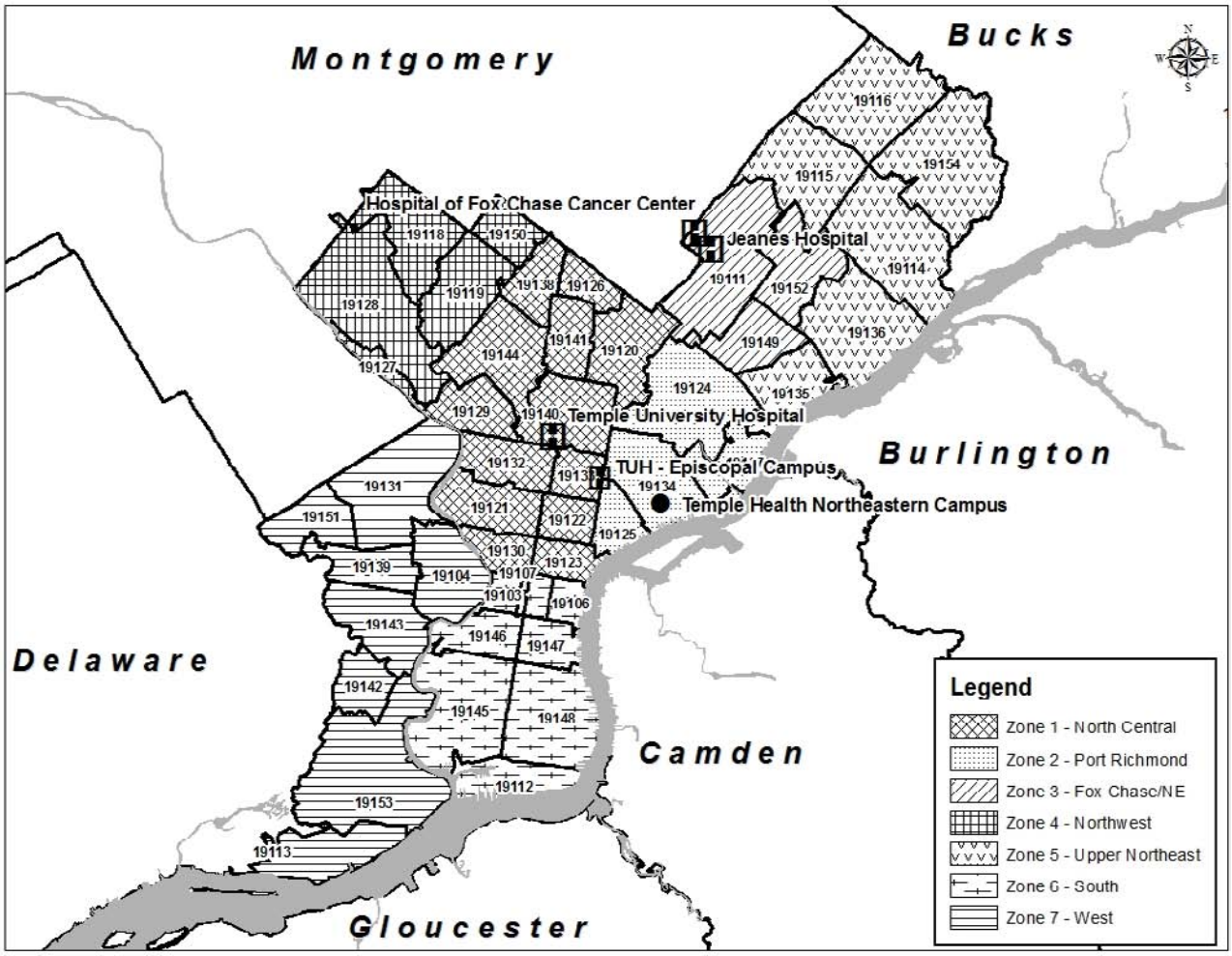

Competition

The Health System operates three hospitals in Philadelphia County and serves patients in Philadelphia, Bucks, Delaware, Montgomery and Chester Counties, all located in the southeastern corner of Pennsylvania, with TUH and Fox Chase serving patients regionally and nationally for tertiary care programs.

Within the five county area, TUHS views the Health System's competition to be represented principally by other major stand-alone hospitals or multi-hospital systems. The organizations listed in the following table are viewed by TUHS to be significant competitors based on their having at least two of the following characteristics: (1) within 5 miles of any TUHS hospital, (2) an on-site medical school, (3) over 400 beds, and (4) tertiary services.

TABLE A-8:
COMPETITION OF TUH, JEANES, AOH

Name	Licensed Beds	Staffed Beds	COTH Member*	Medical School	Distance from TUH (miles)	County
Albert Einstein Medical Center	772	444	Yes	No	3	Philadelphia
Crozer-Chester Medical	440	384	Yes	No	22.3	Delaware
Hahnemann Hospital (Tenet)	496	496	Yes	Yes	3	Philadelphia
Hospital of the University of PA (HUP)	788	788	Yes	Yes	5	Philadelphia
Thomas Jefferson University Hospital	951	803	Yes	Yes	3	Philadelphia
Aria – Jefferson Health	480	480	No	No	5	Philadelphia, Bucks
Abington – Jefferson Health	667	580	Yes	No	5	Montgomery
Other –Jefferson Health	164	164	No	No	Varies	Bucks, Montgomery
Cooper University Health Care	635	489	Yes	Yes	7.8	Camden

Source: The Health System.

The overall market for inpatient activity is composed of two distinct clinical components. The first represents relatively low acuity inpatient cases; a case mix index of less than 2.00x that is declining relatively rapidly as medical practice, technology and pharmacology allow more traditional inpatient procedures to be treated as outpatients or in observation status. This segment of the market has declined (6.2%) since Fiscal Year 2013. The other segment of the market is the high acuity cases, case mix index greater than 2.00x that has remained relatively stable over the years with a small increase related primarily to population shifts. In this market segment, given its investment in high acuity clinical programs, TUH has increased its market share from 5.0% of the market in Fiscal Year 2011 to 5.7% of the market in Fiscal Year 2016. TUH saw its volume of high acuity cases increase by 792 cases during this same time period.

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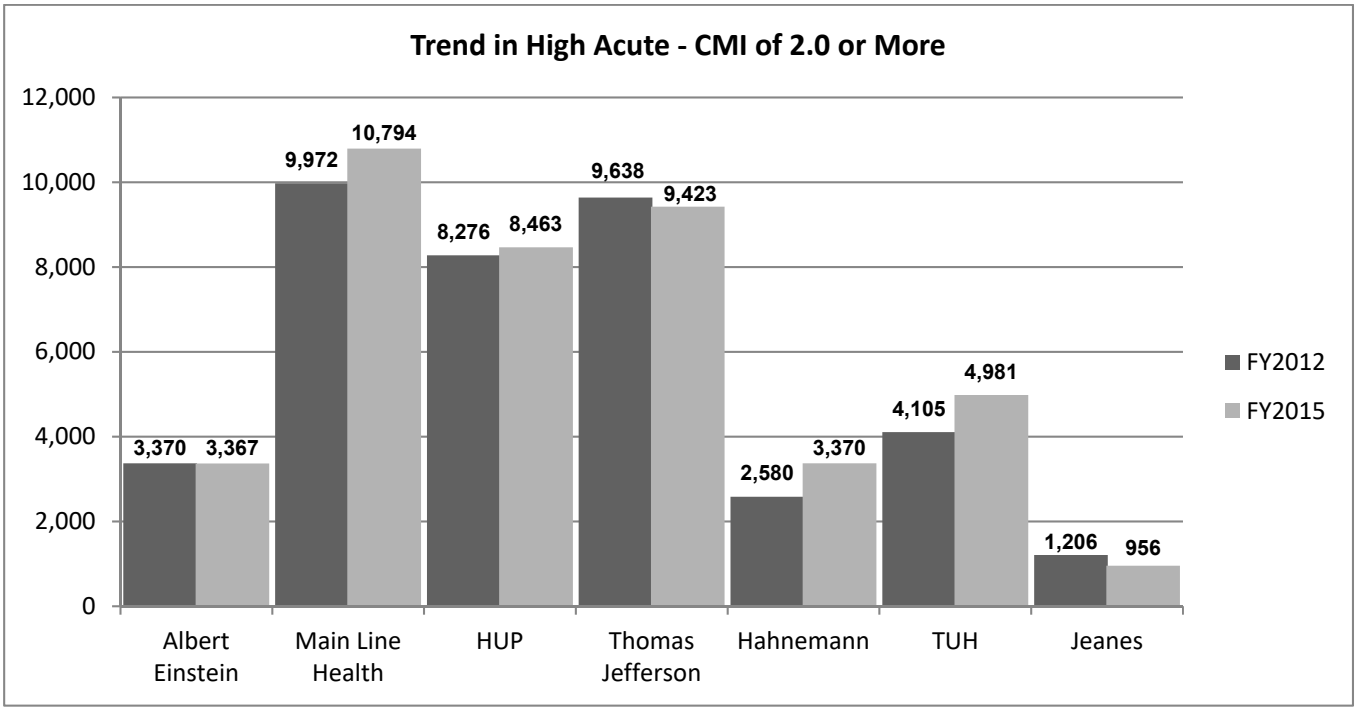
* The Association of American Medical Colleges, Council of Teaching Hospitals and Health Systems (COTH) is a group of individual leaders who represent approximately 400 of the nation's leading teaching hospitals and health systems. Membership is recognized throughout the world as a benchmark for excellence in patient care, research, and medical education.

TABLE A-9:
PENNSYLVANIA FIVE COUNTY MARKET – INPATIENT MARKET SHARE
BY HEALTH SYSTEM - ALL SERVICES

Hospital	Bucks	Chester	Delaware	Montgomery	Philadelphia	Total
			Fiscal Year 2016			
Jefferson	21.67%	3.19%	4.02%	30.59%	22.87%	19.54%
UPHS	4.34%	36.08%	11.15%	5.82%	17.70%	14.64%
Main Line	0.44%	29.40%	34.83%	11.12%	4.27%	11.49%
Trinity	31.06%	0.09%	8.77%	0.48%	8.09%	9.43%
TUHS	2.19%	0.61%	0.73%	2.58%	14.40%	7.40%
AEHN	1.47%	0.63%	0.36%	13.91%	10.35%	7.37%
CHS	0.13%	24.05%	0.25%	12.66%	2.34%	5.63%
Tenet	1.39%	0.44%	0.90%	0.95%	10.26%	5.15%
Prospect	0.04%	0.51%	34.48%	0.16%	0.43%	4.95%
Doylestown	15.77%	0.02%	0.02%	2.13%	0.04%	2.68%
Other	21.51%	4.97%	4.48%	19.59%	9.25%	11.73%
Totals	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**
Total Inpatient Discharges	**68,371**	**45,997**	**63,303**	**81,568**	**211,761**	**471,000**
			Fiscal Year 2011			
Jefferson	23.24%	2.89%	3.25%	31.23%	21.54%	18.92%
UPHS	3.84%	30.62%	7.87%	5.26%	18.44%	13.68%
Main Line	0.49%	31.93%	32.97%	12.49%	4.32%	12.23%
Trinity	29.17%	0.12%	8.63%	0.59%	9.51%	9.63%
TUHS	2.09%	0.64%	0.60%	2.50%	14.34%	7.14%
AEHN	0.97%	0.31%	0.26%	8.43%	10.37%	6.22%
CHS	0.15%	27.13%	0.26%	13.12%	1.99%	5.89%
Tenet	0.59%	0.32%	0.71%	0.68%	6.67%	3.25%
Prospect	0.07%	0.98%	42.31%	0.25%	0.55%	6.75%
Doylestown	13.03%	0.02%	0.02%	1.74%	0.04%	2.15%
Other	26.35%	5.06%	3.14%	23.71%	12.24%	14.16%
Totals	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**
Total Inpatient Discharges	**74,003**	**51,718**	**79,760**	**93,707**	**231,350**	**530,538**

Source: Pennsylvania Healthcare Cost Containment Council.

TUH's total inpatient volume declined from 26,403 in Fiscal Year 2011 to 26,003 in Fiscal Year 2016, a drop of 400 discharges. TUH saw low acute inpatient volume decline by 1,192 discharges, while high acute inpatient volume increased by 792, helping to offset the market forces driving declines in low acute inpatient volumes market-wide.



Source: Pennsylvania Healthcare Cost Containment Council.

The following chart illustrates the Health System's patient origination from the five counties based on discharges.

TABLE A-10:
PATIENT DISCHARGES

	Fiscal Year Ended June 30,			
County	**2014**	**2015**	**2016**	**2017**
Bucks	1,289	1,360	1,455	1,547
Chester	302	275	259	278
Delaware	432	494	472	479
Montgomery	2,053	2,012	1,994	1,926
Philadelphia	32,324	30,869	30,883	29,651
5 County Totals	36,400	35,010	35,063	33,881
All Other Areas	3,398	3,629	3,773	3,906
Totals	**39,798**	**38,639**	**38,836**	**37,787**

Source: The Health System.

SERVICES

Services at TUH, Jeanes and AOH

Temple University Hospital

TUH provides a comprehensive range of inpatient and outpatient services, including secondary, tertiary and quaternary levels of care. As a regional referral center and teaching institution, TUH provides sophisticated diagnostic, therapeutic, radiology and clinical services. TUH offers advanced programs in Cardiovascular Disease, Cancer, Digestive Diseases, Emergency Medicine, Neurosciences, Obstetrics, Orthopedics, Pulmonary Medicine, Transplantation, and Bariatric Surgery. Programs at TUH include the heart transplant program, transplant programs for kidney, single and bilateral lung, liver, and bone marrow. TUH is the only Level 1 Trauma Center in Philadelphia with an adult burn unit. TUH provides services in the following clinical departments:

Internal Medicine:
- Gastroenterology
- Infectious Diseases
- General Internal Medicine
- Metabolism/Endocrinology
- Nephrology
- Medical Oncology
- Rheumatology
- Cardiology
- Geriatrics

Surgery:
- General Surgery
- Pediatric Surgery
- Plastic Surgery
- Otorhinolaryngology (ENT)
- Trauma Surgery
- Transplant Surgery
- Orthopedic Surgery
- Vascular Surgery
- Oral Surgery
- General Urology Surgery
- Neurosurgery
- Cardio-Vascular Surgery
- Otolaryngology Head and Urology Neck Surgery

Thoracic Medicine and Surgery
- Thoracic Surgery
- Pulmonary Medicine

Cancer
- Hematopathology
- Hematology Oncology
- Radiation Oncology

Neuro-Sensory:
- Neurology
- Ophthalmology
- Rehabilitation Medicine

Maternal/Infant:
- Newborn/Neonate
- Obstetrics/Gynecology
- Midwifery

Psychiatry

Burn

Other:
- Anesthesiology
- Dermatology
- Pathology
- Diagnostic Imaging
- Nuclear Medicine
- Family Medicine
- Emergency Medicine
- Dental
- Urology
- Pain Management
- Podiatry
- Sports Medicine
- Pediatric Dentistry

- Geriatrics
- Endocrinology
- Pediatrics

Jeanes Hospital

As listed below, Jeanes provides a full range of inpatient and outpatient services and related ancillary services consistent with its role as a community health care provider. Jeanes is particularly strong in the areas of Orthopedics, Neurosurgery, Vascular Surgery, Cardiology, Oncology, and Geriatrics.

Medicine:
- Cardiology
- Gastroenterology
- Hematology
- Neurology
- Oncology
- Pulmonary Medicine
- Renal Dialysis
- Emergency Medicine
- Intensive Care

Surgery:
- Neurosurgery
- Ophthalmology
- Vascular Surgery
- Orthopedic Surgery
- Otolaryngology
- Plastic/Reconstructive Surgery
- Cardio-Thoracic Surgery
- Urology
- Bariatric Surgery
- Podiatry
- Gynecology

Cardiopulmonary Care:
- Electro cardiology
- Holter Monitor
- Stress Testing
- Echocardiography
- Pacemaker Evaluation
- Pressure Monitoring
- Cardiac Rehabilitation
- Pulmonary Function Studies
- Respiratory Therapy
- Sleep Lab

Radiology:
- Computerized Tomography
- Nuclear Medicine
- Ultrasonography
- Mammography
- Angiography
- Interventional Radiology
- Diagnostic X Ray
- Magnetic Resonance Imaging (MRI)

Other:
- Anesthesiology/Pain Management
- Electroencephalography
- Electromyography
- Diabetic and Nutrition Counseling
- Wound Care/Hyperbaric Oxygen

Rehabilitative Services:
- Physical Therapy
- Occupational and Hand Therapy
- Cardiac and Pulmonary Rehabilitation
- Speech Therapy

Maternal and Child Health

Industrial Medicine & Occupational Health

Home Care Services

Laboratory and Pathology

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American Oncologic Hospital (The Hospital of Fox Chase Cancer Center)

As a designated Comprehensive Cancer Center, the clinical services provided at AOH are focused on those required to provide comprehensive services to cancer patients. The range of services available at AOH is listed in the table below.

Departments:
- Clinical Genetics
- Diagnostic Imaging
- Hematology/Oncology
- Medicine
- Pathology
- Radiation Oncology
- Surgical Oncology
- Emergency Medicine
- Intensive Care

Surgery:
- Neurosurgery
- Ophthalmology
- Vascular Surgery
- Orthopedic Surgery

Care Teams:
- Brain
- Bone Marrow Transplant
- Breast
- Clinical
- Genetics
- Dermatology
- Gastroenterology
- Genitourinary
- Gynecological
- Head & Neck
- Hematology
- Lung
- Lymphoma
- Leukemia Melanoma
- Non-Melanoma
- Myeloma

Major Accreditations, Approvals and Memberships

On November 14, 2015, TUH received accreditation from The Joint Commission effective through November 14, 2018. TUH has provider agreements with The Centers for Medicare and Medicaid Services and the Pennsylvania Department of Human Services to participate in the Medicare and Medicaid programs. TUH is licensed by the Pennsylvania Department of Health, and its psychiatric and rehabilitation inpatient units are separately licensed by the Pennsylvania Department of Health.

On March 25, 2017, Jeanes received accreditation from The Joint Commission effective through March 25, 2020. Jeanes has provider agreements with The Centers for Medicare and Medicaid Services and the Pennsylvania Department of Human Services to participate in the Medicare and Medicaid programs. Jeanes is licensed by the Pennsylvania Department of Health.

On November 5, 2015, AOH received accreditation from The Joint Commission effective through November 5, 2018. AOH has provider agreements with The Centers for Medicare and Medicaid Services and the Pennsylvania Department of Human Services to participate in the Medicare and Medicaid programs. AOH is licensed by the Pennsylvania Department of Public Health.

MEDICAL STAFF AND PHYSICIAN RELATIONS

Temple University Hospital

As of June 30, 2017, the total medical staff numbered 1,261. The active medical staff of TUH consisted of 529 physicians and dental specialists of which 92% were board-certified, and 6% were board eligible, for a total of 98% board-certified/board-eligible active medical staff, with an average age of 47. The active medical staff of TUH is divided into three categories: (1) those who are full-time salaried members of the faculty of the LKSOM and members of the Practice Plan; (2) those who are non-salaried

members of the volunteer faculty of the LKSOM and not members of the Practice Plan; and (3) physicians employed through TPI. Members of the volunteer faculty group provide an important source of patient referrals that supplement Practice Plan physician referrals and account for the balance of the admissions to TUH.

Temple University Hospital's strategy for maintaining and strengthening relationships with its medical staff and other physicians currently has three main elements: the LKSOM's Faculty Practice Plan, TPI and outreach efforts directed at independent private practice physicians.

The University has established the Practice Plan as a clinical faculty practice plan under which full-time, salaried faculty members of the LKSOM are extended the opportunity to apply for privileges of clinical practice at Temple University Hospital and the other University-affiliated health care facilities. The Practice Plan is not a separate corporation, partnership or foundation and is governed within the School of Medicine by a Practice Plan Board under a Memorandum of Agreement (the "Practice Plan Memorandum").

All physicians who have full-time, salaried positions on the faculty of the LKSOM and who are actively engaged in clinical practice activities are required to devote all of their professional efforts to the University and to participate in the Practice Plan, unless specifically exempted (currently approximately 10 physicians are so exempted) by the Dean of the LKSOM. Practice Plan members render their professional activities only at facilities owned or operated by, or affiliated with, the University. With limited exceptions, all professional income received by Practice Plan members is deposited in a Practice Plan account. The excess of receipts over expenditures is available to provide supplemental compensation to the faculty and increase departmental revenues in accordance with the Practice Plan Memorandum. The revenues and expenses of the Practice Plan are not included in Temple University Hospital's financial statements.

Jeanes Hospital

As of June 30, 2017, the total medical staff numbered 608. The active medical staff of Jeanes consisted of 544 physicians and dental specialists and 83% of the active medical staff were board certified. The average age of the medical staff was 50. Of the active medical staff 155 were hospital based and comprised as follows: Anesthesiology 30, Emergency Medicine 35, Pathology 7, Radiology 49, and Hospitalists/Intensivists 34. There are 18 Jeanes physicians that have a faculty appointment to teach medical students at LKSOM.

American Oncologic Hospital and Affiliates

All practicing physicians at AOH are employed by FCCCMG, the physician practice of AOH. As of June 30, 2017, FCCCMG employed 156 physicians within seven clinical departments. Specifically, the number of active physicians in each of the seven clinical departments is as follows: Surgical Oncology (total 56), Medical Oncology (total 37), Medicine (total 23), Radiation Therapy (total 13), Radiology (total 10), Pathology (total 15) and Clinical Genetics (total 2). The average age of the physician group was 42; this group performs in excess of 90% of the clinical services performed at Fox Chase with the remainder of services being performed through voluntary or contracted medical staff.

The physician practice at Fox Chase strives to recruit and retain the most highly qualified physicians within each subspecialty and nearly all have had additional oncologic fellowship training post-residency. In excess of 90% of Fox Chase physicians are board certified, as it is a condition of employment within their first three years on campus. Several faculty members serve in leadership

positions on national and international oncologic specialty societies and are at the forefront in evaluating new drugs and technologies while making critical decisions on clinical pathway standards.

PERSONNEL

Employees

Many of the nurses and other employees of the Health System are currently members of various labor unions. Each of TUH and Jeanes has one or more separate collective bargaining agreements with various labor unions, which have different expiration dates. The failure to renew a collective bargaining agreement or a labor stoppage or similar action related to any of the unions could have a material adverse effect on the operations of the hospital in question. The Health System believes its relationship with its labor force is satisfactory.

As of June 30, 2017, TUH had 4,295 full-time equivalent employees ("FTEs") excluding interns and residents. Nursing employees comprised 1,395 of the 4,295 FTEs and all of the nursing personnel were registered nurses. Approximately 78.1% of TUH's employees are covered by collective bargaining agreements.

TABLE A-11:
COLLECTIVE BARGAINING UNITS – TEMPLE UNIVERSITY HOSPITAL

	Covered Employees	Number of Employees	Contract Expiration
PASNAP	Nurses	1,298	9/30/19
PASNAP	Allied Health Professionals	630	9/30/19
District 1199C TUH	Service	720	6/30/18
District 1199C TUH	Clerical	323	6/30/18
International Union of Engineers Local 835	Engineers	19	11/14/18
Health Professionals and Employees (HPAE)	Registered Nurses Unit and Technical Unit	179	2/28/20
District 1199C EHC	Service	99	10/10/18
District 1199C EHC	Mental Health Unit	87	11/8/18

As of June 30, 2017, Jeanes had 844 FTEs excluding interns and residents. Nursing employees comprised 251 of the 844 FTEs and all of the nursing personnel were registered nurses. The nursing staff at Jeanes is covered by a collective bargaining agreement which runs through November 8, 2017. Management believes that, overall, Jeanes' relations with its employees are satisfactory.

TABLE A-12:
COLLECTIVE BARGAINING UNITS – JEANES HOSPITAL

	Covered Employees	Number of Employees	Contract Expiration
PASNAP Jeanes	Nurses	240	11/8/17

As of June 30, 2017, AOH had 1,896 FTE's. Nursing employees (registered and LPN's) comprise 380 of the 1,896 FTE's and approximately 98% of nursing personnel were registered nurses. There are no

collective bargaining agreements at Fox Chase. However, as shown in the table below, ICR is currently bargaining a first collective bargaining agreement with the International Brotherhood of Electrical Workers Local Union 98 (the "IBEW Local 98"), which represents 28 employees. Management believes that overall, relations with employees are satisfactory.

TABLE A-13:
COLLECTIVE BARGAINING UNITS – FOX CHASE

	Covered Employees	Number of Employees	Contract Expiration
IBEW Local 98	Maintenance	28	N/A

Comparative Health System data for the years ended June 30, 2015, 2016 and 2017 is set forth below. FTE's per Adjusted Occupied Bed at TUH and Jeanes have increased over the period shown. This growth is primarily attributed to a leadership decision to increase bedside nursing in an effort to improve patient and employee satisfaction and quality of care. Another driver of this growth is a continued focus to reduce average length of stay while maintaining fixed staffing levels.

TABLE A-14:
EMPLOYMENT AT TUH AND JEANES

	Fiscal Year Ended June 30,		
	2015	2016	2017
Full-Time Equivalents (FTEs)	4,734	4,902	5,139
Nursing Employees (Registered & LPNs FTEs)	1,578	1,675	1,646
Registered Nurses as a % of Nursing Employees	99%	99%	100%
FTEs per Adjusted Occupied Bed - TUH*	5.03	5.12	5.19
FTEs per Adjusted Occupied Bed - Jeanes*	4.57	5.23	5.83

Source: The Health System.

TABLE A-15:
EMPLOYMENT AT FOX CHASE

	Fiscal Year Ended June 30,		
	2015	2016	2017
Full-Time Equivalents (FTEs)	1,798	1,870	1,896
Nursing Employees (Registered & LPNs FTEs)	348	368	380
Registered Nurses as a % of Nursing Employees	98%	98%	98%

Current Bargaining

In November 2016, TUH and Pennsylvania Association of Staff Nurses & Allied Professionals ("PASNAP") negotiated successor collective bargaining agreements with PASNAP – one with nurse employees and a second with allied professionals – that will expire on September 30, 2019. The negotiations were professional and did not include a threat of a work stoppage. TUH is currently preparing to bargain over two collective bargaining agreements with the District 1199C union, an affiliate of the National Union of Hospital and Health Care Employees, AFSCME, AFL-CIO (the "1199C Union") – one with clerical employees and one with service employees, both of which expire on June 30, 2018. TUH's Episcopal Campus likewise is preparing to bargain over two collective bargaining

* Excludes interns and residents.

agreements with the 1199C Union – one with service employees, which expires on October 10, 2018, and a second with mental health employees, which expires on November 8, 2018. TUH and its Episcopal Campus have good and appropriate relationships with the 1199C Union and expect direct but successful bargaining.

Additionally, ICR is bargaining over a first collective bargaining agreement with the IBEW Local 98, which represents fewer than 30 employees who perform maintenance and landscape duties. The parties have met regularly since the spring of 2016 and have agreed on a number of issues. The parties continue to work toward an agreement that will enable ICR to achieve its mission and objectives and that is fair to the members of the bargaining unit. ICR views the possibility of a labor action against the employer as remote. Nevertheless, the commitment to its patients and mission requires that it be prepared in the event of such action. Its continuing operations plans will provide for continued operation in the event of labor action, which could include picketing, hand-billing, and work stoppage.

Jeanes Hospital is preparing to bargain with PASNAP over a collective bargaining agreement for nurse members of that union. The current agreement expires in early November 2017. Jeanes has a good relationship with PASNAP and expects successful bargaining results.

Benefits

The Health System supports a 401(a) defined contribution retirement plan (the Temple University Health System, Inc. Defined Contribution Retirement Plan) with 11,833 active participants as of December 31, 2016, a 403 (b) plan (the Temple University Health System, Inc. 403(b) Plan) with 14,687 active participants as of December 31, 2016, and a non-qualified 457(b) plan (Temple University Health System, Inc. 457(b) Deferred Compensation Plan) for the benefit of its eligible employees. The plans are intended to provide eligible employees with the opportunity for long-term accumulation of retirement savings through a combination of employee and employer contributions to individual participant accounts and the earnings thereon. The plans are employee benefit plans intended to comply with all applicable federal laws and regulations, including the Code, and the Employee Retirement Income Security Act of 1974, as amended.

The Health System continues to support various legacy defined benefit plans established at individual entities prior to benefits consolidation across TUHS. These plans are all frozen to new participants and future benefit accruals. Only one plan (Jeanes Hospital Retirement Income Plan) has approximately seven grandfathered employees continuing to accrue benefits. Based on market values as of June 30, 2017, the actuarial asset value of the combined plans was $177,335,000 with a funding policy ratio of 83.2%. It is the internal policy of the Health System to maintain 80% or better funded level, therefore the Health System has budgeted approximately $27,321,000 in contributions over the next five years. Wells Fargo is the trustee for the Health System's defined benefit plans.

Certain employee groups were eligible to participate in the Retirement Plan for Employees of Temple University (4898 Plan). This plan was frozen to new Health System participants and future benefit accruals as of October 31, 2001. Certain employees hired before July 1, 2001 are eligible to participate in the post-retirement pre-funding plan administered by Temple University.

HEALTH SYSTEM UTILIZATION

Utilization Statistics

Data for the Health System utilization for the Fiscal Years ended June 30, 2014, 2015, 2016, and 2017, are presented in the following table.

TABLE A-16:
UTILIZATION STATISTICS

	Fiscal Year Ended June 30,			
	2014	**2015**	**2016**	**2017**
Discharges	39,798	38,639	38,836	37,787
Discharged Patient Days	230,173	236,030	245,459	244,203
Census Patient Days	233,252	239,523	245,090	250,830
Discharged Length of Stay	5.15	5.39	5.53	5.78
Clinical Decision Unit (CDU) Observation Discharges	2,488	1,848	1,596	1,077
Non-CDU Observation Discharges	7,332	8,043	8,586	9,318
Emergency Department Visits	171,442	171,734	178,714	175,192
Admissions from ED	22,450	21,556	21,909	20,904
% Admission from ED	60.2%	59.5%	60.1%	58.9%
Inpatient Surgeries	11,751	12,024	11,671	11,571
Outpatient Surgeries	12,523	13,002	13,544	14,289
Medicare Case Mix Index	1.84	1.88	1.94	2.04
Total Case Mix Index	1.64	1.71	1.77	1.82
Births - Discharges	2,981	2,942	2,849	2,650
Cardiology Procedures	4,716	6,293	6,129	6,199
Total Transplants	190	246	296	326
Total Outpatient Registrations	487,600	492,167	510,872	497,406
MRI/CT Procedures	35,895	35,953	35,756	34,652
Radiation Therapy Procedures	22,204	24,820	26,495	25,347
Chemotherapy Infusions	28,250	31,184	34,103	32,178

Source: The Health System.

Sources of Revenue

Payments on behalf of the majority of patients are made to TUH, Jeanes and AOH by (i) the Federal Government under the Medicare program; (ii) the Commonwealth under the Medicaid program; (iii) Blue Cross; (iv) commercial insurance companies; (v) HMO and other types of managed care organizations ("MCOs"); and (vi) other sources.

The following table summarizes the Payor Mix by discharge for TUH, Jeanes, and AOH.

TABLE A-17:
PAYOR MIX BY DISCHARGE FOR TUH, JEANES & AOH

	Fiscal Year Ended June 30,					
	2015		**2016**		**2017**	
Medicaid*	13,997	36.2%	15,200	39.1%	14,117	37.4%
Medicare*	16,377	42.4%	16,166	41.6%	16,619	44.0%
Blue Cross	5,228	13.5%	5,010	12.9%	4,601	12.2%
Managed Care	2,471	6.4%	2,424	6.2%	2,319	6.1%
Other	566	1.5%	36	0.1%	131	0.3%
Totals	38,639	100.0%	38,836	100.0%	37,787	100.0%

Source: Health System Records.

The following table summarizes the Payor Mix by discharge for TUH only.

TABLE A-18:
PAYOR MIX BY DISCHARGE FOR TUH

	Fiscal Year Ended June 30,					
	2015		**2016**		**2017**	
Medicaid*	12,772	46.0%	13,779	49.3%	12,503	46.4%
Medicare*	10,556	38.1%	10,382	37.1%	10,760	40.0%
Blue Cross	2,686	9.7%	2,526	9.0%	2,309	8.6%
Managed Care & Other	1,726	6.2%	1,278	4.6%	1,352	5.0%
Totals	27,740	100.0%	27,695	100.0%	26,924	100.0%

Source: Health System Records.

For a discussion of the third-party payment programs mentioned above, reference should be made to "BONDHOLDERS' RISKS" in the forepart of this Official Statement.

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* Includes Managed Care.

Managed Care

In recent years, MCOs have achieved increasing healthcare market share. The following table provides information on MCO penetration in the Philadelphia and combined five county markets for calendar year 2016:

TABLE A-19:
MANAGED CARE ORGANIZATIONS

	Philadelphia	Five Counties*
Aetna Companies	179,873	452,088
United Healthcare Companies	63,414	113,996
Independence Health Group	443,741	991,436
HPP	232,471	272,543
All Others	37,530	53,200
2016 Total Enrollees	957,029	1,883,263
7/1/16 Estimated Population	1,569,898	4,099,813
2016 Penetration Rate (%)	61.0%	45.9%

Source: The Hospital and Health System Association of Pennsylvania, HMO Annual Report for Calendar Year 2016 Data.

The Parent has contracts in effect with all the major MCOs.

SUMMARY FINANCIAL AND OPERATING INFORMATION

Below is a summary statement of operations and selected balance sheet information for the Health System for each of the fiscal years in the three-year period ended June 30, 2017. The following summaries should be read in conjunction with data included under the subheading "Management's Discussion – Utilization and Financial Performance of the Consolidated Results of the Health System" and "Management's Discussion – Balance Sheet of the Consolidated Results of the Health System," as well as the audited consolidated financial statements, related notes and supplementary information for fiscal years ended June 30, 2017, 2016 and 2015 provided in Appendix "B" to the Official Statement.

As noted under "CORPORATE ORGANIZATION – The Obligated Group," the members of the Obligated Group are the only entities obligated to make payments on the 2017 Bonds.

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* Philadelphia, Bucks, Montgomery, Chester and Delaware Counties, all located within Pennsylvania.

TABLE A-20:
SUMMARY STATEMENT OF UNRESTRICTED OPERATIONS ($000s)
TEMPLE UNIVERSITY HEALTH SYSTEM, INC.

	Fiscal Year Ended June 30,			
	2014	**2015**	**2016**	**2017**
Net Patient Service Revenue*	$1,320,944	$1,432,806	$1,558,863	$1,655,667
Research Revenue	33,561	29,565	32,036	35,189
Investment Income	517	325	807	842
Contribution and Other Revenue	45,878	45,494	45,472	53,734
Net Assets Released from Restrictions Used for Operations	5,806	6,236	5,483	6,960
Total Operating Revenues*	$1,406,706	$1,514,426	$1,642,661	$1,752,392
Depreciation and Amortization	50,976	51,078	50,514	51,131
Interest	29,338	27,028	27,024	28,595
Other Operating Expenses	1,336,367	1,427,025	1,554,558	1,672,197
Total Operating Expenses	$1,416,681	$1,505,131	$1,632,096	$1,751,923
Operating Income (Loss)†*	(9,975)	9,295	10,565	469
Investment Income	12,813	12,301	6,591	6,894
Non-Operating Gain	498	830	-	-
Excess of Revenues over Expenses*	$3,336	$22,426	$17,156	$7,363

Source: Audited Financial Statements of the Health System for the Fiscal Years ended June 30, 2014, 2015, 2016 and 2017.

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* The Obligated Group represents 100% of Operating Revenues for all periods presented above. The Obligated Group represents 69%, 123%, 134% and 358% of Operating Income/(Loss) for the Fiscal Years ended June 30, 2014, 2015, 2016 and 2017, respectively.

† Included in the performance are proceeds of the approved Temple University Academic Health Center Non-Preferred Appropriation from the Commonwealth of Pennsylvania, which are passed through to the University as an equity transfer. These funds totaled $6,437,000, $6,210,000, $6,210,000 and $6,229,000 for the Fiscal Years ended June 30, 2014, 2015, 2016 and 2017, respectively.

Management's Discussion – Utilization and Financial Performance of the Consolidated Results of the Health System

Utilization and Financial Results – Fiscal Year 2015 Compared to Fiscal Year 2014

For the Fiscal Year ended June 30, 2015, the Health System reported a Net Income of $22,426,000. Included in the reported performance was $6,210,000 of Temple University Non-Preferred Appropriation from the Commonwealth which was transferred to the University.

Year-over-year, total net patient service revenue increased by 8.5% or $111,862,000; driven by improved outpatient revenue of $59,959,000, inpatient revenue of $35,330,000, improved population health income and increased funding to TUH from the Commonwealth. The increase in outpatient revenue was primarily driven by enhanced patient access which led to substantial improvement in outpatient volumes at AOH. AOH's diagnostic imaging studies, outpatient surgical procedures, and chemotherapy infusions increased by 20.1%, 16.8%, and 10.4%, respectively, compared to the prior year. The inpatient revenue growth was largely due to favorable case mix at TUH. TUH's case mix index increased by 5.9% (from 1.69 to 1.79) compared to the prior year, mainly as a result of continued growth in the surgical and transplant programs. TUHS recognized population health income of $3,806,000 compared to a loss of $1,775,000 in the prior period. $2,608,000 of the population health income recorded in 2015 related to HPP and was the result of receiving a prior year pay-for-performance bonus, release of prior year reserves due to favorable claims development, increased funding for the ultra-high cost Hepatitis C medication and increased revenues in the Medicare product line. The remaining $1,198,000 of population health income related to incentive payments under shared risk arrangements with other payors, primarily IBC.

Total operating expenses increased by 6.2% or $88,450,000 compared to the prior year period largely due to increases in professional fees and supplies and pharmaceuticals expense, partially offset by a decrease in insurance expense. Professional fees grew as a result of increased charges from the University, largely driven by the University's strategic funding initiative related to faculty hires. The supplies and pharmaceuticals increase occurred at TUH as a result of the higher acuity and increased volume in the operating room, and at AOH, as a result of the aforementioned growth in outpatient volumes. The reduction in professional liability insurance was a result of effective risk management and program defense.

Utilization and Financial Results – Fiscal Year 2016 Compared to Fiscal Year 2015

For the Fiscal Year ended June 30, 2016, the Health System reported a Net Income of $17,156,000. The reported performance includes $6,210,000 of Temple University Non-Preferred Appropriation from the Commonwealth which was transferred to the University.

Year-over-year, total net patient service revenue increased by 8.8% or $126,057,000; driven by improved outpatient revenue of $74,429,000, inpatient revenue of $44,588,000, increased population health revenue and increased funding from the Commonwealth. The increase in outpatient revenue was primarily driven by considerable growth of the TUH outpatient pharmacy, which expanded its patient population for outpatient services and successfully implemented other retail pharmacy initiatives during 2016. Continued growth in outpatient volumes at AOH also contributed to the revenue increase. AOH's outpatient operations, radiation therapy treatment starts, and chemotherapy infusions increased by 12.0%, 10.3%, and 9.4%, respectively, compared to the prior year. The inpatient revenue growth was largely due to favorable acuity at TUH. TUH's case mix index increased by 3.4% or 0.06 compared to the prior year, primarily due to the continued growth in volumes related to the surgical and transplant programs. In 2016, TUHS recognized population health income of $10,616,000 compared to income of $3,806,000 in

the prior period. $8,711,000 of the population health income recorded in 2016 related to HPP and was the result of recording pay-for-performance bonuses for the current and prior year and increased revenues in the Medicaid product line. The increase in Medicaid product line revenues was driven by higher per member per month premiums. The remaining $1,905,000 of population health income related to incentive payments under shared risk arrangements with other payors, primarily IBC.

Total operating expenses increased by 8.4% or $126,964,000 compared to the prior year period largely due to increases in supplies and pharmaceuticals, salaries, employee benefits, and professional fees expenses. The supplies and pharmaceuticals increase occurred at TUH as a result of the aforementioned growth of the outpatient pharmacy and increased inpatient acuity, and at AOH, as a result of the growth in outpatient volumes. The increases in salaries and employee benefits were due to higher staffing levels associated with increased inpatient acuity and length of stay at TUH. Also contributing to the increase in salaries, professional fees, and supplies and pharmaceuticals were pre-implementation costs at TUH associated with the new EPIC system. These costs totaled $18,977,000 in 2016.

Utilization and Financial Results – Fiscal Year 2017 Compared to Fiscal Year 2016

For the Fiscal Year ended June 30, 2017, the Health System reported net income of $7,363,000. The reported performance includes $6,229,000 of Temple University Non-Preferred Appropriation from the Commonwealth which was transferred to the University.

Year-over-year, total net patient service revenue increased by 6.2% or $96,804,000; driven by improved outpatient revenue of $50,058,000 and increased funding from the Commonwealth of $26,270,000. The increase in outpatient revenue was driven by considerable growth of the TUH outpatient pharmacy and continued growth in outpatient volumes at AOH. AOH's outpatient operations and diagnostic imaging studies increased by 11.9% and 4.6%, respectively, compared to the prior year. Also contributing to the outpatient revenue increase was a settlement with an insurance company valued at $11,885,000 that primarily impacted AOH. TUHS recognized population health income of $36,582,000 compared to income of $8,711,000 in the prior year. $28,268,000 of the population health income recorded for the Fiscal Year ended June 30, 2017 related to HPP and was the result of significant improvements in performance for the Medicaid product line. The remaining $8,314,000 of population health income related to incentive payments under shared risk arrangements with other payors, primarily IBC. The increase in Commonwealth funding is related to an increase in federalized funding primarily related to additional inpatient and outpatient supplemental funding paid through managed care companies under the provisions of the state wide Quality Assessment (tax) Program compared to the prior year.

Total operating expenses increased by 7.3% or $119,827,000 compared to the prior year largely due to implementation and stabilization costs related to the EPIC system which went live at TUH in August 2016, increased Faculty Practice Plan support, professional liability expenses and supplies and pharmaceuticals costs at TUH and AOH. Actual costs for the implementation of the EPIC system totaled $43,313,000 compared to $18,977,000 in the prior year for a year-over-year increase of $24,337,000. These costs were driven primarily by increases to salaries, professional fees and purchased services and other. On-going costs related to the EPIC system are projected to be $15,672,000 in Fiscal Year 2018. The increase in Faculty Practice Plan support is primarily related to an increase of $20,733,000 in federalized dollars received and passed through to the Faculty Practice Plan in support of their clinical activities in service to the community and an increase of $11,891,000 in professional liability support provided to Temple University Physicians ("TUP"), the LKSOM's faculty practice plan described herein. Professional liability costs, excluding TUP support, increased year-over-year by $5,533,000 due to unfavorable claims experience. The supplies and pharmaceuticals increase of $29,477,000 occurred as a result of the growth in outpatient volume and increased use of more expensive therapies at AOH as well

as continued growth of the outpatient pharmacy, increased transplants and increased inpatient acuity at TUH. Remaining increases in operating expenses are primarily related to inflation.

TABLE A-21:
FISCAL YEAR 2017 QUARTERLY TRENDS ($000s)

	Fiscal Year Ended June 30, 2017				
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
Reported Net Income (Loss) before Commonwealth Funding*	($51,604)	($48,622)	($26,281)	($17,514)	($144,021)
Commonwealth Funding (Net)†	30,620	32,320	39,001	43,215	145,156
Reported Net Income (Loss)	($20,984)	($16,302)	$12,720	$25,701	$1,135

	Normalized for Commonwealth Funding				
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
Reported Net Income (Loss) before Commonwealth Funding*	($51,604)	($48,622)	($26,281)	($17,514)	($144,021)
Normalized Commonwealth Funding (Net)‡	36,289	36,289	36,289	36,289	145,156
Reported Net Income (Loss)	($15,315)	($12,333)	$10,008	$18,775	$1,135

TUHS' Fiscal Year 2017 performance trended in a positive direction as TUHS recovered from TUH's implementation of EPIC. Net patient service revenue stabilized over Fiscal Year 2017 with stable emergency department visits and inpatient discharges as well as increases in CMI, outpatient registrations and operating room volume. In addition to stronger patient revenues, total revenue also increased due to favorable population health results and Commonwealth funding.

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* Excluded in the Reported Net Income (Loss) before Commonwealth Funding are proceeds of the approved Temple University Academic Health Center Non-Preferred Appropriation from the Commonwealth, which are passed through to the University as an equity transfer. These funds totaled $1,557,250 for each quarter of Fiscal Year 2017 or a total of $6,229,000.
† As reported.
‡ Normalized to reflect level quarterly receipts of Commonwealth funding.

TABLE A-22:
SUMMARY BALANCE SHEET ($000s)
TEMPLE UNIVERSITY HEALTH SYSTEM, INC.

	As of June 30,			
	2014	**2015**	**2016**	**2017**
Unrestricted Cash and Cash Equivalents plus Investments	$321,196	$326,209	$278,547	$301,350
Patient Accounts Receivable, Net	163,579	181,441	195,220	217,425
Other Current Assets	160,726	159,012	195,745	168,601
Total Current Assets	645,501	666,662	669,512	687,376
Property, Plant and Equipment, Net	337,306	348,599	353,160	340,065
Unrestricted Investments	30,588	33,669	43,087	50,496
Other Assets	347,125	329,644	327,433	330,522
Total Assets*	$1,360,520	$1,378,574	$1,393,192	$1,408,459
Current Portion of Long-Term Debt	$6,873	$15,685	$17,427	$18,397
Accounts Payable & Accrued Expenses	146,791	162,700	200,556	170,638
Other Current Liabilities	100,607	112,829	106,097	108,523
Total Current Liabilities	254,271	291,214	324,080	297,558
Long-Term Debt	527,050	510,389	500,385	502,044
Other Long-Term Liabilities	223,343	228,090	247,839	224,391
Total Liabilities	1,004,664	1,029,693	1,072,304	1,023,993
Net Assets	355,856	348,881	320,888	384,466
Total Liabilities and Net Assets	$1,360,520	$1,378,574	$1,393,192	$1,408,459

Source: Audited Financial Statements of the Health System for the Fiscal Years ended June 30, 2014, 2015, 2016 and 2017.

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* The Obligated Group represents 94%, 94%, 95% and 95% of Total Assets for the Fiscal Years ended June 30, 2014, 2015, 2016 and 2017, respectively.

TABLE A-23:
LIQUIDITY OF THE OBLIGATED GROUP ($000s)

	As of June 30,			
	2014	**2015**	**2016**	**2017**
Unrestricted Cash and Cash Equivalents plus Investments	$321,196	$326,209	$278,547	$301,350
Unrestricted Investments	30,588	33,669	43,087	50,496
Board Designated Unrestricted Investments	14,388	28,811	13,842	11,260
Less: Real Estate Investments	(7,491)	(4,838)	(1,464)	(5,673)
Less: Restricted Liquidity	(1,636)	(2,770)	(1,419)	(717)
Liquidity	357,045	381,081	332,593	356,716
Less: Non-Obligated Group Liquidity	(41,839)	(41,718)	(42,592)	(34,018)
Obligated Group Liquidity	$315,206	$339,363	$290,001	$322,698
Days' Cash on Hand	84	85	67	69

Source: The Health System.

Management's Discussion – Balance Sheet of the Consolidated Results of the Health System

Balance Sheet – Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015 total available liquidity in the Health System was $381,081,000. (Liquidity in the Summary Balance Sheet above consists of: Cash and Cash Equivalents plus Investments and Unrestricted Investments, adjusted by $28,811,000 for Board Designated funds that management considers unrestricted less Restricted Cash and Investments.) In a year-over-year comparison, TUHS experienced an increase in available liquidity of $24,036,000. This increase of $24,036,000 in available liquidity was primarily due to operating performance.

At June 30, 2015, Net Patient Accounts Receivable was $181,441,000. In a year-over-year comparison, Net Patient Accounts Receivable increased by $17,862,000. Days in accounts receivable was 50 versus 48 at June 30, 2014.

Accounts Payable and Accrued Expenses was $162,700,000 as of June 30, 2015 or an increase of $15,909,000 over the previous year primarily due to the timing of payments at year end.

At June 30, 2015, the long term debt of the Health System was $526,074,000. This was a reduction from the prior year of $7,849,000 primarily due to adopting Financial Accounting Standards Board ("FASB") Accounting Standard Update 2015-03 ("ASU 2015-03"), Simplifying the Presentation of Debt Issuance Costs, and scheduled principal payments. ASU 2015-03 requires that all costs incurred to issue debt be presented on the balance sheet as a direct deduction of the carrying value of debt, for all periods presented. The adoption of ASU-2015-03 resulted in $4,565,000 of unamortized deferred issuance costs, previously recorded as an asset, to be presented as a deduction from the carrying value of debt in 2015.

Other long-term liabilities were $228,090,000 as of June 30, 2015 or an increase of $4,747,000 over June 30, 2014. This increase was primarily related to the actuarial valuation of the liability for retirement benefits, partially offset by a decrease in the actuarial liability for the self-insurance program.

Balance Sheet – Fiscal Year 2016 Compared to Fiscal Year 2015

As of June 30, 2016 total available liquidity in the Health System was $332,593,000. (Liquidity in the Summary Balance Sheet above consists of: Cash and Cash Equivalents plus Investments and Unrestricted Investments, less Restricted Cash and Investments.) In a year-over-year comparison, TUHS experienced a decrease in available liquidity of $48,488,000. This decrease of $48,488,000 in available liquidity was primarily due to a delay in Commonwealth Supplemental Payments of $46,366,000 as a result of delays in payment entirely caused by the Commonwealth's Fiscal Year 2016 Budget not being agreed to until March of 2016 and an increase in Net Patient Accounts Receivable, primarily due to revenue growth.

At June 30, 2016, Net Patient Accounts Receivable was $195,220,000. In a year-over-year comparison, Net Patient Accounts Receivable increased by $13,779,000. Days in accounts receivable was 48 versus 50 at June 30, 2015.

Accounts Payable and Accrued Expenses was $200,556,000 as of June 30, 2016 or an increase of $37,856,000 over the previous year primarily due to the timing of payments at year end and an increase in accrued expenses related to pre-implementation EPIC system costs.

At June 30, 2016, the long term debt of TUHS was $517,812,000. This was a reduction from the prior year of $8,262,000 primarily related to scheduled principal payments.

Other long-term liabilities were $247,839,000 as of June 30, 2016 or an increase of $19,749,000 over June 30, 2015. This increase was primarily related to the actuarial valuation of the liability for retirement benefits, partially offset by a decrease in the actuarial liability for the self-insurance program.

Balance Sheet – Fiscal Year 2017 Compared to Fiscal Year 2016

As of June 30, 2017 total available liquidity in the Health System was $356,716,000 (Liquidity in the Summary Balance Sheet above consists of: Cash and Cash Equivalents plus Investments and Unrestricted Investments, less Restricted Cash and Investments). In a year-over-year comparison, TUHS experienced an increase in liquidity of $24,123,000. This increase was due primarily to the accelerated collection of Commonwealth Supplemental Payments compared to the delay that occurred in Fiscal Year 2016.

At June 30, 2017, Net Patient Accounts Receivable was $217,425,000. In a year-over-year comparison, Net Patient Accounts Receivable increased by $22,205,000. Days in accounts receivable was 51 at June 30, 2017 versus 48 at June 30, 2016.

Accounts Payable and Accrued Expenses were $170,638,000 as of June 30, 2017 or a decrease of $29,918,000 from the prior year, primarily due to timing of payments to vendors.

Other long-term liabilities were $224,391,000 as of June 30, 2017 or a decrease of $23,448,000 over June 30, 2016. This decrease was primarily related to the actuarial valuation of the liabilities for retirement benefits.

SUPPLEMENTAL FINANCIAL INFORMATION

Historical and Pro Forma Debt Service Coverage

The following table sets forth the historical coverage of annual debt service on long-term debt of the Obligated Group. The pro forma coverage has been calculated assuming the 2017 Bonds were issued. **There can be no assurance that the Obligated Group will generate income available for debt service in future years comparable to historical performance.**

TABLE A-24:
DEBT SERVICE COVERAGE ($000s)

	Fiscal Year Ended June 30,			
	2014	**2015**	**2016**	**2017**
Excess of Revenues over Expenses	$6,157	$24,424	$20,260	$7,952
Add: Depreciation and Amortization	50,220	50,375	49,773	50,605
Add: Interest Expense	29,176	26,887	26,904	28,497
Add: Asset Disposals	373	331	221	261
Add: Other Than Temporary Impairment	803	1,144	108	213
Income Available for Debt Service	86,729	103,161	97,266	87,528
Annual Debt Service	35,394	36,106	47,632	46,210
Annual Debt Service Coverage	2.45	2.86	2.04	1.89
Maximum Annual Debt Service*	48,789	48,789	48,789	46,210
Maximum Annual Debt Service Coverage	1.78	2.11	1.99	1.89
Pro Forma Maximum Annual Debt Service	40,360	40,360	40,360	40,360
Pro Forma Maximum Annual Debt Service Coverage	2.15	2.56	2.41	2.17

Source: The Health System.

The increase in Annual Debt Service payments in the schedule above for the Fiscal Year ended June 30, 2016 relates to an $8,200,000 principal payment on the 2012B Bonds defined below. Fiscal Year 2016 is the first year in which a principal payment was due for these bonds.

Long Term Debt

Outstanding Debt

The obligations issued or secured under the Loan and Trust Agreement (as defined in the forepart of the Official Statement) are as follows: $220,970,000 original principal amount of Hospital Revenue Refunding Bonds, Series A&B of 2007 (Temple University Health System), of which $201,610,000 was outstanding as of June 30, 2017 and $311,105,000 original principal amount of Hospital Revenue Refunding Bonds, Series A&B of 2012 (Temple University Health System), of which $294,310,000 was outstanding as of June 30, 2017. There is a loan to Episcopal Hospital that is booked for $2,227,000. The Obligated Group also has capital lease obligations and equipment financing arrangements totaling $21,713,000 that are not secured under the Loan and Trust Agreement. All outstanding long-term debt of TUHS bears interest at fixed rates.

* Includes approximately $1,000,000 of annual payments due with respect to other loans and capitalized leases of the Health System not secured under the Loan and Trust Agreement.

In Fiscal Year 2018, the Health System anticipates obtaining a letter of credit in the amount of $17,200,000, of which Health Partners Plans will be the beneficiary. If drawn upon, the note evidencing the obligation related to the letter of credit would be parity under the Loan and Trust Agreement and would be reflected on the Health System's financial statements as short-term debt.

Plan of Finance – 2017 Bonds

The proceeds of the 2017A Bonds, along with other available funds, will be used to provide financing for a project consisting of: (i) the current refunding of all or a portion of (a) the Authority's Hospital Revenue Refunding Bonds, Series 2007A (the "2007A Bonds"); (b) the Authority's Hospital Revenue Refunding Bonds, Series 2007B (the "2007B Bonds"); and (c) the Authority's Hospital Revenue Refunding Bonds, Series 2012B; (ii) funding a deposit to the debt service reserve fund for the 2017 Bonds; and (iii) paying the costs of issuance of the 2017 Bonds.

Debt to Capitalization

The table below provides historic debt to capitalization for the Obligated Group. TUHS is currently not a party to any swap or derivative transactions.

TABLE A-25:
DEBT TO CAPITALIZATION ($000s)

	As of June 30,			
	2014	**2015**	**2016**	**2017**
Principal Outstanding of Long-Term Debt	$530,104	$522,780	$515,064	$518,267
Unrestricted Net Assets	184,545	180,600	171,847	208,461
Combined Debt to Capitalization Ratio	74.2%	74.3%	75.0%	71.3%

Source: The Health System.

Funding Member Companies

Various Obligated Group Members have working capital needs that are funded through the Parent. Since the creation of the unified Obligated Group in June of 2005, the Parent has been funded by TUH, Jeanes, and since 2012, AOH. In addition, ICR's working capital needs are funded through AOH. For the Fiscal Year ended June 30, 2017, the Parent transferred $8,150,000 to TPI and $3,281,000 to Temple Transport and AOH transferred $19,540,000 to ICR. For Fiscal Year 2018, the Parent has board approval to transfer an amount not to exceed $10,400,000 to TPI, $9,000,000 to Jeanes and $2,500,000 to Temple Transport and AOH has board approval to transfer an amount not to exceed $21,400,000 to ICR. TUH transfers funds to affiliates under certain circumstances and conditioned upon meeting certain tests. See "BONDHOLDERS' RISKS – Factors that Could Affect the Future Financial Condition of the Obligated Group – Advances and Transfers to Affiliates and Other Obligations" in the forepart of this Official Statement.

INSURANCE

For a discussion of medical professional liability insurance, see "BONDHOLDERS' RISKS – Medical Professional Liability Insurance Market" in the forepart of this Official Statement.

During 2009, TUHS moved its medical and prescription benefits from fully-insured programs to self-insured arrangements. TUHS provides these benefits to all eligible participating employees and dependents through self-insurance arrangements with IBC (medical) and Aon/CVS Caremark pharmacy

coalition (prescription). These self-insured arrangements are supported by purchased stop-loss insurance using a $600,000 per person attachment point. While there remains claims volatility from month to month, actual claims experience has tracked with fully-insured trend projections.

As of June 30, 2017, the TUHS medical and prescription plans are self-insured and covered 7,087 employees and 8,390 dependents for a total of 15,477 people. As of June 30, 2017, TUHS incurred $65,495,000 and $14,329,000 in medical and prescription expenses, respectively. These expenses do not include any point-of-service costs such as doctor's copays, deductibles, or coinsurance. TUHS' plans are self-funded. As of June 30, 2017, TUHS had a stop-loss policy in place that reimbursed any claims above $600,000 per plan year per covered individual.

The Health System also provides coverage for workers' compensation as part of its self-insured workers' compensation program. The program is funded as required under the laws of the Commonwealth. The Health System has guaranteed the payment of workers' compensation claims for all Health System affiliates participating in the program. As of June 30, 2017, all participating affiliates have funded their estimated workers' compensation claim liabilities incurred under the program.

Various other coverages, such as property, umbrella and general liability insurance, are maintained by the University on behalf of the TUHS affiliates.

LITIGATION

From time to time in the ordinary course of business, the members of the Obligated Group are the subject of lawsuits of various kinds, including suits alleging professional liability by physicians or employees of the Hospitals. As of the date hereof, management to the best of its knowledge is not aware of any litigation, whether pending or threatened, in which an adverse outcome is probable and in which such outcome would be material with respect to the Obligated Group's financial position taken as a whole.

In addition, the Obligated Group is involved in litigation and regulatory investigations arising in the course of business. After consultation with legal counsel, management estimates that these matters will be resolved without a material adverse effect on the Obligated Group's financial position taken as a whole.

FUNDRAISING

Strategies are aimed at supporting the pipeline growth at TUH, TUH-Episcopal Campus and Jeanes that include annual fund drives, major gift solicitation, corporation and foundation fundraising activity, planned giving, gifts from grateful patients and patient families, and employee solicitations. These plans focus on key areas such as Ambulatory Operating Rooms, Inpatient Operating Rooms, Public Lobby improvements, restricted donations to clinical and research areas and strategic annual funds, in addition to physician and employee focused efforts. The strategy focuses on direct contact and direct mailings.

The Anna T. Jeanes Foundation was founded in 1907 by philanthropist Anna T. Jeanes of Philadelphia who was a Quaker. Jeanes was founded in 1928 through a provision in the will of Anna T. Jeanes who created an endowment for the establishment of a hospital for "Cancerous, Nervous, and Disabling Ailments." In the mid-1940s, the Board of Directors voted to expand this vision and Jeanes Hospital began to operate as a general medical surgical hospital. The Foundation's mission is to continue the Quaker Presence and Values in Jeanes Hospital and its community. Each year the Foundation provides financial support to Jeanes Hospital in its efforts to provide community outreach and education.

Also it provides community grants to non-profit organizations who promote health, wellness and safety programs with the Jeanes community.

Traditional sources of philanthropy at Fox Chase include members of the Board of Directors, charitable foundations, individuals and groups, former patients and their families. Revenue recorded for the Fox Chase Entities from philanthropy for the Fiscal Years ended June 30, 2014 through June 30, 2016 were $12,960,000, $9,670,000, and $13,600,000, respectively. As of June 30, 2017, the Foundation held $51,377,000 in permanently restricted and other charitable assets which were previously donated to, or raised by, the Fox Chase Entities. The Foundation will distribute income from these assets exclusively to the Fox Chase Entities affiliated with TUHS. The Foundation is permitted to receive additional gifts and, as of Fiscal Year 2018, will actively engage in fundraising and solicitation of gifts. The Affiliation Agreement specifies that all fundraising activities on behalf of TUHS, including the Fox Chase Entities who affiliate with TUHS, are overseen by the TUHS Office of Institutional Advancement. Funds received will go to the Fox Chase Entities. In addition to grant funding and clinical trials, philanthropy represents a significant component of revenue to support research.

Episcopal Healthcare Foundation ("EHF") is a non-profit organization, which was incorporated under the laws of the Commonwealth of Pennsylvania on October 15, 1998. The purpose of EHF is to assist in funding the healthcare needs of the community served by TUH-Episcopal Hospital. EHF is in no way owned or affiliated by Temple University, the Parent, the Obligated Group or any TUHS affiliates; it is solely a community organization.

As of June 30, 2017, EHF had approximately $27,348,000 in permanently restricted assets held in beneficial interest for the TUH-Episcopal Campus. EHF is required to distribute to TUH-Episcopal Campus annually a minimum amount equal to the greater of (a) 3.5% of the fair value of EHF's non–exempt use assets as of the immediately preceding year end or (b) 85% of EHF's adjusted net income for the immediately preceding year. The aforementioned percentage is determined in accordance with Pennsylvania statutes.

Over the last three Fiscal Years, distributions to TUH-Episcopal campus were $885,000 through June 30, 2017, $938,000 for 2016, and $905,000 for 2015.

THE UNIVERSITY

Background

Temple University – Of The Commonwealth System of Higher Education ("Temple," "Temple University" or the "University") was founded in 1884 and organized as a nonsectarian college in 1888 under the nonprofit corporation laws of the Commonwealth. Temple became a state-related university in 1965. Today it is the 32nd largest public four-year university in the United States and a fully accredited institution of higher education. The University, with 39,581 students in the fall semester of the 2016-2017 academic year (and with another 1,353 students enrolled at Temple University Japan), has the largest enrollment in Southeastern Pennsylvania. It also has the second largest graduate/professional student body in the Commonwealth, with 5,932 degree-seeking graduate students, 3,437 students pursuing professional degrees and 796 non-degree-seeking graduate level students in the fall semester of the 2016-2017 academic year. Approximately 70% of all Temple students are Pennsylvania residents.

Temple University is the sole member of TUHS, which in turn is the sole member of TUH and other health care related enterprises. Prior to June 30, 1996, the University operated TUH as an unincorporated division. The active subsidiaries of TUHS include TUH, Jeanes, AOH, TPI and Temple Transport. TUHS is the sole shareholder of its Bermuda-domiciled captive insurance company, TUHIC.

TUHS Foundation is an active second tier subsidiary of TUH. ICR, FCCCMG and Network are active subsidiaries of AOH.

The University has three other subsidiaries, Good Samaritan Insurance Co. Ltd. ("Good Samaritan"), a captive insurance company domiciled in Bermuda, Temple Educational Support Services Ltd. ("TESS"), a Japanese for-profit corporation established to operate the University's programs in Tokyo, Japan, and Temple University School of Podiatric Medicine, Inc. ("TUSPM"), a Pennsylvania nonprofit corporation that holds the real estate for the University's School of Podiatric Medicine. None of these subsidiaries have debt obligations or currently anticipate incurring debt. **The University is not obligated on any debt of TUHS or any of its subsidiaries.**

Campuses

The University is situated on five campuses in Pennsylvania and includes seventeen academic schools and colleges. In addition, the University has campuses in Tokyo, Japan, and Rome, Italy.

The Main Campus, the academic center of the University, is situated along North Broad Street between Girard Avenue and Susquehanna Avenue in North Philadelphia. The campus encompasses approximately 118 acres of land on which 78 buildings, open green space, and athletic fields exist to support the University's academic and research mission. A wide range of building types and styles exist on campus including academic, administrative, research, performing arts, athletic, residential, and retail space totaling approximately 8,072,933 gross square feet of space overall. The buildings and landscape combined serve approximately 34,034 full-time and part-time students at the Main Campus, in addition to staff, faculty, alumni and other visitors. Additionally, the Main Campus supports numerous community-based programs and hosts visitors and families of students from the greater Philadelphia area, from 49 states, and from more than 129 foreign countries.

The Health Sciences Center ("HSC") is situated on 24 acres at Broad and Ontario Streets approximately two miles north of the Main Campus. The total gross square feet of space on the HSC campus is 1,548,694. The Schools of Medicine, Dentistry and Pharmacy, and programs in the College of Public Health are located on this campus. HSC is also the site of TUH. Approximately 2,661 students are enrolled at this campus.

The Temple University Ambler Campus is located on 187 acres in Upper Dublin Township, Montgomery County, Pennsylvania. It is the home of programs in Landscape Architecture, Horticulture and Community Development. The campus also offers coursework and four-year undergraduate programs in the College of Liberal Arts, the College of Education, the Fox School of Business and coursework toward the first two years of the five-year undergraduate program of the School of Pharmacy. In addition, a variety of graduate courses are offered. Near the Ambler Campus is the Temple University Fort Washington Graduate and Professional Center ("TUFW"). It offers graduate programs including the Master's degree in Quality Assurance and Regulatory Affairs from the School of Pharmacy and non-credit courses for adult learners in Montgomery County, Pennsylvania. TUFW features corporate-style classrooms and modern computer labs. It is located near the junction of a major north-south traffic artery (Route 309) and the Pennsylvania Turnpike. Approximately 454 students are enrolled at Ambler Campus and 372 at TUFW.

Temple University Center City is located in Center City Philadelphia at 1515 Market Street. The campus offers a variety of credit and non-credit continuing education courses to professionals and other students. Approximately 1,004 students are enrolled at this campus.

The Temple University School of Podiatric Medicine is located on the majority of one city block at 8th and Race Streets in Central Philadelphia. Approximately 374 students are enrolled at this campus.

In Fiscal Year 1995, the University formed TESS, a for-profit Japanese corporation, to operate the Temple University Japan ("TUJ") program, which was formerly operated in conjunction with a Japanese partner. Founded in 1982, TUJ is the oldest and largest American college in Japan. As of the fall semester of the 2016-2017 academic year, TUJ had an enrollment of 1,356 students, most of whom are residents of Japan. TUJ has earned official recognition by Japan's Ministry of Education, Culture, Sports, Science and Technology ("MEXT") and is the first postsecondary educational institution in Japan with overseas roots to receive MEXT's designation as a Foreign University, Japan Campus. This status makes it possible for TUJ credits to be recognized by Japanese universities and allows TUJ graduates to apply to the graduate schools of Japanese public universities.

Undergraduate Program

The University offers baccalaureate degrees in 153 fields of study. Schools within the University offering baccalaureate degrees are the College of Liberal Arts, College of Engineering, School of Social Work, College of Science and Technology, College of Education, Fox School of Business and Management, School of Sport, Tourism and Hospitality Management, Klein College of Media and Communication, College of Public Health, Esther Boyer College of Music and Dance, Tyler School of Art, and the School of Theater, Film, and Media Arts. Associate degrees are offered in Horticulture.

Graduate and Professional Programs

Masters degrees are offered in 167 areas of study and doctorates are offered in 50 scholarship and research programs and 14 professional practice specialties. Policy for graduate education is set by a faculty body chaired by the Dean of the Graduate School. Graduate level professional degrees are offered in Law, Medicine, Dentistry, Pharmacy, and Podiatric Medicine.

Lewis Katz School of Medicine

The School of Medicine, part of Temple University, offers a four-year program leading to an M.D. degree and performs biomedical research, clinical health services, educational research, and patient care related to its teaching programs. The School has added a physician assistant (PA) degree program, welcoming its first class in June 2016. In addition to the basic curriculum offered to medical and physician assistant students, all clinical departments provide continuing education programs. Many departments and divisions have sponsored educational conferences. Special programs are offered periodically by individuals or departments to extend new methods and techniques to the surrounding health professional community.

The School of Medicine, in conjunction with TUH, provides a wide variety of consulting and educational services to health care professionals in the Delaware Valley region. The School of Medicine M.D. and biomedical sciences graduate programs are fully accredited by all applicable accrediting bodies. The PA program has provisional accreditation; full accreditation is pending graduation of the first class. As the fourth most applied to allopathic medical school in the country, LKSOM received 10,883 applications in 2017 for its 210 M.D. program spaces in the incoming class. Dr. Larry Kaiser serves not only as Chief Executive Officer of the Health System but also as Dean of LKSOM and Senior Executive Vice President for Health Affairs for Temple University. Dr. Kaiser reports directly to the President of the University and sits on the President's Council.

The School and TUHS have coordinated strategic plans. These plans reflect common goals that led to the transformation of the physician enterprise, including recruitment of exceptional physicians, and comprehensive research (Temple University 2012) and education (Temple University 2012 and 2015) strategic plans.

Faculty. Currently there are 630 full-time salaried faculty members of the School of Medicine, 38 part-time, and approximately 1,488 voluntary faculty members who have academic appointments and are primarily practicing at affiliated hospitals. Of the full-time salaried faculty, 79% are clinical faculty. All full-time faculty members who are engaged in clinical practice activities at TUH are members of TUP. The volunteer faculty members participate primarily in the clinical instruction of medical and PA students, and residents at the School's regional campus and affiliated hospitals. Medical staff at affiliated hospitals participating in student and resident education must meet the same criteria for faculty status as the full-time faculty, and must hold an adjunct appointment in the LKSOM.

The Health System, through its member entities, provides funding to the clinical physicians employed by the LKSOM. These funds compensate physicians for performing hospital functions, supervising and training hospital residents, and providing clinical services required by TUHS to fulfill its clinical mission to the community. For Fiscal Year 2017, this funding totaled $122,953,000 from TUHS.

Graduate Medical Education at Temple University Hospital

As of June 30, 2017, there were 43 residency programs at TUH, and 552 residents and fellows.

Funds Flow between the Health System and the University

The University made payments to TUHS of $10,081,000 and $11,429,000 in Fiscal Years 2015 and 2016, respectively for a number of purposes, including facilities rent, reimbursement for salary and benefits for certain employees of TUHS, such as certified registered nurse anesthetists who provide services to the University, the costs of various physician-related services, such as pharmacy and medical records provided by TUHS to TUP, and certain other intercompany charges.

The Health System, through its member entities, provides funding to the clinical physicians employed by LKSOM. These funds compensate physicians for performing hospital functions, supervising and training hospital residents, and providing clinical services required by TUHS to fulfill its clinical mission to the community. In addition, the Health System made payments to the University of $87,130,000 and $113,169,000 in Fiscal Years 2015 and 2016, respectively. At the end of Fiscal Year 2017, funding totaled $188,046,000. These figures reflect all cash payments made to the University by the Health System in the Fiscal Years referenced, for items which include both expenses on the income statement as well as payments for capital and other transfers.

As reflected in the table below, as well as Footnote 11 in the Health System's audited financial statements contained in this Official Statement with respect to Fiscal Year 2015 and Fiscal Year 2016, certain of these payments are accrued and reflected on the Health System's expenses on the income statement in each Fiscal Year. This includes amounts due from the Health System to the University to support the Faculty Practice Plan, shown below in the line "Medical School Clinical Physicians" in the table. The increase in this line item from Fiscal Year 2014 to 2016 reflects the University's strategic funding initiative related to faculty hires and the planned transition of funding responsibility from the University to the Health System. In 2014 the University provided $36,000,000 of additional funding to the School of Medicine, in 2015 the University provided $8,290,000 and in 2016 provided $453,000. These hires were higher-level recruits in experience and faculty rank across multiple specialties. For

Fiscal Year 2017, the Health System made total payments to the University of $167,414,000, which included $122,953,000 in Faculty Practice Plan support.

TABLE A-26:
TUHS INTER-COMPANY TRANSFERS WITH TEMPLE UNIVERSITY ($000s)

	Fiscal Year Ended June 30,		
	2014	**2015**	**2016**
Medical School Clinical Physicians	$48,727	$81,027	$89,814
Maintenance	7,423	8,434	8,066
Telecommunications	5,252	6,980	6,449
Institutional Support	3,454	3,324	5,369
Security	2,054	2,345	2,394
Employee Tuition	1,564	1,553	1,662
Other Administrative Support	12,863	10,828	13,527
Total	$81,337	$114,491	$127,281

Source: Audited Financial Statements of the Health System.

Distance Education

In 2014 Temple established the Office of Digital Education ("ODE") to develop existing and new degree programs for online delivery. The University invested in its online-based infrastructure and encourages faculty and schools to expand online course sections and full program options. Currently Temple is authorized and offers online courses in 50 states.

APPENDIX B

CERTAIN FINANCIAL STATEMENTS OF TEMPLE UNIVERSITY HEALTH SYSTEM, INC.

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Temple University Health System

Consolidated Financial Statements as of and for the Years Ended June 30, 2017 and 2016, Supplemental Schedules as of and for the Year Ended June 30, 2017, and Independent Auditors' Report

TEMPLE UNIVERSITY HEALTH SYSTEM

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
Temple University Health System, Inc.
Philadelphia, Pennsylvania

We have audited the accompanying consolidated financial statements of Temple University Health System (a wholly owned subsidiary of Temple University—Of the Commonwealth System of Higher Education) and its subsidiaries (the "Health System"), which comprise the consolidated balance sheets as of June 30, 2017, and 2016 , and the related consolidated statements of operations and changes in net assets, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Temple University Health System and subsidiaries as of June 30, 2017 and 2016, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Supplemental Consolidating Schedules

Our audits were conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplemental consolidating schedules on pages 49-57 are presented for the purpose of additional analysis of the consolidated financial statements rather than to present the financial position, results of operations, and cash flows of the individual companies, and are not a required part of the consolidated financial statements. These schedules are the responsibility of the Company's management and were derived from and relate directly to the underlying accounting and other records used to prepare the consolidated financial statements. Such schedules have been subjected to the auditing procedures applied in our audits of the consolidated financial statements and certain additional procedures, including comparing and reconciling such schedules directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, such schedules are fairly stated in all material respects in relation to the consolidated financial statements as a whole.

Deloitte & Touche LLP

October 19, 2017

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED BALANCE SHEETS
AS OF JUNE 30, 2017 AND 2016
(In thousands)

	2017	2016
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 150,537	$ 151,324
Patient accounts receivable—net of allowance for doubtful accounts	217,425	195,220
Other receivables—net of allowance for doubtful accounts of $746 and $867 in 2017 and 2016, respectively	80,183	100,773
Inventories and other current assets	37,629	41,194
Current portion of assets limited as to use	37,558	42,213
Investments	150,813	127,223
Current portion of workers' compensation fund	7,546	6,723
Current portion of self-insurance program receivables	3,150	2,000
Expenditures reimbursable by research grants and awards	2,535	2,842
Total current assets	687,376	669,512
PROPERTY, PLANT AND EQUIPMENT:		
Land and land improvements	11,915	11,927
Buildings	494,020	484,225
Fixed and movable equipment	497,936	443,924
Construction-in-progress	10,781	43,295
	1,014,652	983,371
Less accumulated depreciation	674,587	630,211
Net property, plant and equipment	340,065	353,160
ASSETS LIMITED AS TO USE	129,396	152,642
INVESTMENTS	50,496	43,087
WORKERS' COMPENSATION FUND	3,859	5,064
SELF-INSURANCE PROGRAM RECEIVABLES	20,495	16,451
GOODWILL AND OTHER INTANGIBLES	21,044	21,875
BENEFICIAL INTEREST IN ASSETS HELD BY OTHERS	118,767	105,177
OTHER ASSETS	36,961	26,224
TOTAL ASSETS	$ 1,408,459	$ 1,393,192

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED BALANCE SHEETS
AS OF JUNE 30, 2017 AND 2016
(In thousands)

	2017	2016
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES:		
Current portion of long-term debt	$ 18,397	$ 17,427
Line of credit	15,000	-
Accounts payable	90,471	108,556
Accrued expenses	80,167	92,000
Current portion of estimated settlements with third-party payors	9,887	21,815
Current portion of self-insurance program liabilities	31,192	24,134
Unexpended research grants and awards	1,983	1,096
Other current liabilities	50,461	59,052
Total current liabilities	297,558	324,080
LONG-TERM DEBT	502,044	500,385
SELF-INSURANCE PROGRAM LIABILITIES	116,626	121,364
ACCRUED POSTRETIREMENT BENEFITS	57,068	93,956
OTHER LONG-TERM LIABILITIES	50,697	32,519
Total liabilities	1,023,993	1,072,304
NET ASSETS:		
Unrestricted	228,196	180,802
Temporarily restricted	24,108	24,229
Permanently restricted	132,162	115,857
Total net assets	384,466	320,888
TOTAL LIABILITIES AND NET ASSETS	$ 1,408,459	$ 1,393,192

See notes to consolidated financial statements. (Concluded)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016
(In thousands)

	2017	2016
UNRESTRICTED NET ASSETS:		
Unrestricted revenues and other support:		
Net patient service revenue before allowance for doubtful accounts	$ 1,681,900	$ 1,585,204
Allowance for doubtful accounts	(26,233)	(26,341)
Total net patient service revenue	1,655,667	1,558,863
Research revenue	35,189	32,036
Contribution revenue	11,251	5,628
Other revenue	42,483	39,844
Investment income	842	807
Net assets released from restrictions used for operations	6,960	5,483
Unrestricted revenues and other support	1,752,392	1,642,661
Expenses:		
Salaries	694,391	660,260
Employee benefits	197,073	189,443
Professional fees	174,960	137,817
Supplies and pharmaceuticals	353,092	323,615
Purchased services and other	170,008	163,119
Maintenance	17,945	17,837
Utilities	18,784	20,511
Leases	18,521	20,211
Insurance	26,949	21,416
Depreciation and amortization	51,131	50,514
Interest	28,595	27,024
Asset impairment	213	108
Loss on disposal of fixed assets	261	221
Expenses	1,751,923	1,632,096
Operating income	469	10,565
Other income—net:		
Investment income	6,894	6,591
Other income—net	6,894	6,591
Excess of revenues and other support over expenses	7,363	17,156

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016
(In thousands)

	2017	2016
Excess of revenues and other support over expenses	$ 7,363	$ 17,156
Other changes in unrestricted net assets:		
Net transfers to the University	(7,822)	(6,680)
Net assets released from restrictions used for purchase of property and equipment	1,728	7,452
Net change in fair value of investments	15,535	(5,526)
Adjustment to funded status of pension and postretirement liabilities	31,087	(33,964)
Adjustment to funded status of long-term disability liabilities	(497)	363
Increase (decrease) in unrestricted net assets	47,394	(21,199)
TEMPORARILY RESTRICTED NET ASSETS:		
Contribution income	5,849	10,660
Net assets released from restrictions	(8,688)	(12,935)
Net change in fair value of investments	109	(51)
Investment income	2,609	2,347
(Decrease) increase in temporarily restricted net assets	(121)	21
PERMANENTLY RESTRICTED NET ASSETS:		
Contribution income	2,050	943
Net change in fair value of investments	948	(18)
Investment loss	(283)	(55)
Change in beneficial interest in assets held by others	13,590	(7,685)
Increase (decrease) in permanently restricted net assets	16,305	(6,815)
INCREASE (DECREASE) IN NET ASSETS	63,578	(27,993)
NET ASSETS—Beginning of year	320,888	348,881
NET ASSETS—End of year	$ 384,466	$ 320,888

See notes to consolidated financial statements. (Concluded)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016
(In thousands)

	2017	2016
OPERATING ACTIVITIES:		
Increase (decrease) in net assets	$ 63,578	$ (27,993)
Adjustments to reconcile increase (decrease) in net assets to net cash provided by operating activities:		
Net realized and unrealized (gains) losses on investments	(21,179)	4,952
Net realized and unrealized (gains) losses on beneficial interests in assets held by others	(13,590)	7,685
Depreciation, amortization and accretion	50,212	49,568
Intangible amortization	920	946
Impairment on intangibles	146	108
Amortization of bond premium, discount, debt issuance costs and underwriter's discount	60	12
Allowance for doubtful accounts	26,233	26,341
Adjustment to funded status of pension and postretirement liabilities	(31,087)	33,964
Adjustment to funded status of long-term disability liabilities	497	(363)
Capitalized interest	(164)	(1,888)
Gain on extinguishment of debt	-	(57)
Asset impairment	67	-
Proceeds from contributions and investments restricted to property, plant and equipment and endowments	(1,728)	(7,452)
Loss on disposal of fixed assets	261	221
Permanently restricted gifts and donations received	(2,050)	(943)
Net transfers to the University	7,822	6,680
Changes in operating assets and liabilities:		
Patient accounts receivable	(48,438)	(40,120)
Other receivables	20,303	(51,008)
Pledges receivable—net	(967)	960
Inventories and other current assets	3,565	(2,393)
Expenditures reimbursable by research grants and awards	307	(685)
Other assets	(9,718)	(5,843)
Accounts payable	(15,859)	23,269
Accrued expenses	(11,833)	8,429
Estimated settlements with third-party payors	(11,928)	(8,518)
Self-insurance program receivables and liabilities	(2,874)	(17,064)
Unexpended research grants and awards	887	(1,607)
Other liabilities	3,118	8,207
Net cash provided by operating activities	6,561	5,408

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016
(In thousands)

	2017	2016
INVESTING ACTIVITIES:		
Decrease in assets limited as to use	$ 2,954	$ 12,721
Purchases of property, plant and equipment	(34,202)	(47,902)
Purchases of investments	(276,366)	(148,719)
Proceeds from sales of investments	291,875	243,147
Proceeds from sale of fixed assets	491	3,792
Net cash (used in) provided by investing activities	(15,248)	63,039
FINANCING ACTIVITIES:		
Proceeds from contributions and investments restricted to property, plant and equipment and endowments	1,728	7,452
Repayment of long-term debt	(16,072)	(15,161)
Repayment of capital lease obligations	(2,213)	(1,222)
Proceeds from issuance of long-term debt	15,229	1,527
Proceeds from line of credit	15,000	-
Permanently restricted gifts and donations received	2,050	943
Net transfers to the University	(7,822)	(470)
Net cash provided by (used in) financing activities	7,900	(6,931)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(787)	61,516
CASH AND CASH EQUIVALENTS—Beginning of year	151,324	89,808
CASH AND CASH EQUIVALENTS—End of year	$ 150,537	$ 151,324
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION—Cash paid for interest	$ 28,395	$ 28,778
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITY:		
Amounts recorded for purchases of property and equipment in excess of amounts paid	$ 3,380	$ 5,607
Cost of assets acquired through capitalized leases	$ 5,625	$ 6,639

See notes to consolidated financial statements. (Concluded)

1. ORGANIZATION AND DESCRIPTION OF BUSINESS

Temple University Health System, Inc. ("TUHS") is a Pennsylvania nonprofit corporation of which Temple University—Of The Commonwealth System of Higher Education (the "University" or "TU") is its sole member. TUHS was incorporated in August 1995 and serves principally to coordinate the activities and plans of its health care subsidiaries and affiliates in Philadelphia and the surrounding area. The subsidiaries and affiliates (herein referred to as "corporate members") of TUHS (collectively, with TUHS, referred to as the "Health System"), all of which operate in Philadelphia and the surrounding area, include the following:

- Temple University Hospital, Inc. ("TUH"), a nonprofit corporation, operating a 732-bed acute care teaching hospital at three inpatient campuses and additional outpatient locations in Philadelphia and Montgomery Counties, with TUHS as its sole member;

- Temple University Health System Foundation ("TUHSF"), a nonprofit corporation formed to support the health-care-related activities of TUHS, with TUH as its sole member;

- Jeanes Hospital ("JH"), a nonprofit corporation, operating a 146-bed acute care hospital located in the Fox Chase section of Philadelphia, with TUHS as its sole member;

- Episcopal Hospital ("Episcopal"), a nonprofit corporation, providing clinical outpatient health care services, with TUHS as its sole member;

- Temple Health System Transport Team, Inc. ("T3"), a nonprofit corporation, is a critical care air and ground ambulance company, with TUHS as its sole member;

- Temple Physicians, Inc. ("TPI"), a nonprofit corporation formed to develop and acquire community-based primary care practices located in the service area of TUHS, with TUHS as its sole member;

- TUHS Insurance Company, Ltd. ("TUHIC"), a captive insurance company established to reinsure the professional liability claims of certain subsidiaries of TUHS. TUHS is the beneficial owner of TUHIC which is domiciled in Bermuda;

- American Oncologic Hospital d/b/a The Hospital of Fox Chase Cancer Center ("AOH"), a nonprofit corporation, is a 100 licensed bed specialty hospital that provides advanced inpatient and outpatient care to cancer patients, with TUHS as its sole member;

- Institute for Cancer Research d/b/a the Research Institute of Fox Chase Cancer Center ("ICR"), a nonprofit corporation, is primarily engaged in basic research, including programs in cancer biology, developmental therapeutics, immune cell development and host disease, cancer epigenetics, and cancer prevention and control and is a National Cancer Institute designated Comprehensive Cancer Center, with AOH as its sole member;

- Fox Chase Cancer Center Medical Group, Inc. ("MGI"), a nonprofit corporation, employs and provides physician services to the Fox Chase family of organizations, with AOH as its sole member;

- Fox Chase Network, Inc. ("Network"), a nonprofit corporation, provides cancer related clinical and administrative services to cancer programs of community hospitals and physicians, with AOH as its sole member;

- Fox Chase, Ltd. ("Limited"), a business corporation that holds minority interests in joint ventures with area hospitals, with AOH as its sole stockholder; and

- Temple Center for Population Health, LLC ("TCPH"), a Pennsylvania limited liability company, participating in accountable care, coordinated care, shared savings, bundled payment programs and other similar programs or initiatives with or implemented by governmental payors, commercial payors and other parties, with TUHS as its sole member.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation—The accompanying consolidated financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of the Health System. All significant intercompany transactions and balances have been eliminated in consolidation.

Cash and Cash Equivalents—Cash equivalents consist primarily of highly liquid investments, such as money market funds and debt instruments with original maturities of three months or less at the time of purchase. At June 30, 2017 and 2016, the Health System had cash balances in financial institutions, which exceed federal depository insurance limits. Management believes that credit risks related to these deposits are minimal. Cash and cash equivalents are carried at cost, which approximates fair value.

Investments—Investments in equity securities with readily determinable fair values and all investments in debt securities are reported at fair value. Investment income or loss (including realized gains and losses, interest, and dividends) is included in other income unless the income is restricted by donor or law, except for investment income on borrowed funds held by trustees as collateral on outstanding debt. This investment income is included in unrestricted revenue and other support. Unrealized gains and losses on equity securities with readily determinable fair values and all investments in debt securities are excluded from the excess of revenues over expenses unless the amount was recorded as part of the other-than-temporary impairment adjustment as disclosed in Note 6.

The Health System also invests in various limited partnerships which are private equity funds. Such investments are accounted for on the equity basis of accounting, which approximates fair value as determined by the fund managers and financial information provided by the limited partnership. This financial information includes assumptions and methods that were reviewed by the Health System. The Health System believes that the estimated fair value is reasonable as of June 30, 2017 and 2016. Because these investments are not readily marketable, the estimated fair values are subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market existed, and such differences could be material. These investments vary as to their level of liquidity, with differing requirements for notice prior to redemption or withdrawal. Investment gains and losses on these funds are included in other income.

Investments, in general, are exposed to various risks such as interest rate, credit and overall market volatility. As such, it is reasonably possible that changes in the value of investments will occur in the near term and that such changes could materially affect the amounts reported in the consolidated financial statements.

The Health System reviews its investments to identify those for which market value is below cost. The Health System then makes a determination as to whether investments are other-than-temporarily impaired based on guidelines established in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 320.

Assets Limited as to Use—Assets limited as to use primarily include assets held by trustees under indenture and insurance agreements, designated assets set aside by the Board primarily for future capital improvements, over which the Board retains control and may at its discretion subsequently use for other purposes, and donor restricted assets. Amounts required to meet current liabilities of the Health System have been classified as current assets in the consolidated balance sheets.

Property, Plant and Equipment—Property, plant and equipment are stated at cost. Depreciation is provided over the estimated useful life of each class of depreciable asset and is computed using the straight-line method. Depreciation expense was $50,040,000 and $49,453,000 for the years ended June 30, 2017 and 2016, respectively. Expenditures for maintenance and repairs necessary to maintain property, plant and equipment are charged to operations. Costs of renewals and betterments are capitalized. The amount of capitalized leases is $18,620,000 and $12,944,000 at June 30, 2017 and 2016, respectively, and is included in the property, plant and equipment balances. Amortization of these assets is included with depreciation expense. At June 30, 2017 and 2016, the accumulated depreciation balance included $8,434,000 and $6,224,000, respectively, of accumulated amortization of capital leased assets. Interest costs incurred on borrowed funds during the period of construction of capital assets, net of interest earned on the unexpended proceeds of tax-exempt borrowings specifically incurred for construction, are capitalized as a component of the cost of acquiring those assets. The remaining amounts of capitalized interest costs for the fiscal years ended June 30, 2017 and 2016 were $0 and $2,185,000, respectively.

Long-Lived Assets Review—The Health System reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If the carrying value of a long-lived asset is considered impaired, a loss is recognized by which the carrying value exceeds the fair value (less any costs related to disposal or abandonment, if applicable). The impairment amounts recognized on long-lived assets for the fiscal years ended June 30, 2017 and 2016 were $67,000 and $0, respectively.

Goodwill and Other Intangibles—Goodwill and other intangible assets are accounted for in accordance with the accounting guidance in FASB ASC Topic 350 for *Intangibles—Goodwill and Other*. Goodwill and indefinite-lived intangible assets are not amortized, but are evaluated for impairment annually or when indicators of a potential impairment are present. The Health System's annual impairment date is June 30th. The annual evaluation for impairment of goodwill and indefinite-lived intangibles is based on valuation models that incorporate assumptions and internal projections of expected future cash flows and operating plans. Based on the results of the Health System's reviews, no impairment loss was recognized in the results of operations for the fiscal years ended June 30, 2017 and 2016, respectively. Subsequent to the latest review, there have been no events or circumstances that indicate any potential additional impairment of the Health System's goodwill and indefinite-lived intangible asset balance.

The cost of intangible assets with determinable useful lives is amortized to reflect the pattern of economic benefits consumed on a straight-line basis over the estimated periods benefited. Patents, technology and other intangibles with contractual terms are generally amortized over their respective legal or contractual lives. When certain events or changes in operating conditions occur, an impairment assessment is performed and lives of intangible assets with determinable lives may be adjusted and impairment charges recorded. Refer to Note 8 for impairment charges recorded during fiscal years 2017 and 2016.

Asset Retirement Obligations—The Health System recognizes the fair value of a liability for legal obligations associated with asset retirements in the period in which it is incurred, in accordance with FASB ASC Topic 410, if a reasonable estimate of the fair value of the obligation can be made. When the liability is initially recorded, the Health System capitalizes the cost of the asset retirement obligation by increasing the carrying amount of the related long-lived asset. The value of the asset, when established in 2006, was $1,144,000. Over time, the liability is accreted to its present value each period using a discount rate between 5% and 7%, and the capitalized cost associated with the retirement obligation is depreciated over the useful life of the related asset. Upon settlement of the obligation, any difference between the cost to settle the asset retirement obligation and the liability recorded is recognized as a gain or loss in the consolidated statements of operations and changes in net assets. At June 30, 2017 and 2016, the recorded asset retirement obligation liability was $5,051,000 and $4,773,000, respectively. Accretion costs for 2017 and 2016 were $330,000 and $312,000, respectively.

Deferred Financing Costs—Deferred financing costs are amortized over the term of the related debt. Gross deferred financing costs were $5,911,000 as of June 30, 2017 and 2016. Accumulated amortization of deferred financing costs was $2,008,000 and $1,685,000 as of June 30, 2017 and 2016, respectively. Deferred financing costs are presented on the balance sheet as a direct deduction from the carrying value of long-term debt.

Net Assets—Net assets are categorized according to externally (donor) imposed restrictions. A description of the three net asset categories follows:

Unrestricted Net Assets—are those assets that are available for the support of operations and whose use is not externally restricted, although their use may be limited by other factors such as by contract or board designation.

Temporarily Restricted Net Assets—are those assets whose use by the Health System has been limited by donors to a specific time period or purpose.

Permanently Restricted Net Assets—include gifts, trusts and pledges that require by donor restrictions that the corpus be invested in perpetuity, with only the income available for operations or in accordance with donor restrictions.

Beneficial Interest in Perpetual Trusts—The Health System is the irrevocable beneficiary of the income from certain perpetual trusts administered by third parties. The Health System's beneficial interest is reported at the fair value of the underlying trust assets. Because the trusts are perpetual and the original corpus cannot be used, these funds are reported as permanently restricted net assets.

Contracts, Grants and Awards—Income from contracts, grants and awards, including overhead allowances, is recorded as the related direct expenses are incurred. Indirect cost revenues on agency grants and contracts are subject to audit and possible adjustment by governmental payors. Appropriate allowances are made currently for estimated adjustments to governmental arrangements.

Contributions—The Health System records unconditional promises to give (pledges) as receivables and revenues, and distinguishes between contributions received for each net asset category in accordance

with donor-imposed restrictions. Upon expiration of donor restrictions, amounts are reclassified as unrestricted and reported as net assets released from restriction.

Performance Indicator—In the accompanying consolidated statements of operations and changes in net assets, the primary indicator of the Health System's results is "Excess of revenues and other support over expenses". Changes in unrestricted net assets which are excluded from the excess of revenues and other support over expenses, consistent with industry practice, include unrealized gains and losses on investments, permanent transfers of assets to and from affiliates for other than goods or services, contributions of long lived assets and certain adjustments to pension, postretirement and long-term disability liabilities.

Net Patient Service Revenue and Estimated Settlements with Third-Party Payors—The Health System records gross patient service revenue in the period that the services are rendered. Net patient service revenue before allowance for doubtful accounts represents gross patient service revenue less provisions for contractual adjustments. Payments for services rendered to patients covered by Medicare, Medicaid and other government programs are generally less than billed charges and, therefore, provisions for contractual adjustments are made to reduce gross patient service revenue to the estimated cash receipts based on each program's principles of payment/reimbursement. Estimates of contractual allowances for services rendered to patients covered by commercial insurance, including managed care health plans, are primarily based on the payment terms of contractual arrangements, such as predetermined rates per diagnosis, per diem rates or discounted fee for service rates. In addition, the Health System receives medical assistance payments for the reimbursement of services for charity and uncompensated care services. The federal funding of such costs is subject to an upper payment limit and retrospective settlement. Coinsurance and deductibles within the third-party payor agreements are the patient's responsibility and the Health System considers these amounts in its determination of the allowance for doubtful accounts. For services associated with self-pay patients (which include patients with deductible and copayment balances due for which third-party coverage exists for part of the bill), the Health System records a significant provision for bad debts in the period of service on the basis of its past experience, which indicates that many patients are unable or unwilling to pay the portion of their bill for which they are financially responsible. The difference between the standard rates (or the discounted rates if negotiated) and the amounts actually collected after all reasonable collection efforts have been exhausted is charged off against the allowance for doubtful accounts. Finally, the Health System engages in various contracts with insurance companies where the Health System is at risk for the total cost of care to an attributed patient population as well as contracts that provide for pay for performance incentives. The value of these agreements is estimated and included in net patient service revenue.

Net patient service revenue is reported at the estimated net realizable amounts from patients, third-party payors and others for services rendered, including retroactive adjustments under reimbursement agreements with third-party payors. Retroactive adjustments are accrued on an estimated basis in the period the related services are rendered or when known by the Health System and adjusted in future periods as final settlements or changes in estimates are determined. Laws and regulations governing the Medicare and Medicaid programs are extremely complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates could change by a material amount in the near term (see Note 3).

Other Revenue—Other revenue includes amounts earned from cafeteria operations, parking garage operations, transport services provided by T3, and other non-patient care services.

Other revenue also includes "meaningful use" payments received from The Centers for Medicare and Medicaid Services ("CMS") relating to certain provisions of the American Recovery and Reinvestment Act of 2009 ("ARRA"). The ARRA defines "meaningful use" of electronic health records ("EHR")

technology and makes federal incentive payments to healthcare entities that qualify by demonstrating improved quality, safety and effectiveness of care. Under the Medicare EHR incentive program, providers can earn up to four annual payments that are earned by achieving and maintaining objectives established by CMS. Medicaid providers that are acute care that have at least 10% of patient volume to Medicaid patients may also be eligible for Medicaid EHR payments. Medicaid payment amounts are determined in the first year of participation and "meaningful use" status must be achieved and maintained in subsequent years in order to qualify for additional payments.

The Health System recognizes EHR incentive payments in accordance with the International Accounting Standard 20 ("IAS20") Grant Accounting Model. Under the IAS20 Grant Accounting Model, EHR incentive payments are recognized ratably over a compliance period once management is reasonably assured of program compliance for the entire 90-day period (in the first payment year) or 365-day period (in the second through fourth payment years). During fiscal years 2017 and 2016, the Health System recognized $196,000 and $465,000, respectively, from Medicare EHR incentive payments and $6,052,000 and $517,000, respectively, from Medicaid EHR incentive payments.

Charity Care—The Health System provides care without charge or at a standard rate discounted for uninsured patients that is not related to published charges to patients who meet certain criteria under the Health System's charity care policy. Some patients qualify for charity care based on federal poverty guidelines or their financial condition being such that requiring payment would impose a hardship on the patient. Because the Health System does not pursue collection of amounts determined to qualify as charity care, they are not reported as net patient service revenue.

Income Taxes—Substantially all of the individual members of the Health System are nonprofit corporations and have been recognized as tax-exempt pursuant to Section 501(c)(3) of the Internal Revenue Code. Limited, a wholly owned subsidiary, which is currently inactive, in which the Health System exercises control is a for-profit corporation that is subject to federal and state income tax. Such taxes are immaterial and have been reported with other expenses in the accompanying consolidated financial statements.

The Health System's federal Exempt Organization Business Income Tax Returns for 2016, 2015, 2014, and 2013 remain subject to examination by the Internal Revenue Service ("IRS").

Use of Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates comprise the allowances for doubtful accounts, contractual allowances, estimated settlements with third-party payors, self-insurance program assets and liabilities, accrued postretirement benefits, estimated asset retirement obligations and the valuation of alternative investments.

Recently Issued Accounting Pronouncements—In May 2014, the FASB issued ASU 2014-09 which clarifies the principles for recognizing revenue from contracts with customers. The update outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The update states that an entity should recognize revenue to depict the transfer of promised goods or services to customers in the amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods and services. Entities are required to apply the following steps when recognizing revenue under the update: (1) identify the contract(s) with a customer; (2) identify the performance obligation in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when (or as) the entity

satisfies a performance obligation. In August 2015, the FASB issued ASU 2015-14 which deferred the effective date of ASU 2014-09 by one year. In March 2016, the FASB issued ASU 2016-08, which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, which clarifies guidance related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. In May 2016, the FASB issued ASU 2016-12, which affects only the narrow aspects of Topic 606. This amendment addresses certain issues identified in the guidance from ASU 2014-09 on assessing collectability, presentation of sales taxes, noncash consideration, and completed contracts and contract modifications at transition. Application is required for the first annual period beginning after December 15, 2017. The update allows for a "full retrospective" adoption, meaning the update is applied to all periods presented, or a "modified retrospective" adoption, meaning the update is applied only to the most current period presented in the financial statements. The update allows for early adoption using one of three options and will be adopted no earlier than July 1, 2018. The Health System currently anticipates the most significant change will be how the estimate for the allowance for doubtful accounts will be recognized under the new standards. Under the current standards, the Health System's estimate for certain patient amounts not expected to be collected based on our historical experience have been recorded to allowance for doubtful accounts. Under the new standards, the Health System's estimate for these amounts not expected to be collected based on historical experience will be recognized as a reduction to revenue. Subsequent changes in estimates of collectability due to a change in the financial status of a payor, for example a bankruptcy, will continue to be recognized as allowance for doubtful accounts. Amounts previously written off to the allowance for doubtful accounts as a result of our inability to collect payment will be recognized as a reduction to revenue under the new standard.

In May 2015, the FASB issued ASU 2015-07, which removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value ("NAV"), per share practical expedient. The update also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. Application is effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early application is permitted. The Health System adopted the new guidance on July 1, 2016 and modified the fair value disclosures as of June 30, 2016 to conform to the presentation as of June 30, 2017. The June 30, 2016 fair value hierarchy table of pension plan assets in Note 13 was modified to reclassify $12,591,000 previously classified in Level 2 and $16,356,000 previously classified in Level 3 to investments measured at NAV. The June 30, 2016 fair value hierarchy table of postretirement plan assets in Note 13 was modified to reclassify $100,430,000 previously classified in Level 2 and $42,517,000 previously classified in Level 3 to investments measured at NAV. The June 30, 2016 fair value hierarchy table in Note 18 was modified to reclassify $28,318,000 previously classified in Level 2 and $11,730,000 previously classified in Level 3 to investments measured at NAV.

In January 2016, the FASB issued ASU 2016-01, which requires all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee). It also requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value. In addition, the ASU eliminates the requirement to disclose the fair value of financial instruments measured at amortized cost for entities that are not public

business entities. Application is effective for fiscal years beginning after December 15, 2018. Early adoption is permitted as of the fiscal years beginning after December 15, 2017. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, which created Topic 842 that establishes the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing, and uncertainty of cash flows arising from a lease. The main difference between previous GAAP and Topic 842 is the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous GAAP. The FASB decided that, lessees should be required to recognize the assets and liabilities arising from leases on the balance sheet. The FASB concluded that the economics of leases can vary for a lessee and that those economics should be reflected in the financial statements; therefore, Topic 842 retains a distinction between finance leases and operating leases. The classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the previous leases guidance. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous GAAP. Application is effective for fiscal years beginning after December 15, 2018. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements and bond covenants.

In August 2016, the FASB issued ASU 2016-14, which removes the requirement for a not-for-profit entity to distinguish between resources with temporary and permanent restrictions on the face of their financial statements, meaning a not-for-profit entity will present two classes of net assets instead of three. ASU 2016-14 also requires expenses to be presented by their natural and functional classification, investment returns to be presented net of external and direct internal investment expenses, and requires entities to provide more information about their available resources and liquidity. ASU 2016-14 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted, and will be applied retrospectively. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, which affects some aspects of Topic 230. This amendment addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. The section applicable to the Health System relates to debt prepayment and extinguishment costs. The amendment states that cash payments for debt prepayment or debt extinguishment costs should be classified as cash outflows for financing activities. ASU 2016-15 is effective for not-for-profit entities for fiscal years beginning after December 15, 2018 and will be applied retrospectively. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, which affects entities that have restricted cash or cash equivalents and are required to present a statement of cash flows under Topic 230. This amendment requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or cash equivalents. Therefore, amounts generally described as restricted cash and cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period totals shown on the statement of cash flows. Application for not-for-profit entities is effective for fiscal years beginning after December 15, 2018. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, which modifies the presentation of net periodic pension costs and net periodic postretirement benefit cost. The amendments in this update require that an

employer disaggregate the service cost component from the other components of net benefit cost. The amendments also provide explicit guidance on how to present the service cost component and the other components of net benefit cost in the income statement. The other components of net benefit cost as defined in paragraphs 715-30-35-4 and 715-60-35-9 are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. This update is effective for annual periods beginning after December 15, 2018. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

3. NET PATIENT SERVICE REVENUE

Net patient accounts receivable includes the allowance for doubtful accounts of $28,180,000 and $22,312,000 at June 30, 2017 and 2016, respectively. The allowance for doubtful accounts is estimated based on the Health System's belief that a patient has the ability to pay for services but payment is not expected to be received.

Accounts receivable are written off against the allowance for doubtful accounts when management determines that recovery is unlikely and the Health System ceases collection efforts. Overall, the total of self-pay write-offs for the year ended June 30, 2017 has not changed significantly from the year ended June 30, 2016. The Health System has not experienced significant changes in write-off trends nor has the Health System changed its charity care policy.

Net patient service revenue before allowance for doubtful accounts from these major payor sources based on primary insurance designation is as follows for the years ended June 30, 2017 and 2016 (in thousands):

	2017	2016
Medicare and Medicaid	$ 1,062,486	$ 985,479
Self-pay	16,105	15,279
Other third-party payors	603,309	584,446
Total	$ 1,681,900	$ 1,585,204

Net patient service revenue also includes estimates of reimbursement from third-party payors. For the fiscal years ended June 30, 2017 and 2016, net patient service revenue increased by $17,295,000 and $3,003,000, respectively, as a result of settlements related to prior years or changes in estimates related thereto.

4. BUSINESS AND CREDIT CONCENTRATION

The Health System provides diversified health care services primarily to area residents through its inpatient and outpatient care facilities in the Greater Philadelphia Metropolitan Area. As a function of its mission and location, the Health System serves a disproportionately high number of poor or indigent patients; consequently, the Health System derives a substantial portion of its revenue from the Medicare (federal government) and the Medical Assistance (Commonwealth of Pennsylvania, Department of Human Services [DHS]) programs.

The distribution of inpatient services provided from continuing operations (TUH, JH and AOH) based upon patient discharges (excluding newborns) by class of payor for the years ended June 30, 2017 and 2016, is as follows (unaudited):

	2017		2016	
	Discharges	**%**	**Discharges**	**%**
Continuing operations:				
Medical assistance:				
Fee for service	2,493	6.6 %	3,352	8.6 %
Managed care	11,624	30.8	11,848	30.5
Total medical assistance	14,117	37.4	15,200	39.1
Medicare:				
Fee for service	8,838	23.4	8,257	21.3
Managed care	7,781	20.6	7,909	20.4
Total Medicare	16,619	44.0	16,166	41.6
Independence Blue Cross*	4,601	12.2	5,010	12.9
All other	2,450	6.4	2,460	6.3
	37,787	100 %	38,836	100 %

* Includes Traditional, Personal Choice and Keystone Health Plan East insurance plans.

Health Choices is a DHS program that requires all medical assistance recipients in the Philadelphia five-county area to join a Medicaid Health Maintenance Organization ("HMO"). Under Health Choices, DHS has entered into capitation arrangements with five Medicaid HMOs, four of which the Health System contracts with, which in turn negotiate separate payment rates with health care providers. The medical assistance-managed care category above includes the four Medicaid HMOs under the Health Choices program with which the Health System contracts. The Health System grants credit without collateral to its patients, most of whom are local residents and are insured under third-party payor agreements. The mix of net receivables from third-party payors and patients at June 30, 2017 and 2016, is as follows:

	2017	2016
Medical assistance:		
Fee for service (FFS)	2.8 %	4.5 %
Managed care	18.0	16.8
Medicare (FFS only)	17.5	13.6
Independence Blue Cross	20.4	23.5
Aetna U.S. Healthcare	7.7	6.0
Commercial	6.6	8.7
Managed care/HMOs (including Medicare)	20.5	19.4
Other	6.5	7.5
	100 %	100 %

5. CHARITY CARE

The Health System maintains detailed records to identify and monitor the level of charity care it provides to its patients. Charity care costs are estimated by applying an overall cost to charge ratio to charity care charges. The cost to charge ratio is calculated by dividing total expenses by total gross patient service revenue before allowance for doubtful accounts. The estimated costs and expenses incurred to provide charity care, including the estimated unreimbursed cost of services in excess of specific payments for services rendered to Medical Assistance recipients, were $206,913,000 and $183,413,000 for the fiscal years ended June 30, 2017 and 2016, respectively (see Note 17).

6. INVESTMENTS

Assets Limited as to Use—The composition of assets limited as to use at June 30, 2017 and 2016, is set forth in the following table (in thousands):

	2017	2016
Under indenture agreements-held by trustee:		
Debt service funds	$ 25,019	$ 24,951
Debt service reserve funds	51,034	50,909
Construction fund	201	20,933
	76,254	96,793
Under debt agreements	225	225
Under insurance arrangements (TUHIC)	49,270	55,061
Board designated	11,477	14,420
Donor restricted	28,975	27,514
Workers' and unemployment compensation	753	842
	166,954	194,855
Less amounts required for current liabilities	37,558	42,213
	$ 129,396	$ 152,642

By security classification (in thousands):

	2017	2016
U.S. government securities	$ 58,045	$ 92,868
Fixed income mutual funds	2,013	2,083
Corporate bonds, notes, and other debt securities	15,227	12,672
Cash, money market funds, and certificates of deposit	82,870	79,910
Equity securities and mutual funds	8,167	6,971
Alternative funds	632	351
	$ 166,954	$ 194,855

Workers' Compensation Fund—Workers' compensation fund at June 30, 2017 and 2016, consisted of (in thousands):

	2017	2016
U.S. government securities	$ 6,977	$ 8,198
Corporate bonds, notes, and other debt securities	3,003	2,919
Cash, money market funds, and certificates of deposit	1,155	306
	$ 11,135	$ 11,423

Investments—Investments at June 30, 2017 and 2016, consisted of (in thousands):

	2017	2016
U.S. government securities	$ 26,752	$ -
Corporate bonds, notes, and other debt securities	19,391	-
Fixed income mutual funds	10,349	55,273
Equity securities and mutual funds	94,321	71,949
Real estate	345	365
Alternative funds	29,900	21,574
Limited liability partnerships	17,843	19,244
Limited liability corporations and joint ventures	2,313	1,099
Other	95	806
	$ 201,309	$ 170,310

Investment Income—Investment income and gains (losses) from investments, including assets limited as to use and cash and cash equivalents, are comprised of the following for the years ended June 30, 2017 and 2016 (in thousands):

	2017	2016
Interest and dividend income	$ 11,746	$ 11,343
Net realized losses on sales of investments	(445)	(1,154)
Recognition of other-than-temporary impairment	(1,239)	(499)
Net unrealized gains (losses)	16,592	(5,595)
	$ 26,654	$ 4,095

Interest, dividends, realized and unrealized gains (losses) are reported as follows (in thousands):

	2017	2016
Consolidated statements of operations and changes in net assets:		
Unrestricted revenues—investment income	$ 842	$ 807
Unrestricted other income—investment income	6,894	6,591
Other changes in unrestricted net assets—net change in fair value	15,535	(5,526)
Temporarily restricted net assets—net unrealized gains (losses)	109	(51)
Temporarily restricted net assets—investment income	2,609	2,347
Permanently restricted net assets—net unrealized gains (losses)	948	(18)
Permanently restricted net assets—investment loss	(283)	(55)
	$ 26,654	$ 4,095

Unrealized gains (losses) are reported as a component of other changes in unrestricted net assets in the consolidated statements of operations and changes in net assets unless their use is restricted by donor.

The following tables provide information on the gross unrealized losses and fair market value of the Health System's investments with unrealized losses that are not deemed to be other-than-temporarily impaired, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at June 30, 2017 and 2016 (in thousands):

	At June 30, 2017					
	Less Than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. government securities	$ 24,784	$ (58)	$ -	$ -	$ 24,784	$ (58)
Fixed income mutual funds	-	-	8,079	(202)	8,079	(202)
Corporate bonds, notes, and other debt securities	10,925	(38)	-	-	10,925	(38)
Equity securities and mutual funds	-	-	543	(3)	543	(3)
Total temporarily impaired securities	$ 35,709	$ (96)	$ 8,622	$ (205)	$ 44,331	$ (301)

	At June 30, 2016					
	Less Than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Fixed income mutual funds	$ -	$ -	$ 32,000	$ (1,848)	$ 32,000	$ (1,848)
Equity securities and mutual funds	24,400	(943)	18,812	(5,058)	43,212	(6,001)
Total temporarily impaired securities	$ 24,400	$ (943)	$ 50,812	$ (6,906)	$ 75,212	$ (7,849)

With respect to the debt and equity securities in an unrealized loss position as of June 30, 2017 and 2016, the Health System has determined it is not more likely than not that the Health System may be required to sell its available-for-sale securities before their anticipated recoveries. In assessing the likelihood that the Health System will be required to sell a security before its anticipated recovery, the Health System considers various factors including its future cash flow requirements, legal and regulatory requirements, the level of its cash, cash equivalents, short-term investments and fixed maturity investments available-for-sale in an unrealized gain position, and other relevant factors.

In evaluating credit losses, the Health System considers a variety of factors in the assessment of a security including: (1) the time period during which there has been a significant decline below cost;

(2) the extent of the decline below cost and par; (3) the potential for the security to recover in value; (4) an analysis of the financial condition of the issuer; (5) the rating of the issuer; and (6) failure of the issuer of the security to make scheduled interest or principal payments.

During fiscal years 2017 and 2016, the Health System recorded other-than-temporary impairment charges of $1,239,000 and $499,000, respectively, on certain investments in debt and equity securities.

TUHIC Debt Securities—At June 30, 2017 and 2016, TUHIC held investments in debt securities which are included as assets limited as to use in the Health System's consolidated balance sheets. The amortized cost and estimated fair value of debt securities at June 30, 2017 and 2016, by contractual maturity, are shown below (in thousands). Expected maturities may differ from contractual maturities because borrowers may have the right to call or repay obligations with or without call or prepayment penalties. Gross unrealized holding gains on these securities aggregated $144,000 and $1,078,000 at June 30, 2017 and 2016, respectively. Gross unrealized holding losses on these securities aggregated $287,000 and $6,000 at June 30, 2017 and 2016, respectively.

	2017		2016	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due within one year	$ 216	$ 217	$ 1,014	$ 1,018
Due after one year through five years	30,208	30,207	30,709	31,160
Due after five years through ten years	18,714	18,572	21,177	21,793
Due after ten years	79	78	-	-
	49,217	49,074	52,900	53,971
Mortgage and asset-backed securities	-	-	920	922
	$ 49,217	$ 49,074	$ 53,820	$ 54,893

7. PLEDGES

As of June 30, 2017 and 2016, pledges are included in the consolidated financial statements at their net present value, less estimated uncollectible amounts, as follows (in thousands):

	2017	2016
Total value of pledges	$ 4,992	$ 4,024
Unamortized discount for gross pledges	(57)	(58)
Reported value for pledges	$ 4,935	$ 3,966

The discount rates applied to pledges were between 1.24% to 1.89% for 2017 and 0.45% to 1.29% for 2016.

Based upon payment schedules that are either specified by donors or estimated by the Health System, payments on pledges are due as follows (in thousands):

	2017	2016
Amounts due within one year	$ 1,391	$ 1,677
Amounts due in two to five years	3,544	2,195
Amounts due thereafter	-	94
Reported value for pledges	$ 4,935	$ 3,966

The current and long-term portion of pledges receivable are presented within other receivables and other assets, respectively, on the consolidated balance sheets.

8. GOODWILL AND OTHER INTANGIBLES

At June 30, 2016 the Health System had $21,875,000 of goodwill and other intangibles related to our affiliation with AOH and acquisitions of community-based primary care practices by TPI. Intangible assets acquired during 2017 relate to additional acquisitions by TPI of $235,000.

Goodwill and other intangibles at June 30, 2017 and 2016 are summarized as follows (in thousands):

	Goodwill	Other Intangible Assets	Total
Balance at June 30, 2016	$ 524	$ 21,351	$ 21,875
Adjustments:			
Intangible assets acquired	-	235	235
Impairment	-	(146)	(146)
Amortization	-	(920)	(920)
Balance at June 30, 2017	$ 524	$ 20,520	$ 21,044

	Goodwill	Other Intangible Assets	Total
Balance at June 30, 2015	$ 524	$ 21,891	$ 22,415
Adjustments:			
Intangible assets acquired	-	514	514
Impairment	-	(108)	(108)
Amortization	-	(946)	(946)
Balance at June 30, 2016	$ 524	$ 21,351	$ 21,875

The intangible assets with indefinite lives were $14,984,000 at June 30, 2017 and 2016. The following table summarizes intangible assets with indefinite lives at June 30, 2017 and 2016 (in thousands):

	2017		
	Gross	Impairment	Net
AOH trade name	$ 13,000	$ -	$ 13,000
Research and development of intellectual property	1,984	-	1,984
Total intangibles with indefinite lives	$ 14,984	$ -	$ 14,984

	2016		
	Gross	Impairment	Net
AOH trade name	$ 13,000	$ -	$ 13,000
Research and development of intellectual property	1,984	-	1,984
Total intangibles with indefinite lives	$ 14,984	$ -	$ 14,984

At June 30, 2017 and 2016, amortizing intangible assets were $5,536,000 and $6,367,000, respectively. The following table summarizes amortizing intangible assets at June 30, 2017 and 2016 (in thousands):

	2017			
	Gross	Accumulated Amortization	Impairment	Net
Intellectual property	$ 5,615	$ (2,059)	$ -	$ 3,556
Contracts and agreements	1,860	(725)	-	1,135
Physician contracts	2,410	(1,681)	(146)	583
Other	619	(357)	-	262
Total amortizing intangibles	$ 10,504	$ (4,822)	$ (146)	$ 5,536

	2016			
	Gross	Accumulated Amortization	Impairment	Net
Intellectual property	$ 5,615	$ (1,648)	$ -	$ 3,967
Contracts and agreements	1,860	(580)	-	1,280
Physician contracts	2,283	(1,364)	(108)	811
Other	619	(310)	-	309
Total amortizing intangibles	$ 10,377	$ (3,902)	$ (108)	$ 6,367

During fiscal year 2017, newly acquired intangible assets relate to community-based primary care practices of $235,000. The weighted average life of this newly acquired intangible asset is 3.9 years.

Aggregate amortization expense was $920,000 and $946,000 for the years ended June 30, 2017 and 2016, respectively. Amortization expense for the next five years and thereafter is expected to be as follows (in thousands):

2018	$ 874
2019	820
2020	647
2021	548
2022	536
Thereafter	2,111
Total	$ 5,536

9. LONG-TERM DEBT AND LINE OF CREDIT

Long-term debt at June 30, 2017 and 2016, was as follows (in thousands):

	2017	2016
2012 TUHS Series A and B Hospital Revenue Bonds issued by the Hospitals and Higher Education Facilities Authority of Philadelphia (the "Authority") at fixed interest rates of 5.0%, 5.625%, and 6.25% due in installments through 2043		
Principal amount	$ 294,310	$ 302,905
Less unamortized discount, premium, debt issuance costs, and underwriter's discount	(7,189)	(7,154)
Long-term debt less unamortized discount, premium, and debt issuance costs	287,121	295,751
2007 TUHS Series A and B Hospital Revenue Bonds, issued by the Authority at fixed interest rates of 5.0% and 5.5%, due in installments through 2035		
Principal amount	201,610	203,985
Less unamortized discount, premium, and debt issuance costs	(1,182)	(1,278)
Long-term debt less unamortized discount, premium, and debt issuance costs	200,428	202,707
Loan payable to Episcopal Healthcare Foundation due in December 2020 at a fixed interest rate of 4.0%	2,180	2,748
Various capital lease obligations due in installments through 2022 at varied fixed interest rates ranging from 5.79% to 6.00%	11,107	7,696
Equipment financing arrangements due in installments through 2020 at varied fixed interest rates ranging from 1.34% to 3.80%	10,605	8,910
Mortgage obligation due in installments through December 2031 at a fixed interest rate of 4.18%	9,000	-
	520,441	517,812
Less current portion of long-term debt	18,397	17,427
	$ 502,044	$ 500,385

The bond issues and notes payable are generally collateralized by the assets and gross revenues of the TUHS Obligated Group and are subject to various financial covenants. The TUHS Obligated Group includes TUHS, TUH, JH, TPI, T3, AOH, ICR, MGI and Network. The Health System is in compliance with its debt covenants for 2017 and 2016.

At June 30, 2017, total aggregate principal payments under long-term debt and capital lease obligations for the next five years and thereafter are (in thousands):

	Long-Term Debt	Capital Leases
2018	$ 15,597	$ 2,800
2019	15,086	2,892
2020	14,743	2,819
2021	13,772	1,902
2022	13,398	632
Thereafter	445,109	62
Total	$ 517,705	$ 11,107

During fiscal year 2017, the Health System entered into a revolving line of credit arrangement with a financial institution allowing for outstanding borrowings not to exceed $25,000,000 and expiring in June 2018. Interest is calculated at one month fully absorbed LIBOR plus 1.4%. Borrowings at June 30, 2017 were $15,000,000 due upon expiration.

10. LEASE COMMITMENTS

The Health System leases certain property and equipment under operating lease agreements with remaining terms expiring at various dates through 2046. Lease expenses for 2017 and 2016 were $18,521,000 and $20,211,000, respectively.

At June 30, 2017, future minimum payments by year and in the aggregate under non-cancelable operating leases with initial or remaining terms of more than one year are as follows (in thousands):

2018	$ 10,420
2019	8,458
2020	8,241
2021	6,516
2022	4,336
Thereafter	6,132
Total	$ 44,103

11. RELATED PARTY TRANSACTIONS

Temple University—The Health System has made various transfers of unrestricted net assets to the University to be used for health-related programs and initiatives. In fiscal years 2017 and 2016, $7,822,000 and $7,680,000, respectively, in net asset transfers were recognized. In addition, the University has made transfers of unrestricted net assets to the Health System to be used for research initiatives. In fiscal years 2017 and 2016, $0 and $1,000,000, respectively, in net asset transfers were recognized. All of the 2017 and 2016 transfers were disbursed by June 30, 2017 and 2016, respectively.

The Health System and University allocate certain costs for services provided to each other. Costs billed to the Health System by the University in 2017 and 2016 include (in thousands):

	Health System Expense	
	2017	2016
Medical school clinical physicians	$ 122,953	$ 89,814
Maintenance	8,562	8,066
Telecommunications	4,254	6,449
Institutional support	6,163	5,369
Security	2,365	2,394
Employee tuition	1,975	1,662
Other administrative support	21,142	13,527
Total expenses billed	$ 167,414	$ 127,281

The University also billed the Health System for capital projects in the amount of $205,000 and $191,000 for the years ended June 30, 2017 and 2016, respectively.

TUH is the teaching hospital for Temple University School of Medicine and its clinical practice plan physicians (TUP). TUH purchases administrative, supervisory and teaching physician services from TUP. TUH also provides other support to TUP to further the missions of TUH and the medical school. These charges are recorded on the consolidated statements of operations and changes in net assets as a professional fee expense.

The Health System charges the University for the cost of services provided to the University. Amounts billed to the University in 2017 and 2016 include (in thousands):

	2017	2016
Salaries and fringe benefits, primarily for residents	$ 18,543	$ 12,029
Rent	7,204	6,058
Other	4,449	3,743
Total expenses billed to the University	$ 30,196	$ 21,830

Such amounts are included as other revenue or a reduction of expenses reported in the consolidated financial statements.

At June 30, 2017 and 2016, $39,779,000 and $52,497,000, respectively, are due to the University for transactions during those years and are included in accounts payable. At June 30, 2017 and 2016, $2,691,000 and $3,674,000, respectively, are due from the University for transactions during those years and are included in other receivables.

Health Partners Plans—TUH and Episcopal are participants and governing members in a Medicaid, Medicare, and Children's Health Insurance Program ("CHIP") HMO known as Health Partners Plans ("HPP").

Under certain of its contracts with HPP, the Health System is the beneficiary of, or is responsible for, allocated HPP gains and losses that are based primarily on the number of HPP members enrolled in the Health System's primary care physicians' network and other factors as approved by the HPP board.

HPP's annual premium revenues for Medicaid were $1,452,687,000 and $1,317,899,000 for fiscal years 2017 and 2016. For fiscal years 2017 and 2016, the Health System recognized a gain of $37,067,000 and $16,300,000, respectively, for Medicaid in net patient service revenue from HPP members.

HPP's annual premium revenues for Medicare were $299,736,000 and $257,082,000 for fiscal years 2017 and 2016. For fiscal years 2017 and 2016, the Health System recognized a loss of ($8,720,000) and ($7,583,000), respectively, for Medicare in net patient service revenue from HPP members.

HPP's annual premium revenues for CHIP were $17,477,000 and $16,451,000 for fiscal years 2017 and 2016. For fiscal years 2017 and 2016, the Health System recognized a loss of ($79,000) and ($6,000), respectively, for CHIP in net patient service revenue from HPP members.

The Health System's estimated gains and losses are included in the accompanying consolidated statements of operations and changes in net assets as a component of net patient service revenue. The net gain recorded in 2017 and 2016 was $28,268,000 and $8,711,000, respectively.

In fiscal year 2016, the Health System obtained a letter of credit in the amount of $20,000,000, of which HPP is the beneficiary. The letter of credit was used to support the statutory capital needs of HPP. No amounts were drawn on the letter of credit during fiscal years 2017 and 2016. As directed by HPP, the letter of credit was terminated on March 1, 2017.

12. MEDICAL PROFESSIONAL LIABILITY AND WORKERS' COMPENSATION INSURANCE

The Health System members participate in the Health System's insurance programs for medical professional liability claims. Primary coverage is provided by an insurance company and reinsured to TUHIC.

Because primary losses are reinsured through TUHIC, primary losses are essentially self-insured up to certain limits, which are coordinated with statutory excess coverage provided through the Pennsylvania Medical Care Availability and Reduction of Error Fund ("MCare Fund"). Also, additional excess liability coverage has been obtained through a commercial insurance carrier.

The Health System accrues liabilities for the estimated losses on asserted and unasserted claims. The discount rate used in determining the liability at June 30, 2017 and 2016, was 1.75% and 1.25%, respectively. The liabilities are comprised of asserted claims for self-insured components of the program and accruals for unasserted claims. Asserted claims are specifically identified, with actuarial determination of the ultimate liability on asserted and unasserted claims based on claims settlement history. The estimated discounted liability accrued for asserted and unasserted claims for the Health System was $125,022,000 and $120,197,000 at June 30, 2017 and 2016, respectively. The estimated liability accrued for asserted and unasserted claims for TUHIC was $30,539,000 and $31,341,000 at June 30, 2017 and 2016, respectively. The Health System incurred net medical professional liability insurance expense of $24,837,000 and $18,681,000 in 2017 and 2016, respectively. These costs are recorded in the consolidated statements of operations and changes in net assets as insurance expense.

The activity in the liability for claims reported and claims incurred but not reported for TUHIC for the years ended June 30, 2017 and 2016, is summarized as follows (in thousands):

	2017	2016
Outstanding	$ 11,290	$ 14,660
Incurred but not reported	14,249	16,681
	$ 25,539	$ 31,341
Balance—July 1	$ 31,341	$ 37,595
Incurred related to current year	10,969	14,313
Incurred related to prior year	(5,730)	(10,852)
	5,239	3,461
Paid related to current year	242	249
Paid related to prior year	10,799	9,466
	11,041	9,715
Net balance—June 30	$ 25,539	$ 31,341

As a result of changes in estimates of insured events in prior years, loss and loss adjustment expenses relating to prior years decreased by ($5,730,000) for the year ended June 30, 2017 and decreased by ($10,852,000) for the year ended June 30, 2016.

TUHIC is registered under the Bermuda Insurance Act of 1978, amendments thereto and the Related Regulations (the "Insurance Act") and is obliged to comply with various provisions of the Insurance Act regarding solvency and liquidity. The minimum required statutory capital and surplus at June 30, 2017 and 2016, was $2,554,000 and $3,134,000, respectively, and the actual statutory capital and surplus was $24,970,000 and $25,272,000, respectively. The minimum required level of liquid assets was $22,989,000 and $26,459,000 and actual liquid assets were $55,721,000 and $60,551,000 at June 30, 2017 and 2016, respectively.

The Health System is primarily self-insured for workers' compensation. Program assets at June 30, 2017 and 2016, were $11,405,000 and $11,788,000, respectively. Program liabilities were determined using a discount rate of 2.25% and 1.50% for fiscal years 2017 and 2016, respectively. The estimated discounted liability accrued at June 30, 2017 and 2016, was $22,796,000 and $25,301,000, respectively. Workers' compensation expense was $6,301,000 and $6,440,000 for fiscal years 2017 and 2016, respectively. These costs are recorded in the consolidated statements of operations and changes in net assets as employee benefit expense.

The Health System follows ASU 2010-24, which clarifies that a health care entity should not net insurance recoveries against a related claim liability. The ASU requires that the ultimate costs of claims or similar contingent liabilities shall be accrued when the incidents that give rise to the claims occur. This guidance also requires recognition of additional offsetting assets and liabilities on the balance sheet relating to workers' compensation and medical professional liability recoveries and claims. The current

and long-term asset balances recorded due to this guidance are reflected on the consolidated balance sheets as current portion of self-insurance program receivables and self-insurance program receivables, while the offsetting liabilities are reflected within current portion of self-insurance liabilities and self-insurance liabilities. The amounts below are also included in the disclosure of liabilities within this footnote above. The balances recorded for the years ended June 30, 2017 and 2016 are summarized as follows (in thousands):

	2017			2016		
	Current	Long-Term	Total	Current	Long-Term	Total
Workers' compensation:						
Open reserves in excess of retention	$ -	$ 1,122	$ 1,122	$ -	$ 1,987	$ 1,987
Incurred but not recorded reserves in excess of retention	-	527	527	-	1,088	1,088
Professional liability:						
Claims settled within the MCare Layer	3,150	-	3,150	2,000	-	2,000
Open reserves within the MCare Layer	-	6,100	6,100	-	6,283	6,283
Incurred but not recorded reserves in excess of the MCare Layer	-	5,647	5,647	-	6,326	6,326
Incurred but not recorded reserves in excess of the Buffer Layer	-	2,098	2,098	-	767	767
	$ 3,150	$ 15,494	$ 18,644	$ 2,000	$ 16,451	$ 18,451

13. PENSION AND OTHER POSTRETIREMENT BENEFITS

The Health System sponsors various defined benefit plans at the individual affiliate level based on prescribed eligibility requirements and certain Health System employees participate in the University's defined benefit plan. In addition, certain Health System members participate in the defined contribution retirement plans and defined benefit retirement plans for eligible employees that provide benefits through contributions made by the Health System and its employees. Beginning January 1, 2007, the Health System established new defined contribution plans for its employees and no longer actively participated in the University's defined contribution plans. Also, on November 1, 2007, the last of the TUHS defined benefit retirement plans was closed to new participants; only certain grandfathered employees are eligible to participate in the defined benefit pension plans. These employees are not eligible to participate in the Health System's defined contribution plans.

The Health System makes contributions to participants' accounts under the Health System's defined contribution plans based on a defined percentage of the employee's base wages and length of service. The Health System contributions to the plans for fiscal years 2017 and 2016 were $28,496,000 and $25,807,000, respectively. Contributions to the plans for fiscal year 2018 are expected to be $29,839,000.

Multiemployer Plans—Also, certain Health System employees participate in multiemployer pension plans based on collective-bargaining agreements. The Health System contributes to two multiemployer pension plans under the terms of collective-bargaining agreements that cover these union-represented employees. The risks of participating in these multiemployer plans are different from a single-employer plan in the following aspects:

a. Assets contributed to the multiemployer plan by one employer may be used to provide benefits to employees of other participating employers.

b. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers.

c. If the Health System chooses to stop participating in one or both of its multiemployer plans, the Company may be required to pay that plan(s) an amount based on the underfunded status of the plan(s), referred to as a withdrawal liability.

The Health System's participation in these plans for the annual period ended June 30, 2017, is outlined in the table below. The "EIN/Pension Plan Number" column provides the Employer Identification Number (EIN) and the three-digit plan number, if applicable. The most recent Pension Protection Act (PPA) zone status available in 2017 and 2016 is also noted below. The zone status is based on information that the Health System received from the plan and is certified by the plan's actuary. Among other factors, plans in the red zone are generally less than 65% funded, plans in the yellow zone are less than 80% funded, and plans in the green zone are at least 80% funded. The "FIP/RP Status Pending/Implemented" column indicates plans for which a financial improvement plan (FIP) or a rehabilitation plan (RP) is either pending or has been implemented. The last column lists the expiration date(s) of the collective-bargaining agreement(s) to which the plans are subject.

Pension Fund	EIN/Pension Plan Number	Pension Protection Act Zone Status 2017	Pension Protection Act Zone Status 2016	FIP/RP Status Pending/ Implemented	Contributions of TUHS 2017	Contributions of TUHS 2016	Surcharge Imposed	Expiration Date of Collective Bargaining Agreement
The Pension Fund for Hospital and Health Care Employees Philadelphia and Vicinity (1)	23-2627428/001	Red	Red	Yes	$ 7,493,000	$ 5,819,000	Yes	Various up to 2018
Central Pension Fund of the International Union of Operating Engineers and Participating Employers (2)	36-6052390/001	Green	Green	No	96,000	94,000	No	November 2018
			Total contributions		$ 7,589,000	$ 5,913,000		

(1) Plan years began 1/1/17 and 1/1/16
(2) Plan years began 2/1/17 and 2/1/16

The Health System was listed in its plan's Form 5500 as providing more than 5% of the total contributions for the following plan and plan year:

Pension Fund	Exceeded More Than 5% of Total Contributions (as of December 31 of the Plan's Year End)
The Pension Fund for Hospital and Health Care Employees — Philadelphia and Vicinity	2016

At the date these consolidated financial statements were issued, Forms 5500 were not available for the plan year ending in 2017.

Certain Health System employees participate in the University's postretirement health and life insurance plan. Benefits begin for eligible employees at age 62, and upon the accumulation of 10 years' service.

Postretirement Health Care Plan Trends—For measurement purposes, 6.6% and 9.4% annual rates of increase in the per-capita cost of postretirement benefits were assumed for 2017 for the shared plan of the Health System and University and the AOH and Affiliates plan, respectively, compared to the rates of 6.6% and 11.0% for 2016. For 2017, these rates are assumed to decrease gradually to 4.5% in 2025 and 4.5% in 2026, respectively, and to remain at those levels thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement benefit plan. A one-percentage-point change in assumed health care cost trend rates would have the following effects on the year ended June 30, 2017 (in thousands) for all Health System and University participants:

	1% Increase	1% (Decrease)
Incremental effect on total of service and interest cost components	$ 4,086	$ (3,428)
Incremental effect on postretirement benefit obligation	54,584	(42,485)

Defined Benefit Pension, Defined Contribution and Postretirement Benefit Plans—Total defined benefit pension, defined contribution, and other postretirement benefit plans expense under all Health System programs amounted to $40,687,000 and $37,784,000 for the fiscal years ended June 30, 2017 and 2016, respectively.

The following table sets forth the activity of the pension and other postretirement benefit plans (which includes the joint Health System and University plans) as of and for the years ended June 30, 2017 and 2016 (dollars in thousands). A measurement date of June 30 is used for the plans.

	Pensions		Other Postretirement Benefit Plan	
	2017	2016	2017	2016
Change in benefit obligation:				
Benefit obligation—beginning of year	$ 213,387	$ 191,079	$ 454,611	$ 418,619
Affiliation impact	-	-	-	-
Service cost	2,019	2,203	15,505	15,378
Interest cost	6,555	8,728	13,012	18,376
Plan participant contributions	174	205	2,016	2,274
Actuarial (gain) loss	(4,231)	20,238	(61,014)	17,127
Benefits paid	(8,416)	(7,864)	(15,157)	(17,163)
Administrative expenses paid	(1,176)	(1,178)	-	-
Settlement	(38)	(24)	-	-
Benefit obligation—end of year	208,274	213,387	408,973	454,611
Change in plan assets:				
Fair value of plan assets—beginning of year	152,147	158,383	283,806	290,465
Actual return on plan assets	17,118	303	26,978	(5,170)
Employer contributions	13,488	2,298	12,503	13,400
Plan participant contributions	174	205	2,016	2,274
Plan expenses	(1,176)	(1,178)	-	-
Benefits paid	(8,416)	(7,864)	(15,157)	(17,163)
Fair value of plan assets—end of year	173,335	152,147	310,146	283,806
Funded status	(34,939)	(61,240)	(98,827)	(170,805)
Less University prepaid (accrued) cost	(584)	(6,325)	(75,614)	(131,229)
Net amount recognized—TUHS Only	$ (34,355)	$ (54,915)	$ (23,213)	$ (39,576)
Amount recognized in the balance sheets, include:				
Other noncurrent assets	$ -	$ -	$ -	$ -
Other current liabilities	-	-	(500)	(535)
Accrued postretirement benefits—noncurrent	(34,355)	(54,915)	(22,713)	(39,041)
Net amount recognized—TUHS Only	$ (34,355)	$ (54,915)	$ (23,213)	$ (39,576)

	Pensions		Other Postretirement Benefit Plan	
	2017	2016	2017	2016
Amounts recognized in unrestricted net assets:				
Prior service cost (credit)	$ -	$ -	$ (249)	$ (2,740)
Net actuarial loss	87,274	103,278	10,055	27,633
Net amount recognized in unrestricted net assets	$ 87,274	$ 103,278	$ 9,806	$ 24,893
Weighted-average assumptions to determine benefit obligation:				
Discount rate	3.67%-4.07%	3.36%-4.02%	2.82%-3.95%	2.34%-3.83%
Rate of compensation increase	2.50%-3.00%	2.50%-3.00%	N/A	N/A
Weighted-average assumptions to determine net periodic cost:				
Discount rate	3.36%-4.03%	4.45%-4.65%	2.34%-3.83%	2.95%-4.50%
Rate of compensation increase	2.50%–3.00%	3.00%–4.00%	N/A	N/A
Expected return on plan assets	6.50%–7.00%	6.50%–7.00%	7.50%	7.50%
Components of net periodic cost (benefit):				
Service cost	$ 2,019	$ 2,203	$ 15,505	$ 15,378
Interest cost	6,555	8,727	13,012	18,376
Expected return on plan assets	(11,212)	(10,731)	(21,167)	(21,617)
Amortization	-	-	(2,491)	(6,916)
Recognized net actuarial loss	6,823	5,759	5,822	4,403
Settlement	197	256	-	-
Net periodic cost	4,382	6,214	10,681	9,624
Less: University net periodic cost	(648)	(906)	(9,812)	-
TUHS net periodic cost	$ 3,734	$ 5,308	$ 869	$ 9,624

The estimated net actuarial loss for the defined benefit plans that will be amortized from unrestricted net assets into net periodic benefit cost in fiscal year 2018 is $5,951,000. The estimated net actuarial loss and net prior service credit for the postretirement health and life insurance plan that will be amortized from unrestricted net assets into net periodic benefit cost in fiscal year 2018 is $209,000 and $249,000, respectively.

Effective July 1, 2016, the Health System changed the method used to estimate the service and interest costs for pension and postretirement benefits. The new method utilizes a full yield curve approach to estimate service and interest costs by applying specific spot rates along the yield curve used to determine the benefit obligation of relevant projected cash outflows. The Health System made the change to provide a more precise measurement of service and interest costs by aligning the timing of the plan's liability cash flows to the corresponding spot rate on the yield curve. The change does not impact the measurement of the plan's obligations.

Assets Allocations—The following details the Health System's defined benefit plans asset allocations:

Pension Plans Assets	Target Allocation Fiscal Year Ending June 30, 2018	Percentage of Plan Assets at June 30, 2017	Percentage of Plan Assets at June 30, 2016
Equity funds and alternative funds	68-95%	77 %	70 %
Cash and fixed income	5-32%	23	30
Total		100 %	100 %

The following details the University-sponsored pension and other postretirement defined benefit plan asset allocations:

Pension and Other Postretirement Benefit Plan Assets	Target Allocation Fiscal Year Ending June 30, 2018	Percentage of Plan Assets at June 30, 2017	Percentage of Plan Assets at June 30, 2016
Equity funds and securities	20-75%	69 %	67 %
Cash and fixed income	25-80%	31	33
Total		100 %	100 %

Investment Strategy—The long-term investment strategy for pension and other postretirement benefit plans assets is to: meet present and future benefit obligations to all participants and beneficiaries; cover reasonable expenses incurred to provide such benefits; and provide a total return that maximizes the ratio of assets to liabilities by maximizing investment return at the appropriate level of risk.

The pension plans assets of the joint Health System and Temple University plans were $173,335,000 and $152,147,000 at June 30, 2017 and 2016, respectively. The fair values of the pension plan assets at June 30, 2017, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Investments measured at NAV	Total
Cash and cash equivalents	$ 4,956	$ -	$ -	$ -	$ 4,956
Equity funds and securities	75,784	-	-	10,539	86,323
Alternative funds	-	-	-	5,190	5,190
Fixed income mutual funds	36,823	24,033	-	-	60,856
Limited partnerships	-	-	-	16,010	16,010
Total market value	$ 117,563	$ 24,033	$ -	$ 31,739	$ 173,335

The fair values of the pension plan assets at June 30, 2016, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Investments measured at NAV	Total
Cash and cash equivalents	$ 3,936	$ -	$ -	$ -	$ 3,936
Equity funds and securities	59,157	-	-	10,103	69,260
Alternative funds	-	-	-	4,855	4,855
Fixed income mutual funds	60,107	-	-	-	60,107
Limited partnerships	-	-	-	13,989	13,989
Total market value	$ 123,200	$ -	$ -	$ 28,947	$ 152,147

Transfers between Levels 1 and 2—During the years ended June 30, 2017 and 2016, there were no transfers between Levels 1 and 2.

Transfers into or out of Level 3—Transfers into or out of Levels are reflected as of the beginning of the period when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable/unobservable.

The fair values of the following investments have been estimated using a net asset value equivalent (e.g. ownership interest in partners' capital to which a proportionate share of net assets is attributable) as of June 30, 2017 and 2016.

	Fair Value (In Thousands)	Unfunded Commitments (In Thousands)	Redemption Frequency (If Currently Eligible)	Redemption Notice Period (If Applicable)
As of June 30, 2017:				
Cash*	$ 187	$ -	Quarterly	90 days
Multi-Strategy Hedge Funds (a)	17,313	-	Daily, Quarterly	0–95 days
Distressed Debt Hedge Funds (b)	438	-	Quarterly	65–90 days
Private Equity Funds (c)	93	-	Quarterly	90 days
Global/Macro Hedge Funds (d)	840	-	Quarterly	90 days
Real Estate Funds (e)	7,288	-	Quarterly	45–90 days
Equity Funds (f)	5,580	-	Daily, Monthly	0-60 days
	$ 31,739	$ -		

	Fair Value (In Thousands)	Unfunded Commitments (In Thousands)	Redemption Frequency (If Currently Eligible)	Redemption Notice Period (If Applicable)
As of June 30, 2016:				
Cash*	$ 140	$ -	Quarterly	90 days
Multi-Strategy Hedge Funds (a)	14,138	-	Daily, Quarterly	0–95 days
Distressed Debt Hedge Funds (b)	364	-	Quarterly	65–90 days
Private Equity Funds (c)	23	-	Quarterly	90 days
Global/Macro Hedge Funds (d)	749	-	Quarterly	90 days
Real Estate Funds (e)	7,343	-	Monthly, Quarterly	30–45 days
Equity Funds (f)	6,190	-	Daily	0 days
	$ 28,947	$ -		

* Cash holdings of underlying managers

(a) This category includes investments that seek to earn above-average, risk adjusted, long-term returns that have a low correlation to traditional equity and fixed income markets. The investments include futures contracts, call options, warrants and structured products all of which are referenced as derivative instruments.

(b) This category includes investments in hedge funds that invest in debt obligations of distressed companies at a discount and sell the obligations following reorganization or restructuring of the companies.

(c) This category includes real estate loans and non-public company equity and debt securities.

(d) This category includes investments in a broad diversity of asset classes and geographic markets. They may invest in the equity, global fixed income, currency and commodity sectors.

(e) This category includes investments that maintain exposure to real estate and natural resources through public and private investments whose value is strongly controlled by commodities and real estate and may act as a hedge against unanticipated inflation.

(f) This category includes investments in U.S., International Developed Markets and Emerging Markets equities via commingled funds and index funds. The funds seek to balance the long term growth of capital with income and high total return.

The postretirement plan assets of the joint Health System and Temple University were $310,146,000 and $283,806,000 at June 30, 2017 and 2016, respectively, of which only a portion of this pool of assets belongs to the Health System. The fair values of the postretirement plan assets at June 30, 2017, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Investments measured at NAV	Total
Cash and cash equivalents	$ 7,114	$ -	$ -	$ -	$ 7,114
Equity funds and securities	155,533	-	-	10,539	166,072
Fixed income index funds	-	-	-	67,169	67,169
Limited partnerships	-	-	-	69,791	69,791
Total market value	$ 162,647	$ -	$ -	$ 147,499	$ 310,146

The fair values of the postretirement plan assets at June 30, 2016, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Investments measured at NAV	Total
Cash and cash equivalents	$ 6,974	$ -	$ -	$ -	$ 6,974
Equity funds and securities	133,885	-	-	24,581	158,466
Fixed income index funds	-	-	-	67,457	67,457
Limited partnerships	-	-	-	50,909	50,909
Total market value	$ 140,859	$ -	$ -	$ 142,947	$ 283,806

The fair values of the following investments have been estimated using a net asset value equivalent (e.g. ownership interest in partners' capital to which a proportionate share of net assets is attributable) as of June 30, 2017 and 2016.

	Fair Value (In Thousands)	Unfunded Commitments (In Thousands)	Redemption Frequency (If Currently Eligible)	Redemption Notice Period (If Applicable)
As of June 30, 2017:				
Cash*	$ 1,805	$ -	Quarterly	90 days
Multi-Strategy Hedge Funds (a)	31,020	-	Quarterly	65–90 days
Distressed Debt Hedge Funds (b)	4,214	-	Quarterly	65–90 days
Private Equity Funds (c)	903	-	Quarterly	90 days
Global/Macro Hedge Funds (d)	8,086	-	Quarterly	90 days
Real Estate Funds (e)	8,550	-	Monthly	30 days
Fixed Income Funds (f)	67,169	-	Daily	2–6 days
Equity Funds (g)	25,752	-	Daily, Monthly	0-60 days
	$ 147,499	$ -		

	Fair Value (In Thousands)	Unfunded Commitments (In Thousands)	Redemption Frequency (If Currently Eligible)	Redemption Notice Period (If Applicable)
As of June 30, 2016:				
Cash*	$ 1,385	$ -	Quarterly	90 days
Multi-Strategy Hedge Funds (a)	29,996	-	Quarterly	65–90 days
Distressed Debt Hedge Funds (b)	3,563	-	Quarterly	65–90 days
Private Equity Funds (c)	227	-	Quarterly	90 days
Global/Macro Hedge Funds (d)	7,346	-	Quarterly	90 days
Real Estate Funds (e)	8,392	-	Monthly	30 days
Fixed Income Funds (f)	67,457	-	Daily	2–6 days
Equity Funds (g)	24,581	-	Daily	0 days
	$ 142,947	$ -		

* Cash holdings of underlying managers

(a) This category includes investments that seek to earn above-average, risk adjusted, long-term returns that have a low correlation to traditional equity and fixed income markets. The investments include futures contracts, call options, warrants and structured products all of which are referenced as derivative instruments.

(b) This category includes investments in hedge funds that invest in debt obligations of distressed companies at a discount and sell the obligations following reorganization or restructuring of the companies.

(c) This category includes real estate loans and non-public company equity and debt securities.

(d) This category includes investments in a broad diversity of asset classes and geographic markets. They may invest in the equity, global fixed income, currency and commodity sectors.

(e) This category includes investments that maintain exposure to real estate and natural resources through public and private investments whose value is strongly controlled by commodities and real estate and may act as a hedge against unanticipated inflation.

(f) This category includes investments in intermediate and long term U.S. government securities and credit securities and U.S. fixed income index funds and commingled funds.

(g) This category includes investments in U.S., International Developed Markets and Emerging Markets equities via commingled funds and index funds. The funds seek to balance the long term growth of capital with income and high total return.

Expected Return on Plan Assets—The expected long-term rate of return for the plans' total assets is based on the expected return of each of the above investment categories, weighted based on the median of the target allocation for each class. Equity securities are expected to return 5.25% to 10.75% over the long-term, while fixed income is expected to return between 2.25% and 6.75%.

Expected Cash Flows—The following table shows expected cash flows related to the defined benefit pension and other postretirement benefit plans (in thousands):

	Pension Plans TU/ Health System	Postretirement Benefit Plan TU/ Health System
Expected Health System contributions for fiscal year ending June 30, 2018:		
Expected employer contributions	$ 6,009	$ 5,497
Expected employee contributions	-	2,003
Estimated future benefit payments from plan assets reflecting expected future service for the fiscal year ending June 30:		
2018	9,459	18,633
2019	9,737	19,443
2020	10,150	20,146
2021	10,537	21,163
2022	10,990	22,014
2023 to 2027	60,402	118,336

14. ENDOWMENT

The Health System's endowment consists of several funds established for a variety of purposes. As required by GAAP, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

Interpretation of Relevant Law—The Health System classifies as permanently restricted net assets (a) the original value of the gifts donated to the permanent endowment when explicit donor stipulations requiring permanent maintenance of the historical fair value are present, and (b) the original value of the subsequent gifts to the permanent endowment when explicit donor stipulations requiring permanent maintenance of the historical fair value are present. The remaining portion of the donor-restricted endowment fund comprised of accumulated investment earnings not required to be maintained in perpetuity is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Health System in a manner consistent with the donor's stipulations. The Health System considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds: duration and preservation of the fund, purposes of the donor-restricted endowment funds, general economic conditions, the possible effect of inflation and deflation, the expected total return from income and the appreciation of investments, other resources of the Health System, and the investment policies of the Health System.

Endowment net asset composition by type of fund as of June 30, 2017 (in thousands):

	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	$ 6,946	$ 13,395	$ 20,341

Endowment net asset composition by type of fund as of June 30, 2016 (in thousands):

	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	$ 8,985	$ 10,680	$ 19,665

Changes in endowment net assets for the fiscal years ended June 30, 2017 and 2016 (in thousands):

	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets—June 30, 2015	$ 9,090	$ 9,810	$ 18,900
Contributions	-	943	943
Investment return—investment income (loss)	2,295	(73)	2,222
Appropriations of endowment assets for expenditure	(2,400)	-	(2,400)
Endowment net assets—June 30, 2016	8,985	10,680	19,665
Contributions	-	2,050	2,050
Investment return—investment income	2,720	665	3,385
Appropriations of endowment assets for expenditure	(4,759)	-	(4,759)
Endowment net assets—June 30, 2017	$ 6,946	$ 13,395	$ 20,341

From time to time, the fair value of assets associated with individual donor restricted endowment funds may fall below the level that the donor requires the Health System to retain as a fund of perpetual duration. There were no such deficiencies at June 30, 2017 and 2016.

Investment Return Objectives and Spending Policy—The Health System has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to the programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets. Under this policy, as approved by the Board of Directors, the endowment assets are invested in a manner to generate returns at least equal to and preferably greater than the consumer price index plus 4.5%. To satisfy its long-term rate-of-return objectives, the Health System targets a diversified asset allocation that places a greater emphasis on equity based investments within prudent risk constraints.

The Health System has a policy of appropriating for distribution each year 2% to 7% of its endowment fund's average fair value over the prior three years. The Board of Directors approved an appropriation of 4.5% for each of the years ended June 30, 2017 and 2016, respectively.

15. TEMPORARILY AND PERMANENTLY RESTRICTED NET ASSETS

Temporarily restricted net assets were held for the following purposes at June 30, 2017 and 2016 (in thousands):

	2017	2016
Property and equipment additions	$ 681	$ 850
Specific health care programs	23,427	23,379
	$ 24,108	$ 24,229

Permanently restricted net assets consist of the following at June 30, 2017 and 2016 (in thousands):

	2017	2016
Beneficial interest in perpetual trusts, income from which is expendable to support health care services (income reported as unrestricted)	$ 40,042	$ 37,572
Beneficial interest in assets held by Episcopal Foundation	27,348	22,836
Beneficial interest in assets held by Fox Chase Cancer Center Foundation	51,377	44,769
	118,767	105,177
Endowment funds, income from which is expendable for specific health care programs (income is temporarily restricted)	13,395	10,680
	$ 132,162	$ 115,857

The Episcopal Healthcare Foundation (the "EH Foundation") controls certain investments that, according to its organizational structure, are held for the benefit of TUH's Episcopal campus operations. TUH has recognized the fair market value of investments held by the EH Foundation as an asset (beneficial interest in the assets held by Episcopal Foundation) and permanently restricted net assets of $27,348,000 and $22,836,000 at June 30, 2017 and 2016, respectively.

The Fox Chase Cancer Center Foundation (the "FCCC Foundation") controls certain investments that, according to its organizational structure, are held for the benefit of ICR's research operations and AOH's clinical operations. ICR and AOH have recognized the fair market value of investments held by the FCCC Foundation as an asset (beneficial interest in the assets held by Fox Chase Cancer Center Foundation) and permanently restricted net assets of $51,377,000 and $44,769,000 at June 30, 2017 and 2016, respectively.

As reported by the respective trustees, the composition of the above funds in which the Health System has a beneficial interest is approximately 70% and 68% marketable equity securities and 30% and 32% fixed income securities at June 30, 2017 and 2016, respectively.

16. COMMITMENTS AND CONTINGENCIES

The Commonwealth of Pennsylvania owns the land upon which certain TUH facilities are located. The land is leased to the University for a term ending December 31, 2043, for a nominal rent. The University subleases these facilities to TUH.

The Friends Fiduciary Corporation owns the land upon which the JH facilities are located. The land is leased to JH for a term ending June 30, 2046, for a nominal rent.

There are reversionary rights held by the land grantor, Friends Fiduciary Corporation, in certain deeds to the properties that make up the main campus of Fox Chase Cancer Center. The grantor may exercise its reversionary rights if ICR or AOH, respectively, no longer manages, operates and controls the premises or if the premises are no longer used for permitted purposes.

As of June 30, 2017, JH has committed to making investments of $201,000 at into partnerships (a private equity fund and a real estate fund), which may be requested through capital calls from the partnerships. Detail regarding the unfunded commitments is disclosed in Notes 13 and 18.

TUHIC holds cash and investments in debt securities in the amount of $49,270,000 and $55,061,000 as of June 30, 2017 and 2016, respectively, which are being held in trust in order to secure TUHIC's liabilities under certain reinsurance contracts.

In addition, the Health System is involved in litigation and regulatory investigations arising in the course of business. After consultation with legal counsel, management estimates that these matters will be resolved without material adverse effect on the Health System's financial position, results of operations, or cash flows.

17. COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF HUMAN SERVICES SUPPORT

The Health System receives support primarily related to providing access to health care services, including care for the uninsured and indigent population (see Note 5). These support payments are included in net patient service revenue in the accompanying consolidated statements of operations and changes in net assets. To the extent that these support payments are dependent on a provider tax from the hospitals, those expenses are included in purchased services and other in the accompanying consolidated statements of operations and changes in net assets. There is no guarantee that this funding will continue in future years. Under certain circumstances, the Health System could be required to repay certain support payments received from the Commonwealth.

Support received from the Commonwealth for the fiscal years ended June 30, 2017 and 2016, including any provider tax expenses, are as follows:

	2017	2016
Base supplemental revenues	$ 102,322,000	$ 80,562,182
State and local hospital assessment revenues	94,311,000	87,900,254
State and local hospital assessment expenses	(46,787,000)	(48,160,121)
Net state and local hospital assessment program	47,524,000	39,740,133
Academic Health Center	6,229,000	6,209,772
Subtotal supplemental funding, net of taxes	156,075,000	126,512,087
Other net supplemental funding	6,810,000	27,543,000
Total net supplemental funding	$ 162,885,000	$ 154,055,087

The Academic Health Center support of $6,229,000 and $6,209,772 for the years ended June 30, 2017 and 2016, respectively, was passed through to the University as an equity transfer.

For the years ended June 30, 2017 and 2016, other net supplemental funding of $6,810,000 and $27,543,000, respectively, was received and provided as support to TUP to further the mission of TUH and the Medical School.

18. FAIR VALUE MEASUREMENTS

FASB ASC Topic 820, which defines fair value, provides a framework for measuring fair value, and expands disclosures required for fair value measurements.

FASB ASC Topic 820 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, FASB ASC Topic 820 establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity's own assumption about market participant assumptions (unobservable inputs classified within Level 3 of the hierarchy).

FASB ASC Topic 820 classifies the inputs used to measure fair value into the following hierarchy:

Level 1—Level 1 inputs are quoted prices in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2—Level 2 inputs include the following:

- Quoted prices in active markets for similar assets or liabilities.
- Quoted prices in markets that are not active for identical or similar assets or liabilities.
- Inputs other than quoted prices, that are observable for the asset or liability.
- Inputs that are derived primarily from or corroborated by observable market data by correlation or other means.

Level 3—Level 3 inputs are unobservable inputs for the asset or liability.

The following table sets forth, by level within the fair value hierarchy, the financial assets and liabilities recorded at fair value on a recurring basis as of June 30, 2017 (in thousands):

Assets	Level 1	Level 2	Level 3	Investments measured at NAV	Total
Assets limited as to use:					
U.S. government securities	$ 47,734	$ 10,311	$ -	$ -	$ 58,045
Fixed income mutual funds	2,013	-	-	-	2,013
Corporate bonds, notes, and other debt securities	-	15,227	-	-	15,227
Cash, money market funds, and certificates of deposit	82,117	753	-	-	82,870
Equity securities and mutual funds	8,167	-	-	-	8,167
Alternative funds	-	-	-	632	632
	140,031	26,291	-	632	166,954
Workers' Compensation Fund:					
U.S. government securities	6,802	175	-	-	6,977
Corporate bonds, notes, and other debt securities	-	3,003	-	-	3,003
Cash, money market funds, and certificates of deposit	1,155	-	-	-	1,155
	7,957	3,178	-	-	11,135
Investments:					
U.S. government securities	12,798	13,954	-	-	26,752
Fixed income mutual funds	10,349	-	-	-	10,349
Corporate bonds, notes, and other debt securities	-	19,391	-	-	19,391
Equity securities and mutual funds	94,321	-	-	-	94,321
Real estate	-	345	-	-	345
Alternative funds	-	-	-	29,900	29,900
Limited liability partnerships	-	-	-	16,697	16,697
	117,468	33,690	-	46,597	197,755
Beneficial interest in perpetual trusts	-	-	40,042	-	40,042
Beneficial interest in the assets held by Episcopal Foundation	-	-	27,348	-	27,348
Beneficial interest in the Fox Chase Cancer Center Foundation	-	-	51,377	-	51,377
Total	$ 265,456	$ 63,159	$ 118,767	$ 47,229	$ 494,611

The following table sets forth, by level within the fair value hierarchy, the financial assets recorded at fair value on a recurring basis as of June 30, 2016 (in thousands):

Assets	Level 1	Level 2	Level 3	Investments measured at NAV	Total
Assets limited as to use:					
U.S. government securities	$ 82,104	$ 10,764	$ -	$ -	$ 92,868
Fixed income mutual funds	2,083	-	-	-	2,083
Corporate bonds, notes, and other debt securities	-	12,672	-	-	12,672
Cash, money market funds, and certificates of deposit	79,203	707	-	-	79,910
Equity securities and mutual funds	6,971	-	-	-	6,971
Alternative funds	-	-	-	351	351
	170,361	24,143	-	351	194,855
Workers' Compensation Fund:					
U.S. government securities	7,981	217	-	-	8,198
Corporate bonds, notes, and other debt securities	-	2,919	-	-	2,919
Cash, money market funds, and certificates of deposit	306	-	-	-	306
	8,287	3,136	-	-	11,423
Investments:					
Fixed income mutual funds	55,273	-	-	-	55,273
Equity securities and mutual funds	71,949	-	-	-	71,949
Real estate	-	365	-	-	365
Alternative funds	-	-	-	21,574	21,574
Limited liability partnerships	-	-	-	18,123	18,123
	127,222	365	-	39,697	167,284
Beneficial interest in perpetual trusts	-	-	37,572	-	37,572
Beneficial interest in the assets held by Episcopal Foundation	-	-	22,836	-	22,836
Beneficial interest in the Fox Chase Cancer Center Foundation	-	-	44,769	-	44,769
Total	$ 305,870	$ 27,644	$ 105,177	$ 40,048	$ 478,739

Transfers between Levels 1 and 2—During the years ended June 30, 2017 and 2016, there were no transfers between Levels 1 and 2.

Transfers into or out of Level 3—Transfers in and/or out of Levels are reflected as of the beginning of the period when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable/unobservable.

The following is a reconciliation of financial instruments for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2017:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	July 1, 2016	Net Income (Loss)	Net Asset	Purchases	Sales	Transfer Into Level 3	Transfer Out of Level 3	June 30, 2017
Year ended June 30, 2017:								
Beneficial interest in perpetual trusts	$ 37,572	$ -	$ 2,470	$ -	$ -	$ -	$ -	$ 40,042
Beneficial interest in the assets held by Episcopal Foundation	$ 22,836	$ -	$ 4,512	$ -	$ -	$ -	$ -	$ 27,348
Beneficial interest in Fox Chase Cancer Center Foundation	$ 44,769	$ -	$ 6,608	$ -	$ -	$ -	$ -	$ 51,377

The following is a reconciliation of financial instruments for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2016:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	July 1, 2015	Net Income (Loss)	Net Asset	Purchases	Sales	Transfer Into Level 3	Transfer Out of Level 3	June 30, 2016
Year ended June 30, 2016:								
Beneficial interest in perpetual trusts	$ 39,900	$ -	$ (2,328)	$ -	$ -	$ -	$ -	$ 37,572
Beneficial interest in the assets held by Episcopal Foundation	$ 23,773	$ -	$ (937)	$ -	$ -	$ -	$ -	$ 22,836
Beneficial interest in Fox Chase Cancer Center Foundation	$ 49,189	$ -	$ (4,420)	$ -	$ -	$ -	$ -	$ 44,769

U.S. government securities, money market funds, equity securities and mutual funds classified as Level 1 are measured using quoted market prices.

Marketable debt securities classified as Level 1 were classified as such due to the usage of observable market prices for identical securities that are traded in active markets. These debt securities primarily include US Treasury Bonds.

The marketable debt securities classified as Level 2 were classified as such due to the usage of observable market prices for similar securities that are traded in less active markets or when observable market prices for identical securities are not available, marketable debt instruments are priced using: non-binding market consensus prices that are corroborated with observable market data; quoted market prices for similar instruments; or pricing models, such as a discounted cash flow model, with all significant inputs derived from or corroborated with observable market data. These debt securities primarily include government bonds, corporate bonds, notes and other debt securities.

The estimated fair values of the Health System's beneficial interest in perpetual trusts, in the assets held by Episcopal Foundation, and in the assets held by Fox Chase Cancer Center Foundation are classified as Level 3 due to lack of observable market data. Currently there is no market in which beneficial interest in trusts are traded and as such, no observable exit price exists for these assets. The fair values are determined based on information provided by the trustees.

The fair values of the following investments have been estimated using a net asset value equivalent (e.g. ownership interest in partners' capital to which a proportionate share of net assets is attributable) as of June 30, 2017 and 2016.

	Fair Value (In thousands)	Unfunded Commitments (In thousands)	Redemption Frequency (if Currently Eligible)	Redemption Notice Period (if Applicable)
As of June 30, 2017:				
Multi-Strategy Hedge Funds (a)	$ 30,756	$ -	Annual, Quarterly	45–95 days
Private Equity Funds (c)	342	149		
Stock Funds (d)	116			
Real Estate Funds (e)	16,015	52	Quarterly	90 days
	$ 47,229	$ 201		
As of June 30, 2016:				
Multi-Strategy Hedge Funds (a)	$ 22,201	$ -	Annual, Quarterly	45–95 days
Distressed Debt Hedge Funds (b)	25	-		
Private Equity Funds (c)	571	156		
Stock Funds (d)	103	-		
Real Estate Funds (e)	17,148	51	Monthly	45 days
	$ 40,048	$ 207		

(a) This category includes investments in hedge funds that use a variety of strategies. These strategies may include long/short equity, long/short credit, event-driven, capital structure arbitrage, fixed income arbitrage, credit of distressed companies, and restructuring and underpriced companies. The remaining restriction period for these investments ranged from three to twelve months.

(b) This category includes investments in hedge funds that invest in debt obligations of distressed companies at a discount and sell the obligations following reorganization or restructuring of the companies. In September 2010, Private Advisors Distressed Opportunities Fund notified the Health System that the fund has begun liquidation. Investors are no longer eligible for voluntary redemptions.

(c) This category includes investments in private equity partnerships whose strategy is to add 5% in value comparable public investments and that will be in the top 25% of comparable private equity managers. In 2017 and 2016, investments representing 98% of the value of the investments in this category cannot be redeemed.

(d) This category includes investments (typically through traditional, long-only stock managers) that maintain (beta) exposure to stocks and achieve (alpha) value added of at least 2% per year over a passive portfolio. Investments in this category are not currently eligible for redemption.

(e) This category includes investments that maintain exposure to real estate and natural resources through public and private investments whose value is strongly controlled by commodities and real estate and may act as a hedge against unanticipated inflation.

The fair value of the Health System's pension assets is disclosed in Note 13.

The following methods and assumptions were used by the Health System in estimating fair value for disclosures in the consolidated financial statements:

Long-Term Debt—The fair value of long-term debt is based on quoted market prices or is estimated using discounted cash flow analyses for similar types of borrowing arrangements based on incremental borrowing rates. The carrying and fair values of long-term debt, excluding capital lease obligations, the Episcopal Healthcare Foundation debt, equipment financing arrangements, and the mortgage obligation at June 30, 2017, are $487,549,000 and $511,710,000, respectively. The carrying and fair values of long-term debt, excluding capital lease obligations, the Episcopal Healthcare Foundation debt, and equipment financing arrangements at June 30, 2016, are $498,458,000 and $528,866,000, respectively.

Other—Cash and cash equivalents, patient and other accounts receivable, and all other current assets and liabilities are reported at amounts that approximate fair value due to the relatively short period to maturity.

19. FUNCTIONAL EXPENSES

The Health System provides general health care services to residents within its geographic location. Expenses related to providing these services are as follows (in thousands):

	2017	2016
Health care services	$ 1,392,089	$ 1,299,135
Research	42,067	39,976
General and administrative	313,789	289,803
Institutional support	3,978	3,182
	$ 1,751,923	$ 1,632,096

20. SUBSEQUENT EVENTS

The Health System has evaluated subsequent events through October 19, 2017, the date the financial statements were issued. There were no additional subsequent events requiring recording or disclosure in the consolidated financial statements.

* * * * * *

SUPPLEMENTAL SCHEDULES

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2017
(In thousands)

ASSETS	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
CURRENT ASSETS:											
Cash and cash equivalents	$ 45,254	$ 3,678	$ 9,837	$ 29,963	$ 10,663	$ 58	$ 3,719	$ 132	$ 41,767	$ -	$ 145,071
Patient accounts receivable—net of allowance for doubtful accounts	155,686	17,010	-	37,381	3,404	-	3,944	-	-	-	217,425
Other receivables—net of allowance for doubtful accounts	70,928	975	1,360	1,050	322	702	262	509	1,051	-	77,159
Inventories and other current assets	22,017	5,279	1,077	7,016	23	-	404	29	2,660	(897)	37,608
Current portion of assets limited as to use	-	-	424	442	-	-	-	-	36,279	-	37,145
Investments	68,217	3,855	6,476	19,772	-	-	-	-	29,357	-	127,677
Current portion of workers' compensation fund	6,169	605	-	658	-	-	63	-	51	-	7,546
Current portion of self-insurance program receivables	-	-	-	-	-	-	-	-	3,150	-	3,150
Expenditures reimbursable by research grants and awards	-	-	1,420	939	-	176	-	-	-	-	2,535
Due from affiliates—current portion	21,907	5,193	1,529	4,327	3,904	29	3,104	285	49,129	(87,327)	2,080
Total current assets	390,178	36,595	22,123	101,548	18,316	965	11,496	955	163,444	(88,224)	657,396
PROPERTY, PLANT AND EQUIPMENT:											
Land and land improvements	5,586	1,785	1,221	3,083	-	-	-	-	9	-	11,684
Buildings	319,671	84,364	23,541	23,528	-	-	4,865	-	25,787	-	481,756
Fixed and movable equipment	323,290	48,614	19,536	33,386	166	-	4,818	1,326	66,541	-	497,677
Construction-in-progress	1,278	2,664	141	5,025	-	-	-	-	1,673	-	10,781
	649,825	137,427	44,439	65,022	166	-	9,683	1,326	94,010	-	1,001,898
Less accumulated depreciation	433,175	112,323	17,557	29,436	162	-	7,303	629	62,358	-	662,943
Net property, plant and equipment	216,650	25,104	26,882	35,586	4	-	2,380	697	31,652	-	338,955
ASSETS LIMITED AS TO USE	4,201	703	17,802	6,504	23	-	-	-	51,306	-	80,539
INVESTMENTS	36,328	1,940	345	5,206	122	-	-	-	422	-	44,363
WORKERS' COMPENSATION FUND	3,281	249	-	-	-	-	12	-	317	-	3,859
SELF-INSURANCE PROGRAM RECEIVABLES	23,168	2,691	-	464	4,347	-	8,146	-	15,494	(38,815)	15,495
INVESTMENT IN TUHIC	-	-	-	-	-	-	-	-	24,977	-	24,977
GOODWILL AND OTHER INTANGIBLES	-	-	5,540	13,261	-	1,659	584	-	-	-	21,044
BENEFICIAL INTEREST IN ASSETS HELD BY OTHERS	33,481	18,881	60,588	5,817	-	-	-	-	-	-	118,767
DUE FROM AFFILIATES	9,367	-	-	-	-	-	-	-	359,784	(369,151)	-
OTHER ASSETS	20,559	1,136	8,749	1,061	284	-	298	-	3,935	-	36,022
TOTAL ASSETS	$ 737,213	$ 87,299	$ 142,029	$ 169,447	$ 23,096	$ 2,624	$ 22,916	$ 1,652	$ 651,331	$ (496,190)	$ 1,341,417

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2017
(In thousands)

ASSETS	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Eliminations	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
CURRENT ASSETS:									
Cash and cash equivalents	$ 746	$ 717	$ 3,814	$ -	$ 189	$ -	$ 5,466	$ -	$ 150,537
Patient accounts receivable—net of allowance for doubtful accounts	-	-	-	-	-	-	-	-	217,425
Other receivables net of allowance for doubtful accounts	54	1,172	4	-	1,794	-	3,024	-	80,183
Inventories and other current assets	6	9	-	-	6	-	21	-	37,629
Current portion of assets limited as to use	-	413	-	-	-	-	413	-	37,558
Investments	5,312	-	17,824	-	-	-	23,136	-	150,813
Current portion of workers' compensation fund	-	-	-	-	-	-	-	-	7,546
Current portion of self-insurance program receivables	-	-	-	-	-	-	-	-	3,150
Expenditures reimbursable by research grants and awards	-	-	-	-	-	-	-	-	2,535
Due from affiliates—current portion	395	-	9,400	17	1,368	-	11,180	(13,260)	-
Total current assets	6,513	2,311	31,042	17	3,357	-	43,240	(13,260)	687,376
PROPERTY, PLANT AND EQUIPMENT:									
Land and land improvements	231	-	-	-	-	-	231	-	11,915
Buildings	12,264	-	-	-	-	-	12,264	-	494,020
Fixed and movable equipment	259	-	-	-	-	-	259	-	497,936
Construction-in-progress	-	-	-	-	-	-	-	-	10,781
	12,754	-	-	-	-	-	12,754	-	1,014,652
Less accumulated depreciation	11,644	-	-	-	-	-	11,644	-	674,587
Net property, plant and equipment	1,110	-	-	-	-	-	1,110	-	340,065
ASSETS LIMITED AS TO USE	-	48,857	-	-	-	-	48,857	-	129,396
INVESTMENTS	310	-	5,823	-	-	-	6,133	-	50,496
WORKERS' COMPENSATION FUND	-	-	-	-	-	-	-	-	3,859
SELF-INSURANCE PROGRAM RECEIVABLES	-	5,000	-	-	-	-	5,000	-	20,495
INVESTMENT IN TUHIC	-	-	-	-	-	-	-	(24,977)	-
GOODWILL AND OTHER INTANGIBLES	-	-	-	-	-	-	-	-	21,044
BENEFICIAL INTEREST IN ASSETS HELD BY OTHERS	27,348	-	-	-	-	-	27,348	(27,348)	118,767
DUE FROM AFFILIATES	-	-	-		-	-	-	-	-
OTHER ASSETS	939	-	-	-	-	-	939	-	36,961
TOTAL ASSETS	$ 36,220	$ 56,168	$ 36,865	$ 17	$ 3,357	$ -	$ 132,627	$ (65,585)	$ 1,408,459

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2017
(In thousands)

LIABILITIES AND NET ASSETS	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
CURRENT LIABILITIES:											
Current portion of long-term debt	$ 4,146	$ 1,093	$ 199	$ 408	$ -	$ -	$ -	$ -	$ 11,959	$ -	$ 17,805
Line of Credit	-	-	-	-	-	-	-	-	15,000	-	15,000
Accounts payable	66,150	5,587	2,795	9,558	889	60	215	206	3,408	-	88,868
Accrued expenses	32,088	7,062	3,280	5,733	6,883	130	4,031	230	49,427	(32,265)	76,599
Current portion of estimated settlements with third-party payors	91	-	-	10,693	-	-	-	-	-	(897)	9,887
Current portion of self-insurance program liabilities	15,445	1,220	241	1,038	161	-	833	121	3,201	-	22,260
Unexpended research grants and awards	-	-	1,886	91	6	-	-	-	-	-	1,983
Due to affiliates—current portion	48,109	6,688	3,323	12,514	2,132	234	5,188	557	19,763	(87,327)	11,181
Other current liabilities	19,875	2,926	302	4,420	772	-	135	-	15,438	-	43,868
Total current liabilities	185,904	24,576	12,026	44,455	10,843	424	10,402	1,114	118,196	(120,489)	287,451
LONG-TERM DEBT	10,087	3,663	708	9,759	-	-	-	-	476,239	-	500,456
SELF-INSURANCE PROGRAM LIABILITIES	61,345	8,016	785	6,276	3,340	-	5,875	186	15,746	(6,550)	95,019
ACCRUED POSTRETIREMENT BENEFITS	27,384	13,094	1,366	2,635	578	-	-	-	-	-	45,057
DUE TO AFFILIATES	218,611	48,721	20,639	71,813	-	-	-	-	9,367	(369,151)	-
OTHER LONG-TERM LIABILITIES	40,141	3,001	1,363	1,431	547	-	390	-	1,830	-	48,703
Total liabilities	543,472	101,071	36,887	136,369	15,308	424	16,667	1,300	621,378	(496,190)	976,686
NET ASSETS (DEFICIT):											
Unrestricted	156,522	(33,118)	20,141	18,379	7,788	2,200	6,249	352	29,948	-	208,461
Temporarily restricted	2,291	391	16,035	5,386	-	-	-	-	5	-	24,108
Permanently restricted	34,928	18,955	68,966	9,313	-	-	-	-	-	-	132,162
Total net assets (deficit)	193,741	(13,772)	105,142	33,078	7,788	2,200	6,249	352	29,953	-	364,731
TOTAL LIABILITIES AND NET ASSETS	$ 737,213	$ 87,299	$ 142,029	$ 169,447	$ 23,096	$ 2,624	$ 22,916	$ 1,652	$ 651,331	$ (496,190)	$ 1,341,417

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2017
(In thousands)

LIABILITIES AND NET ASSETS	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Eliminations	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
CURRENT LIABILITIES:									
Current portion of long-term debt	$ 592	$ -	$ -	$ -	$ -	$ -	$ 592	$ -	$ 18,397
Line of credit	-	-	-	-	-	-	-	-	15,000
Accounts payable	34	539	-	-	1,030	-	1,603	-	90,471
Accrued expenses	-	113	-	-	1,039	-	1,152	2,416	80,167
Current portion of estimated settlements with third-party payors	-	-	-	-	-	-	-	-	9,887
Current portion of self-insurance program liabilities	-	8,932	-	-	-	-	8,932	-	31,192
Unexpended research grants and awards	-	-	-	-	-	-	-	-	1,983
Due to affiliates—current portion	595	-	-	17	1,467	-	2,079	(13,260)	-
Other current liabilities	6,593	-	-	-	-	-	6,593	-	50,461
Total current liabilities	7,814	9,584	-	17	3,536	-	20,951	(10,844)	297,558
LONG-TERM DEBT	1,588	-	-	-	-	-	1,588	-	502,044
SELF-INSURANCE PROGRAM LIABILITIES	2,416	21,607	-	-	-	-	24,023	(2,416)	116,626
ACCRUED POSTRETIREMENT BENEFITS	12,011	-	-	-	-	-	12,011	-	57,068
DUE TO AFFILIATES	-	-	-	-	-	-	-	-	-
OTHER LONG-TERM LIABILITIES	29,342	-	-	-	-	-	29,342	(27,348)	50,697
Total liabilities	53,171	31,191	-	17	3,536	-	87,915	(40,608)	1,023,993
NET ASSETS (DEFICIT):									
Unrestricted	(16,951)	24,977	36,865	-	(179)	-	44,712	(24,977)	228,196
Temporarily restricted	-	-	-	-	-	-	-	-	24,108
Permanently restricted	-	-	-	-	-	-	-	-	132,162
Total net assets (deficit)	(16,951)	24,977	36,865	-	(179)	-	44,712	(24,977)	384,466
TOTAL LIABILITIES AND NET ASSETS	$ 36,220	$ 56,168	$ 36,865	$ 17	$ 3,357	$ -	$ 132,627	$ (65,585)	$ 1,408,459

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2017
(In thousands)

	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
UNRESTRICTED NET ASSETS:											
Unrestricted revenues and other support:											
Net patient service revenue before allowance for doubtful accounts	$ 1,105,399	$ 153,134	$ -	$ 341,041	$ 34,441	$ -	$ 54,682	$ -	$ -	$ (8,574)	$ 1,680,123
Allowance for doubtful accounts	(16,864)	(3,842)	-	(3,325)	(1,185)	-	(1,017)	-	-	-	(26,233)
Total net patient service revenue	1,088,535	149,292	-	337,716	33,256	-	53,665	-	-	(8,574)	1,653,890
Research revenue	-	-	37,541	-	-	106	-	-	-	(2,458)	35,189
Contribution revenue	6,171	18	4,350	608	-	-	-	-	14	-	11,161
Other revenue	21,397	6,585	1,115	2,146	26,956	461	13,424	5,065	104,432	(139,618)	41,963
Investment income	-	-	-	-	-	-	-	-	842	-	842
Net assets released from restrictions used for operations	503	47	5,767	643	-	-	-	-	-	-	6,960
Unrestricted revenues and other support	1,116,606	155,942	48,773	341,113	60,212	567	67,089	5,065	105,288	(150,650)	1,750,005
Expenses:											
Salaries	375,828	63,124	41,698	86,347	50,604	369	41,554	4,524	29,231	(1,214)	692,065
Employee benefits	116,919	19,531	11,475	22,284	6,012	108	9,981	1,447	8,099	(106)	195,750
Professional fees	151,965	13,461	2,118	22,513	132	415	6,890	104	7,088	(30,055)	174,631
Supplies and pharmaceuticals	209,070	27,972	8,244	100,790	204	4	3,642	169	2,715	152	352,962
Purchased services and other	157,432	21,899	3,997	50,336	46	67	6,741	971	13,018	(84,802)	169,705
Maintenance	13,614	2,502	-	-	-	-	238	88	1,218	13	17,673
Utilities	9,627	1,136	3,280	2,292	-	-	940	80	1,023	27	18,405
Leases	13,741	1,345	607	2,233	19	-	3,230	195	4,619	(5,219)	20,770
Insurance	26,824	619	99	2,328	(604)	-	(2,183)	30	(324)	-	26,789
Depreciation and amortization	27,995	4,212	3,732	5,770	2	145	1,019	139	7,591	-	50,605
Interest	19,224	3,676	913	5,633	9	-	51	5	28,432	(29,446)	28,497
Asset impairment	-	-	-	-	-	-	213	-	-	-	213
Loss on disposal of fixed assets	137	171	4	(51)	-	-	-	-	-	-	261
Expenses	1,122,376	159,648	76,167	300,475	56,424	1,108	72,316	7,752	102,710	(150,650)	1,748,326
Operating income (loss)	(5,770)	(3,706)	(27,394)	40,638	3,788	(541)	(5,227)	(2,687)	2,578	-	1,679
Other income—net:											
Investment income (loss)	4,317	1,108	1,199	492	52	-	185	-	(1,080)	-	6,273
Other income—net	4,317	1,108	1,199	492	52	-	185	-	(1,080)	-	6,273
Excess (deficiency) of revenues and other support over expenses from continuing operations	(1,453)	(2,598)	(26,195)	41,130	3,840	(541)	(5,042)	(2,687)	1,498	-	7,952

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2017
(In thousands)

	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
UNRESTRICTED NET ASSETS:								
Unrestricted revenues and other support:								
Net patient service revenue before allowance for doubtful accounts	$ (728)	$ -	$ -	$ -	$ 2,505	$ 1,777	$ -	$ 1,681,900
Allowance for doubtful accounts	-	-	-	-	-	-	-	(26,233)
Total net patient service revenue	(728)	-	-	-	2,505	1,777	-	1,655,667
Research revenue								35,189
Contribution revenue	90	-	-	-	-	90	-	11,251
Other revenue	2,690	11,142	-	-	79	13,911	(13,391)	42,483
Investment income	-	-	-	-	-	-	-	842
Net assets released from restrictions used for operations	-	-	-	-	-	-	-	6,960
Unrestricted revenues and other support	2,052	11,142	-	-	2,584	15,778	(13,391)	1,752,392
Expenses:								
Salaries	748	-	-	-	1,578	2,326	-	694,391
Employee benefits	819	-	-	-	504	1,323	-	197,073
Professional fees	-	-	-	-	329	329	-	174,960
Supplies and pharmaceuticals	113	-	-	-	17	130	-	353,092
Purchased services and other	135	119	13	-	155	422	(119)	170,008
Maintenance	272	-	-	-	-	272	-	17,945
Utilities	378	-	-	-	1	379	-	18,784
Leases	-	-	-	-	-	-	(2,249)	18,521
Insurance	160	5,383	-	-	-	5,543	(5,383)	26,949
Depreciation and amortization	526	-	-	-	-	526	-	51,131
Interest	98	-	-	-	-	98	-	28,595
Asset impairment	-	-	-	-	-	-	-	213
Loss on disposal of fixed assets	-	-	-	-	-	-	-	261
Expenses	3,249	5,502	13	-	2,584	11,348	(7,751)	1,751,923
Operating income (loss)	(1,197)	5,640	(13)	-	-	4,430	(5,640)	469
Other income—net:								
Investment income (loss)	91	16	488	42	-	637	(16)	6,894
Other income—net	91	16	488	42	-	637	(16)	6,894
Excess (deficiency) of revenues and other support over expenses from continuing operations	(1,106)	5,656	475	42	-	5,067	(5,656)	7,363

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2017
(In thousands)

	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians, Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
Excess (deficiency) of revenues and other support over expenses	$ (1,453)	$ (2,598)	$ (26,195)	$ 41,130	$ 3,840	$ (541)	$ (5,042)	$ (2,687)	$ 1,498	$ -	$ 7,952
Other changes in unrestricted net assets:											
Transfers (to) from affiliates/the University	(25,938)	2,900	18,691	(29,928)	8,136	-	8,150	3,173	2,994	-	(11,822)
Net assets released from restrictions used for purchase of property and equipment	431	-	590	424	-	-	-	283	-	-	1,728
Net change in fair value of investments	12,169	(12)	(20)	1,578	-	-	-	-	(1,139)	-	12,576
Adjustment to funded status of pension and postretirement liabilities	22,646	5,595	(495)	(900)	(169)	-	-	-	-	-	26,677
Adjustment to funded status of long-term disability liabilities	(299)	-	-	(80)	(45)	-	(35)	-	(38)	-	(497)
Increase (decrease) in unrestricted net assets	7,556	5,885	(7,429)	12,224	11,762	(541)	3,073	769	3,315	-	36,614
TEMPORARILY RESTRICTED NET ASSETS:											
Contribution income	527	160	4,605	274	-	-	-	283	-	-	5,849
Net assets released from restrictions	(934)	(48)	(6,356)	(1,067)	-	-	-	(283)	-	-	(8,688)
Net change in fair value of investments	109	-	-	-	-	-	-	-	-	-	109
Investment income	186	-	2,133	290	-	-	-	-	-	-	2,609
Increase (decrease) in temporarily restricted net assets	(112)	112	382	(503)	-	-	-	-	-	-	(121)
PERMANENTLY RESTRICTED NET ASSETS:											
Contribution income	-	-	2,036	14	-	-	-	-	-	-	2,050
Net change in fair value of investments	-	-	712	236	-	-	-	-	-	-	948
Investment income (loss)	-	-	(252)	(31)	-	-	-	-	-	-	(283)
Change in beneficial interest in assets held by others	4,866	1,461	6,515	748	-	-	-	-	-	-	13,590
Increase (decrease) in permanently restricted net assets	4,866	1,461	9,011	967	-	-	-	-	-	-	16,305
INCREASE (DECREASE) IN NET ASSETS	12,310	7,458	1,964	12,688	11,762	(541)	3,073	769	3,315	-	52,798
NET ASSETS (DEFICIT)—Beginning of year	181,431	(21,230)	103,178	20,390	(3,974)	2,741	3,176	(417)	26,638	-	311,933
NET ASSETS (DEFICIT)—End of year	$ 193,741	$ (13,772)	$ 105,142	$ 33,078	$ 7,788	$ 2,200	$ 6,249	$ 352	$ 29,953	$ -	$ 364,731

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2017
(In thousands)

	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
Excess (deficiency) of revenues and other support over expenses	$ (1,106)	$ 5,656	$ 475	$ 42	$ -	$ 5,067	$ (5,656)	$ 7,363
Other changes in unrestricted net assets:								
Transfers (to) from affiliates/the University	4,000	(5,000)	-	-	-	(1,000)	5,000	(7,822)
Net assets released from restrictions used for purchase of property and equipment	-	-	-	-	-	-	-	1,728
Net change in fair value of investments	412	(959)	2,547	-	-	2,000	959	15,535
Adjustment to funded status of pension and postretirement liabilities	4,410	-	-	-	-	4,410	-	31,087
Adjustment to funded status of long-term disability liabilities	-	-	-	-	-	-	-	(497)
Increase (decrease) in unrestricted net assets	7,716	(303)	3,022	42	-	10,477	303	47,394
TEMPORARILY RESTRICTED NET ASSETS:								
Contribution income	-	-	-	-	-	-	-	5,849
Net assets released from restrictions	-	-	-	-	-	-	-	(8,688)
Net change in fair value of investments	-	-	-	-	-	-	-	109
Investment income	-	-	-	-	-	-	-	2,609
Increase (decrease) in temporarily restricted net assets	-	-	-	-	-	-	-	(121)
PERMANENTLY RESTRICTED NET ASSETS:								
Contribution income	-	-	-	-	-	-	-	2,050
Net change in fair value of investments	-	-	-	-	-	-	-	948
Investment income (loss)	-	-	-	-	-	-	-	(283)
Change in beneficial interest in assets held by others	-	-	-	-	-	-	-	13,590
Increase (decrease) in permanently restricted net assets	-	-	-	-	-	-	-	16,305
INCREASE (DECREASE) IN NET ASSETS	7,716	(303)	3,022	42	-	10,477	303	63,578
NET ASSETS (DEFICIT)—Beginning of year	(24,667)	25,280	33,843	(42)	(179)	34,235	(25,280)	320,888
NET ASSETS (DEFICIT)—End of year	$ (16,951)	$ 24,977	$ 36,865	$ -	$ (179)	$ 44,712	$ (24,977)	$ 384,466

(Concluded)

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Temple University Health System

Consolidated Financial Statements as of and for the Years Ended June 30, 2016 and 2015, Supplemental Schedules as of and for the Year Ended June 30, 2016, and Independent Auditors' Report

TEMPLE UNIVERSITY HEALTH SYSTEM

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
Temple University Health System, Inc.
Philadelphia, Pennsylvania

We have audited the accompanying consolidated financial statements of Temple University Health System (a wholly owned subsidiary of Temple University — Of the Commonwealth System of Higher Education) and its subsidiaries (the "Health System"), which comprise the consolidated balance sheets as of June 30, 2016 and 2015, and the related consolidated statements of operations and changes in net assets, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements
Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility
Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.
An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Health System's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Health System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Temple University Health System and its subsidiaries as of June 30, 2016 and 2015, and the results of their operations and changes in their net assets, and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Supplementary Consolidating Schedules

Our audits were conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary consolidating schedules on pages 49-56 are presented for the purpose of additional analysis and are not a required part of the consolidated financial statements. These schedules are the responsibility of the Health System's management and were derived from and relate directly to the underlying accounting and other records used to prepare the consolidated financial statements. Such schedules have been subjected to the auditing procedures applied in our audits of the consolidated financial statements and certain additional procedures, including comparing and reconciling such schedules directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, such schedules are fairly stated in all material respects in relation to the consolidated financial statements as a whole.

Deloitte & Touche LLP

October 14, 2016

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED BALANCE SHEETS
AS OF JUNE 30, 2016 AND 2015
(In thousands)

	2016	2015
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 151,324	$ 89,808
Patient accounts receivable — net of allowance for doubtful accounts	195,220	181,441
Other receivables — net of allowance for doubtful accounts of $867 and $903 in 2016 and 2015, respectively	100,773	50,102
Inventories and other current assets	41,194	39,502
Assets held for sale	-	1,650
Current portion of assets limited as to use	42,213	56,697
Investments	127,223	236,401
Current portion of workers' compensation fund	6,723	6,404
Current portion of self-insurance program receivables	2,000	2,500
Expenditures reimbursable by research grants and awards	2,842	2,157
Total current assets	669,512	666,662
PROPERTY, PLANT AND EQUIPMENT:		
Land and land improvements	11,927	11,927
Buildings	484,225	455,576
Fixed and movable equipment	443,924	428,218
Construction-in-progress	43,295	49,926
	983,371	945,647
Less accumulated depreciation	630,211	597,048
Net property, plant and equipment	353,160	348,599
ASSETS LIMITED AS TO USE	152,642	151,148
INVESTMENTS	43,087	33,669
WORKERS' COMPENSATION FUND	5,064	4,734
SELF-INSURANCE PROGRAM RECEIVABLES	16,451	16,967
GOODWILL AND OTHER INTANGIBLES	21,875	22,415
BENEFICIAL INTEREST IN ASSETS HELD BY OTHERS	105,177	112,862
OTHER ASSETS	26,224	21,518
TOTAL ASSETS	$1,393,192	$1,378,574

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED BALANCE SHEETS
AS OF JUNE 30, 2016 AND 2015
(In thousands)

LIABILITIES AND NET ASSETS	2016	2015
CURRENT LIABILITIES:		
Current portion of long-term debt	$ 17,427	$ 15,685
Accounts payable	108,556	79,129
Accrued expenses	92,000	83,571
Current portion of estimated settlements with third-party payors	21,815	29,546
Current portion of self-insurance program liabilities	24,134	31,112
Unexpended research grants and awards	1,096	2,703
Other current liabilities	59,052	49,468
Total current liabilities	324,080	291,214
LONG-TERM DEBT	500,385	510,389
ESTIMATED SETTLEMENTS WITH THIRD-PARTY PAYORS	-	1,488
SELF-INSURANCE PROGRAM LIABILITIES	121,364	132,466
ACCRUED POSTRETIREMENT BENEFITS	93,956	62,245
OTHER LONG-TERM LIABILITIES	32,519	31,891
Total liabilities	1,072,304	1,029,693
NET ASSETS:		
Unrestricted	180,802	202,001
Temporarily restricted	24,229	24,208
Permanently restricted	115,857	122,672
Total net assets	320,888	348,881
TOTAL LIABILITIES AND NET ASSETS	$ 1,393,192	$ 1,378,574

See notes to consolidated financial statements. (Concluded)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015
(In thousands)

	2016	2015
UNRESTRICTED NET ASSETS:		
Unrestricted revenues and other support:		
Net patient service revenue before allowance for doubtful accounts	$1,585,204	$1,459,396
Allowance for doubtful accounts	(26,341)	(26,590)
Total net patient service revenue	1,558,863	1,432,806
Research revenue	32,036	29,565
Contribution revenue	5,628	4,842
Other revenue	39,844	40,652
Investment income	807	325
Net assets released from restrictions used for operations	5,483	6,236
Unrestricted revenues and other support	1,642,661	1,514,426
Expenses:		
Salaries	660,260	626,137
Employee benefits	189,443	176,348
Professional fees	137,817	118,759
Supplies and pharmaceuticals	323,615	270,789
Purchased services and other	163,119	152,655
Maintenance	17,837	17,675
Utilities	20,511	23,345
Leases	20,211	25,071
Insurance	21,416	14,771
Depreciation and amortization	50,514	51,078
Interest	27,024	27,028
Asset impairment	108	1,144
Loss on disposal of fixed assets	221	331
Expenses	1,632,096	1,505,131
Operating income	10,565	9,295
Other income — net:		
Investment income	6,591	12,301
Other — net	-	830
Other income — net	6,591	13,131
Excess of revenues and other support over expenses	17,156	22,426

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015
(In thousands)

	2016	2015
Excess of revenues and other support over expenses	$ 17,156	$ 22,426
Other changes in unrestricted net assets:		
Net transfers to the University	(6,680)	(8,720)
Net assets released from restrictions used for purchase of property and equipment	7,452	3,002
Net change in fair value of investments	(5,526)	(5,587)
Interfund transfers	-	(29)
Adjustment to funded status of pension and postretirement liabilities	(33,964)	(18,619)
Adjustment to funded status of long-term disability liabilities	363	(1,427)
Decrease in unrestricted net assets	(21,199)	(8,954)
TEMPORARILY RESTRICTED NET ASSETS:		
Contribution income	10,660	8,671
Net assets released from restrictions	(12,935)	(9,237)
Net change in fair value of investments	(51)	(43)
Investment income	2,347	3,495
Interfund transfers	-	(717)
Increase in temporarily restricted net assets	21	2,169
PERMANENTLY RESTRICTED NET ASSETS:		
Contribution income	943	1,498
Net change in fair value of investments	(18)	-
Investment loss	(55)	(143)
Change in beneficial interest in assets held by others	(7,685)	(2,290)
Interfund transfers	-	745
Decrease in permanently restricted net assets	(6,815)	(190)
DECREASE IN NET ASSETS	(27,993)	(6,975)
NET ASSETS — Beginning of year	348,881	355,856
NET ASSETS — End of year	$ 320,888	$ 348,881

See notes to consolidated financial statements. (Concluded)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015
(In thousands)

	2016	2015
OPERATING ACTIVITIES:		
Decrease in net assets from continuing operations	$ (27,993)	$ (6,975)
Adjustments to reconcile decrease in net assets to net cash provided by operating activities:		
Net realized and unrealized losses (gains) on investments	4,952	(9,605)
Net realized and unrealized losses on beneficial interests in assets held by others	7,685	2,290
Depreciation, amortization and accretion	49,568	49,907
Intangible amortization	946	1,171
Impairment on intangibles	108	-
Amortization of bond premium, discount, debt issuance costs and underwriter's discount	12	(32)
Allowance for doubtful accounts	26,341	26,590
Adjustment to funded status of pension and postretirement liabilities	33,964	18,619
Adjustment to funded status of long-term disability liabilities	(363)	1,427
Capitalized interest	(1,888)	(912)
Gain on extinguishment of debt	(57)	(33)
Asset impairment	-	1,144
Proceeds from contributions and investments restricted to property, plant and equipment and endowments	(7,452)	(3,002)
Loss on disposal of fixed assets	221	331
Permanently restricted gifts and donations received	(943)	(1,498)
Net transfers to the University	6,680	8,720
Changes in operating assets and liabilities:		
Patient accounts receivable	(40,120)	(44,452)
Other receivables	(51,008)	13,944
Pledges receivable — net	960	590
Inventories and other current assets	(2,393)	(8,112)
Expenditures reimbursable by research grants and awards	(685)	2,022
Other assets	(5,843)	(179)
Accounts payable	23,269	26,113
Accrued expenses	8,429	(10,517)
Estimated settlements with third-party payors	(8,518)	6,275
Self-insurance program receivables and liabilities	(17,064)	(14,824)
Unexpended research grants and awards	(1,607)	764
Other liabilities	8,207	8,403
Net cash provided by operating activities	5,408	68,169

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015
(In thousands)

	2016	2015
INVESTING ACTIVITIES:		
Decrease in assets limited as to use	$ 12,721	$ 10,765
Purchases of property, plant and equipment	(47,902)	(61,803)
Purchases of investments	(148,719)	(437,393)
Proceeds from sales of investments	243,147	433,149
Proceeds from sale of fixed assets	3,792	305
Net cash provided by (used in) investing activities	63,039	(54,977)
FINANCING ACTIVITIES:		
Proceeds from contributions and investments restricted to property, plant and equipment and endowments	7,452	3,002
Repayment of long-term debt	(15,161)	(6,639)
Repayment of capital lease obligations	(1,222)	(1,243)
Proceeds from issuance of long-term debt	1,527	3,513
Permanently restricted gifts and donations received	943	1,498
Net transfers to the University	(470)	(8,720)
Net cash used in financing activities	(6,931)	(8,589)
NET INCREASE IN CASH AND CASH EQUIVALENTS	61,516	4,603
CASH AND CASH EQUIVALENTS — Beginning of year	89,808	85,205
CASH AND CASH EQUIVALENTS — End of year	$ 151,324	$ 89,808
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION — Cash paid for interest	$ 28,778	$ 29,141
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITY:		
Amounts recorded for purchases of property and equipment in excess of amounts paid	$ 5,607	$ 313
Cost of assets acquired through capitalized leases	$ 6,639	$ 1,506

See notes to consolidated financial statements. (Concluded)

1. ORGANIZATION AND DESCRIPTION OF BUSINESS

Temple University Health System, Inc. ("TUHS") is a Pennsylvania nonprofit corporation of which Temple University — Of The Commonwealth System of Higher Education (the "University" or "TU") is its sole member. TUHS was incorporated in August 1995 and serves principally to coordinate the activities and plans of its health care subsidiaries and affiliates in Philadelphia and the surrounding area. The subsidiaries and affiliates (herein referred to as "corporate members") of TUHS (collectively, with TUHS, referred to as the "Health System"), all of which operate in Philadelphia and the surrounding area, include the following:

- Temple University Hospital, Inc. ("TUH"), a nonprofit corporation, operating a 722-bed acute care teaching hospital at three inpatient campuses and additional outpatient locations in Philadelphia and Montgomery Counties, with TUHS as its sole member;

- Temple University Health System Foundation ("TUHSF"), a nonprofit corporation formed to support the health-care-related activities of TUHS, with TUH as its sole member;

- Jeanes Hospital ("JH"), a nonprofit corporation, operating a 146-bed acute care hospital located in the Fox Chase section of Philadelphia, with TUHS as its sole member;

- Episcopal Hospital ("Episcopal"), a nonprofit corporation, providing clinical outpatient health care services, with TUHS as its sole member;

- Temple Health System Transport Team, Inc. ("T3"), a nonprofit corporation, is a critical care air and ground ambulance company, with TUHS as its sole member;

- Temple Physicians, Inc. ("TPI"), a nonprofit corporation formed to develop and acquire community-based primary care practices located in the service area of TUHS, with TUHS as its sole member;

- TUHS Insurance Company, Ltd. ("TUHIC"), a captive insurance company established to reinsure the professional liability claims of certain subsidiaries of TUHS. TUHS is the beneficial owner of TUHIC which is domiciled in Bermuda;

- American Oncologic Hospital d/b/a The Hospital of Fox Chase Cancer Center ("AOH"), a nonprofit corporation, is a 100 licensed bed specialty hospital that provides advanced inpatient and outpatient care to cancer patients, with TUHS as its sole member;

- Institute for Cancer Research d/b/a the Research Institute of Fox Chase Cancer Center ("ICR"), a nonprofit corporation, is primarily engaged in basic research, including programs in cancer biology, developmental therapeutics, immune cell development and host disease, cancer epigenetics, and cancer prevention and control and is a National Cancer Institute designated Comprehensive Cancer Center, with AOH as its sole member;

- Fox Chase Cancer Center Medical Group, Inc. ("MGI"), a nonprofit corporation, employs and provides physician services to the Fox Chase family of organizations, with AOH as its sole member;

- Fox Chase Network, Inc. ("Network"), a nonprofit corporation, provides cancer related clinical and administrative services to cancer programs of community hospitals and physicians, with AOH as its sole member;

- Fox Chase, Ltd. ("Limited"), a business corporation that holds minority interests in joint ventures with area hospitals, with AOH as its sole stockholder; and

- Temple Center for Population Health, LLC ("TCPH"), a Pennsylvania limited liability company, participating in accountable care, coordinated care, shared savings, bundled payment programs and other similar programs or initiatives with or implemented by governmental payors, commercial payors and other parties, with TUHS as its sole member.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation — The accompanying consolidated financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of the Health System. All significant intercompany transactions and balances have been eliminated in consolidation.

Cash and Cash Equivalents — Cash equivalents consist primarily of highly liquid investments, such as money market funds and debt instruments with original maturities of three months or less at the time of purchase. At June 30, 2016 and 2015, the Health System had cash balances in financial institutions, which exceed federal depository insurance limits. Management believes that credit risks related to these deposits are minimal. Cash and cash equivalents are carried at cost, which approximates fair value.

Investments — Investments in equity securities with readily determinable fair values and all investments in debt securities are reported at fair value. Investment income or loss (including realized gains and losses, interest, and dividends) is included in other income unless the income is restricted by donor or law, except for investment income on borrowed funds held by trustees as collateral on outstanding debt. This investment income is included in unrestricted revenue and other support. Unrealized gains and losses on equity securities with readily determinable fair values and all investments in debt securities are excluded from the excess of revenues over expenses unless the amount was recorded as part of the other-than-temporary impairment adjustment as disclosed in Note 6.

The Health System also invests in various limited partnerships which are private equity funds. Such investments are accounted for on the equity basis of accounting, which approximates fair value as determined by the fund managers and financial information provided by the limited partnership. This financial information includes assumptions and methods that were reviewed by the Health System. The Health System believes that the estimated fair value is reasonable as of June 30, 2016 and 2015. Because these investments are not readily marketable, the estimated fair values are subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market existed, and such differences could be material. These investments vary as to their level of liquidity, with differing requirements for notice prior to redemption or withdrawal. Investment gains and losses on these funds are included in other income.

Investments, in general, are exposed to various risks such as interest rate, credit and overall market volatility. As such, it is reasonably possible that changes in the value of investments will occur in the near term and that such changes could materially affect the amounts reported in the consolidated financial statements.

The Health System reviews its investments to identify those for which market value is below cost. The Health System then makes a determination as to whether investments are other-than-temporarily impaired based on guidelines established in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 320.

Assets Limited as to Use — Assets limited as to use primarily include assets held by trustees under indenture and insurance agreements, designated assets set aside by the Board primarily for future capital improvements, over which the Board retains control and may at its discretion subsequently use for other purposes, and donor restricted assets. Amounts required to meet current liabilities of the Health System have been classified as current assets in the consolidated balance sheets.

Property, Plant and Equipment — Property, plant and equipment are stated at cost. Depreciation is provided over the estimated useful life of each class of depreciable asset and is computed using the straight-line method. Depreciation expense was $49,453,000 and $49,807,000 for the years ended June 30, 2016 and 2015, respectively. Expenditures for maintenance and repairs necessary to maintain property, plant and equipment are charged to operations. Costs of renewals and betterments are capitalized. The amount of capitalized leases is $12,944,000 and $11,427,000 at June 30, 2016 and 2015, respectively, and is included in the property, plant and equipment balances. Amortization of these assets is included with depreciation expense. At June 30, 2016 and 2015, the accumulated depreciation balance included $6,224,000 and $10,208,000, respectively, of accumulated amortization of capital leased assets. Interest costs incurred on borrowed funds during the period of construction of capital assets, net of interest earned on the unexpended proceeds of tax-exempt borrowings specifically incurred for construction, are capitalized as a component of the cost of acquiring those assets. The remaining amounts of capitalized interest costs for the fiscal years ended June 30, 2016 and 2015 were $2,185,000 and $5,054,000, respectively.

Long-Lived Assets Review — The Health System reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If the carrying value of a long-lived asset is considered impaired, a loss is recognized by which the carrying value exceeds the fair value (less any costs related to disposal or abandonment, if applicable). There was no impairment of long-lived assets recorded during the fiscal year ended June 30, 2016. As part of the classification of a long-lived asset to held for sale, the Health System recorded a $1,144,000 impairment during the fiscal year ended June 30, 2015.

Assets Held for Sale — The Health System classifies assets and liabilities ("disposal group") as held for sale when management, having the authority to approve the action, commits to a plan to sell the disposal group, the sale is probable within one year, and the disposal group is available for immediate sale in its present condition. In addition, the Health System considers whether an active program to locate a buyer has been initiated, whether the disposal group is marketed actively for sale at a price that is reasonable in relation to its current value, and whether actions required to complete the plan indicate it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn. The disposal group is measured at the lower of its carry amount or fair value less cost to sell and long-lived assets within the disposal group are not depreciated while classified as held for sale.

At June 30, 2015, it was determined that the property located at 100-110 West Laurel Avenue met all of the criteria in accordance with FASB ASC Topic 360 to classify it as an asset held for sale. Management actively marketed this property for sale and sold it during the fiscal year ended June 30, 2016. At June 30, 2015, the long-lived asset was written down to $1,650,000, or its fair value less cost to sell. As a result, an impairment charge of $1,144,000 was recorded related to this asset and the asset is no longer being depreciated. Also included in this disposal group was an asset retirement obligation of $77,000. The asset was presented separately in the consolidated balance sheets in Assets Held for

Sale and the liability is included in Other Current Liabilities. As the property was sold during the fiscal year ended June 30, 2016, there were no remaining assets and liabilities classified as held for sale.

Goodwill and Other Intangibles — Goodwill and other intangible assets are accounted for in accordance with the accounting guidance in FASB ASC Topic 350 for *Intangibles — Goodwill and Other*. Goodwill and indefinite-lived intangible assets are not amortized, but are evaluated for impairment annually or when indicators of a potential impairment are present. The Health System's annual impairment date is June 30th. The annual evaluation for impairment of goodwill and indefinite-lived intangibles is based on valuation models that incorporate assumptions and internal projections of expected future cash flows and operating plans. Based on the results of the Health System's reviews, no impairment loss was recognized in the results of operations for the fiscal years ended June 30, 2016 and 2015, respectively. Subsequent to the latest review, there have been no events or circumstances that indicate any potential additional impairment of the Health System's goodwill and indefinite-lived intangible asset balance.

The cost of intangible assets with determinable useful lives is amortized to reflect the pattern of economic benefits consumed on a straight-line basis over the estimated periods benefited. Patents, technology and other intangibles with contractual terms are generally amortized over their respective legal or contractual lives. When certain events or changes in operating conditions occur, an impairment assessment is performed and lives of intangible assets with determinable lives may be adjusted and impairment charges recorded. There were no impairment losses recognized on intangible assets with determinable useful lives during fiscal years 2016 and 2015. Refer to Note 8 for further information on goodwill and other intangible assets.

Asset Retirement Obligations — The Health System recognizes the fair value of a liability for legal obligations associated with asset retirements in the period in which it is incurred, in accordance with FASB ASC Topic 410, if a reasonable estimate of the fair value of the obligation can be made. When the liability is initially recorded, the Health System capitalizes the cost of the asset retirement obligation by increasing the carrying amount of the related long-lived asset. The value of the asset, when established in 2006, was $1,144,000. Over time, the liability is accreted to its present value each period using a discount rate between 5% and 7%, and the capitalized cost associated with the retirement obligation is depreciated over the useful life of the related asset. Upon settlement of the obligation, any difference between the cost to settle the asset retirement obligation and the liability recorded is recognized as a gain or loss in the consolidated statements of operations and changes in net assets. At June 30, 2016 and 2015, the recorded asset retirement obligation liability is $4,773,000 and $4,508,000, respectively. Accretion costs for 2016 and 2015 were $312,000 and $271,000, respectively.

Deferred Financing Costs — Deferred financing costs are amortized over the term of the related debt. Gross deferred financing costs were $5,911,000 as of June 30, 2016 and 2015. Accumulated amortization of deferred financing costs was $1,685,000 and $1,346,000 as of June 30, 2016 and 2015, respectively. Deferred financing costs are presented on the balance sheet as a direct deduction from the carrying value of long-term debt.

Net Assets — Net assets are categorized according to externally (donor) imposed restrictions. A description of the three net asset categories follows:

Unrestricted Net Assets — are those assets that are available for the support of operations and whose use is not externally restricted, although their use may be limited by other factors such as by contract or board designation.

Temporarily Restricted Net Assets — are those assets whose use by the Health System has been limited by donors to a specific time period or purpose.

Permanently Restricted Net Assets — include gifts, trusts and pledges that require by donor restrictions that the corpus be invested in perpetuity, with only the income available for operations or in accordance with donor restrictions.

Beneficial Interest in Perpetual Trusts — The Health System is the irrevocable beneficiary of the income from certain perpetual trusts administered by third parties. The Health System's beneficial interest is reported at the fair value of the underlying trust assets. Because the trusts are perpetual and the original corpus cannot be used, these funds are reported as permanently restricted net assets.

Contracts, Grants and Awards — Income from contracts, grants and awards, including overhead allowances, is recorded as the related direct expenses are incurred. Indirect cost revenues on agency grants and contracts are subject to audit and possible adjustment by governmental payors. Appropriate allowances are made currently for estimated adjustments to governmental arrangements.

Contributions — The Health System records unconditional promises to give (pledges) as receivables and revenues, and distinguishes between contributions received for each net asset category in accordance with donor-imposed restrictions. Upon expiration of donor restrictions, amounts are reclassified as unrestricted and reported as net assets released from restriction.

Performance Indicator — In the accompanying consolidated statements of operations and changes in net assets, the primary indicator of the Health System's results is "Excess of revenues and other support over expenses". Changes in unrestricted net assets which are excluded from the excess of revenues and other support over expenses, consistent with industry practice, include unrealized gains and losses on investments, permanent transfers of assets to and from affiliates for other than goods or services, contributions of long lived assets, certain adjustments to pension, postretirement and long-term disability liabilities, and gains and losses related to discontinued operations.

Net Patient Service Revenue and Estimated Settlements with Third-Party Payors — The Health System records gross patient service revenue in the period that the services are rendered. Net patient service revenue before allowance for doubtful accounts represents gross patient service revenue less provisions for contractual adjustments. Payments for services rendered to patients covered by Medicare, Medicaid and other government programs are generally less than billed charges and, therefore, provisions for contractual adjustments are made to reduce gross patient service revenue to the estimated cash receipts based on each program's principles of payment/reimbursement. Estimates of contractual allowances for services rendered to patients covered by commercial insurance, including managed care health plans, are primarily based on the payment terms of contractual arrangements, such as predetermined rates per diagnosis, per diem rates or discounted fee for service rates. In addition, the Health System receives medical assistance payments for the reimbursement of services for charity and uncompensated care services. The federal funding of such costs is subject to an upper payment limit and retrospective settlement. Coinsurance and deductibles within the third-party payor agreements are the patient's responsibility and the Health System considers these amounts in its determination of the allowance for doubtful accounts. For services associated with self-pay patients (which include patients with deductible and copayment balances due for which third-party coverage exists for part of the bill), the Health System records a significant provision for bad debts in the period of service on the basis of its past experience, which indicates that many patients are unable or unwilling to pay the portion of their bill for which they are financially responsible. The difference between the standard rates (or the discounted rates if negotiated) and the amounts actually collected after all reasonable collection efforts have been exhausted is charged off against the allowance for doubtful accounts.

Net patient service revenue is reported at the estimated net realizable amounts from patients, third-party payors and others for services rendered, including retroactive adjustments under reimbursement agreements with third-party payors. Retroactive adjustments are accrued on an estimated basis in the

period the related services are rendered or when known by the Health System and adjusted in future periods as final settlements or changes in estimates are determined. Laws and regulations governing the Medicare and Medicaid programs are extremely complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates could change by a material amount in the near term (see Note 3).

Other Revenue — Other revenue includes amounts earned from cafeteria operations, parking garage operations, transport services provided by T3, and other non-patient care services.

Other revenue also includes "meaningful use" payments received from The Centers for Medicare and Medicaid Services ("CMS") relating to certain provisions of the American Recovery and Reinvestment Act of 2009 ("ARRA"). The ARRA defines "meaningful use" of electronic health records ("EHR") technology and makes federal incentive payments to healthcare entities that qualify by demonstrating improved quality, safety and effectiveness of care. Under the Medicare EHR incentive program, providers can earn up to four annual payments that are earned by achieving and maintaining objectives established by CMS. Medicaid providers that are acute care that have at least 10% of patient volume to Medicaid patients may also be eligible for Medicaid EHR payments. Medicaid payment amounts are determined in the first year of participation and "meaningful use" status must be achieved and maintained in subsequent years in order to qualify for additional payments.

The Health System recognizes EHR incentive payments in accordance with the International Accounting Standard 20 ("IAS20") Grant Accounting Model. Under the IAS20 Grant Accounting Model, EHR incentive payments are recognized ratably over a compliance period once management is reasonably assured of program compliance for the entire 90-day period (in the first payment year) or 365-day period (in the second through fourth payment years). During fiscal years 2016 and 2015, the Health System recognized $465,000 and $2,160,000, respectively, from Medicare EHR incentive payments and $517,000 and $635,000, respectively, from Medicaid EHR incentive payments.

Charity Care — The Health System provides care without charge or at a standard rate discounted for uninsured patients that is not related to published charges to patients who meet certain criteria under the Health System's charity care policy. Some patients qualify for charity care based on federal poverty guidelines or their financial condition being such that requiring payment would impose a hardship on the patient. Because the Health System does not pursue collection of amounts determined to qualify as charity care, they are not reported as net patient service revenue.

Income Taxes — Substantially all of the individual members of the Health System are nonprofit corporations and have been recognized as tax-exempt pursuant to Section 501(c)(3) of the Internal Revenue Code. A wholly owned subsidiary, which is currently inactive, in which the Health System exercises control is a for-profit corporation that is subject to federal and state income tax. Such taxes are immaterial and have been reported with other expenses in the accompanying consolidated financial statements.

The Health System's federal Exempt Organization Business Income Tax Returns for 2015, 2014, 2013, and 2012 remain subject to examination by the Internal Revenue Service ("IRS").

Use of Estimates — The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates comprise the allowances for doubtful accounts, contractual allowances, estimated settlements with third-party payors, self-insurance

program assets and liabilities, accrued postretirement benefits, estimated asset retirement obligations and the valuation of alternative investments.

Recently Issued Accounting Pronouncements — In May 2014, the FASB issued ASU 2014-09 which clarifies the principles for recognizing revenue from contracts with customers. The update outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The update states that an entity should recognize revenue to depict the transfer of promised goods or services to customers in the amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods and services. Entities are required to apply the following steps when recognizing revenue under the update: (1) identify the contract(s) with a customer; (2) identify the performance obligation in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when (or as) the entity satisfies a performance obligation. In August 2015, the FASB issued ASU 2015-14 which deferred the effective date of ASU 2014-09 by one year. In March 2016, the FASB issued ASU 2016-08, which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, which clarifies guidance related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. In May 2016, the FASB issued ASU 2016-12, which affects only the narrow aspects of Topic 606. This amendment addresses certain issues identified in the guidance from ASU 2014-09 on assessing collectability, presentation of sales taxes, noncash consideration, and completed contracts and contract modifications at transition. Application is required for the first annual period beginning after December 15, 2017. The update allows for a "full retrospective" adoption, meaning the update is applied to all periods presented, or a "modified retrospective" adoption, meaning the update is applied only to the most current period presented in the financial statements. The update allows for early adoption using one of three options and will be adopted no earlier than July 1, 2018. The Health System is currently evaluating the adoption method to apply and the impact that the update will have on its financial position, results of operations, cash flows and financial statement disclosures.

In August 2014, the FASB issued ASU 2014-15, which provides guidance on determining when and how to disclose going-concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if "conditions or events raise substantial doubt about [the] entity's ability to continue as a going concern." The ASU is effective for annual periods ending after December 15, 2016, and interim periods thereafter, with early adoption permitted. The Health System is currently evaluating the adoption of this update and the impact that this update will have on its consolidated financial statements.

In January 2015, the FASB issued ASU 2015-01 which eliminates from GAAP the concept of an extraordinary item. To be considered an extraordinary item under existing GAAP, an event or transaction must be unusual in nature and must occur infrequently. Stakeholders often questioned the decision-usefulness of labeling a transaction or event as extraordinary and indicated that it is difficult to ascertain whether an event or transaction satisfies both criteria. In light of this feedback and in a manner consistent with its simplification initiative, the FASB decided to eliminate the concept of an extraordinary item. As a result, an entity will no longer (1) segregate an extraordinary item from the results of ordinary operations; (2) separately present an extraordinary item on its income statement, net of tax, after income from continuing operations; and (3) disclose income taxes and earnings-per-share data applicable to an extraordinary item. However, the ASU does not affect the reporting and disclosure requirements for an event that is unusual in nature or that occurs infrequently. Application is required for the first annual period beginning after December 15, 2015, and interim periods within those annual

periods. Early adoption is permitted if the guidance is applied as of the beginning of the annual period of adoption. The Health System is currently evaluating the adoption of this update and the impact that this update will have on its consolidated financial statements.

In April 2015, the FASB issued ASU 2015-03 which requires that all costs incurred to issue debt be presented on the balance sheet as a direct deduction from the carrying value of the debt. The amortization of these costs will remain under the interest method and will continue to be reported as interest expense. The amendments for this update are effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within fiscal years beginning after December 15, 2016. Early adoption is permitted. The new guidance should be applied on a retrospective basis, wherein the balance sheet of each individual period presented should be adjusted to reflect the period-specific effects of applying the new guidance. Upon transition, the Health System is required to comply with the applicable disclosures for a change in an accounting principle, the transition method, a description of the prior period information that has been retrospectively adjusted, and the effect of the change on the financial statement line items. Effective June 30, 2016, the Health System elected to early adopt ASU 2015-03. The adoption of ASU 2015-03 resulted in $4,226,000 and $4,565,000 of unamortized deferred issuance costs at June 30, 2016 and 2015, respectively, that was previously recorded as an asset, being presented as a direct deduction from the carrying value of the debt. At June 30, 2016 and 2015, the Health System did not have any unamortized debt issuance costs related to line-of-credit arrangements.

In May 2015, the FASB issued ASU 2015-07, which removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The update also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. Application is effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early application is permitted. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, which requires all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee). It also requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value. In addition, the ASU eliminates the requirement to disclose the fair value of financial instruments measured at amortized cost for entities that are not public business entities. Application is effective for fiscal years beginning after December 15, 2018. Early adoption is permitted as of the fiscal years beginning after December 15, 2017. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, which created Topic 842 that establishes the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing, and uncertainty of cash flows arising from a lease. The main difference between previous GAAP and Topic 842 is the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous GAAP. The FASB decided that, lessees should be required to recognize the assets and liabilities arising from leases on the balance sheet. The FASB concluded that the economics of leases can vary for a lessee and that those economics should be reflected in the financial statements; therefore, Topic 842 retains a distinction between finance leases

and operating leases. The classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the previous leases guidance. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in the statement of comprehensive income and the statement of cash flows is largely unchanged from previous GAAP. Application is effective for fiscal years beginning after December 15, 2018. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements and bond covenants.

In August 2016, the FASB issued ASU 2016-14, which removes the requirement for a not-for-profit entity to distinguish between resources with temporary and permanent restrictions on the face of their financial statements, meaning a not-for-profit entity will present two classes of net assets instead of three. ASU 2016-14 also requires expenses to be presented by their natural and functional classification, investment returns to be presented net of external and direct internal investment expenses, and requires entities to provide more information about their available resources and liquidity. ASU 2016-14 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted, and will be applied retrospectively. The Health System is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements.

3. NET PATIENT SERVICE REVENUE

Net patient accounts receivable includes the allowance for doubtful accounts of $22,312,000 and $21,645,000 at June 30, 2016 and 2015, respectively. The allowance for doubtful accounts is estimated based on the Health System's belief that a patient has the ability to pay for services but payment is not expected to be received.

Accounts receivable are written off against the allowance for doubtful accounts when management determines that recovery is unlikely and the Health System ceases collection efforts. Overall, the total of self-pay write-offs for the year ended June 30, 2016 has not changed significantly from the year ended June 30, 2015. The Health System has not experienced significant changes in write-off trends nor has the Health System changed its charity care policy.

The allowance for doubtful patient accounts receivable previously disclosed in the Health System's 2015 consolidated financial statements included $18,321,000 in fully reserved patient receivables for which the Health System had ceased all collection efforts as of June 30, 2015. Since collection of these patient receivables was unlikely, this amount should have been removed equally from the June 30, 2015 gross patient accounts receivable and allowance for doubtful patient accounts. Accordingly, the June 30, 2015 gross patient accounts receivable and allowance for doubtful patient accounts disclosed herein have both been reduced by this amount, as compared to the amount disclosed in the prior year. This revision had no impact on the Health System's June 30, 2015 net patient accounts receivable nor did it have any impact on the Health System's consolidated balance sheet as of June 30, 2015, or its consolidated statement of operations and changes in net assets, and statement of cash flows for the year then ended.

Net patient service revenue before allowance for doubtful accounts from these major payer sources based on primary insurance designation is as follows for the years ended June 30, 2016 and 2015 (in thousands):

	2016	2015
Medicare and Medicaid	$ 985,479	$ 918,390
Self-pay	15,279	14,553
Other third-party payers	584,446	526,453
Total	$ 1,585,204	$ 1,459,396

Net patient service revenue also includes estimates of reimbursement from third-party payors. For the fiscal years ended June 30, 2016 and 2015, net patient service revenue increased (decreased) by $3,003,000 and ($410,000), respectively, as a result of settlements related to prior years or changes in estimates related thereto.

4. BUSINESS AND CREDIT CONCENTRATION

The Health System provides diversified health care services primarily to area residents through its inpatient and outpatient care facilities in the Greater Philadelphia Metropolitan Area. As a function of its mission and location, the Health System serves a disproportionately high number of poor or indigent patients; consequently, the Health System derives a substantial portion of its revenue from the Medicare (federal government) and the Medical Assistance (Commonwealth of Pennsylvania, Department of Human Services [DHS]) programs.

The distribution of inpatient services provided from continuing operations (TUH, JH and AOH) based upon patient discharges (excluding newborns) by class of payor for the years ended June 30, 2016 and 2015, is as follows (unaudited):

	2016		2015	
	Discharges	%	Discharges	%
Continuing operations:				
Medical assistance:				
Fee for service	3,352	8.6 %	3,567	9.2 %
Managed care	11,848	30.5	10,430	27.0
Total medical assistance	15,200	39.1	13,997	36.2
Medicare:				
Fee for service	8,257	21.3	8,475	21.9
Managed care	7,909	20.4	7,902	20.5
Total Medicare	16,166	41.6	16,377	42.4
Independence Blue Cross*	5,010	12.9	5,228	13.5
All other	2,460	6.3	3,037	7.9
	38,836	100.0 %	38,639	100.0 %

*Includes Traditional, Personal Choice and Keystone Health Plan East insurance plans.

Health Choices is a DHS program that requires all medical assistance recipients in the Philadelphia five-county area to join a Medicaid Health Maintenance Organization ("HMO"). Under Health Choices, DHS has entered into capitation arrangements with five Medicaid HMOs, four of which the Health System contracts with, which in turn negotiate separate payment rates with health care providers. The medical assistance-managed care category above includes the four Medicaid HMOs under the Health Choices program with which the Health System contracts. The Health System grants credit without collateral to its patients, most of whom are local residents and are insured under third-party payor agreements. The mix of net receivables from third-party payors and patients at June 30, 2016 and 2015, is as follows:

	2016	2015
Medical assistance:		
Fee for service (FFS)	4.5 %	7.2 %
Managed care	16.8	15.4
Medicare (FFS only)	13.6	14.5
Independence Blue Cross	23.5	23.8
Aetna U.S. Healthcare	6.0	6.8
Commercial	8.7	9.0
Managed care/HMOs (including Medicare)	19.4	20.6
Other	7.5	2.7
	100.0 %	100.0 %

5. CHARITY CARE

The Health System maintains detailed records to identify and monitor the level of charity care it provides to its patients. Charity care costs are estimated by applying an overall cost to charge ratio to charity care charges. The cost to charge ratio is calculated by dividing total expenses by total gross patient service revenue before allowance for doubtful accounts. The estimated costs and expenses incurred to provide charity care, including the estimated unreimbursed cost of services in excess of specific payments for services rendered to Medical Assistance recipients, were $183,413,000 and $156,341,000 for the fiscal years ended June 30, 2016 and 2015, respectively (see Note 17).

6. INVESTMENTS

Assets Limited as to Use — The composition of assets limited as to use at June 30, 2016 and 2015, is set forth in the following table (in thousands):

	2016	2015
Under indenture agreements-held by trustee:		
Debt service funds	$ 24,951	$ 24,887
Debt service reserve funds	50,909	50,313
Construction fund	20,933	26,962
	96,793	102,162
Under debt agreements	225	225
Under insurance arrangements (TUHIC)	55,061	51,653
Board designated	14,420	14,401
Donor restricted	27,514	23,167
Workers' and unemployment compensation	842	1,268
Third-party reserves	-	14,969
	194,855	207,845
Less amounts required for current liabilities	42,213	56,697
	$ 152,642	$ 151,148

By security classification (in thousands):

	2016	2015
U.S. government securities	$ 92,868	$ 106,653
Fixed income mutual funds	2,083	2,337
Corporate bonds, notes, and other debt securities	12,672	14,229
Cash, money market funds, and certificates of deposit	79,910	78,538
Equity securities and mutual funds	6,971	5,708
Alternative funds	351	380
	$ 194,855	$ 207,845

Workers' Compensation Fund — Workers' compensation fund at June 30, 2016 and 2015, consisted of (in thousands):

	2016	2015
U.S. government securities	$ 8,198	$ 6,814
Corporate bonds, notes, and other debt securities	2,919	3,537
Cash, money market funds, and certificates of deposit	306	468
	$ 11,423	$ 10,819

Investments — Investments at June 30, 2016 and 2015, consisted of (in thousands):

	2016	2015
Fixed income mutual funds	$ 55,273	$ 142,570
Equity securities and mutual funds	71,949	93,831
Real estate	365	3,665
Alternative funds	21,574	14,872
Limited liability partnerships	19,244	13,282
Limited liability corporations and joint ventures	1,099	1,173
Other	806	677
	$ 170,310	$ 270,070

Investment Income — Investment income and gains (losses) from investments, including assets limited as to use and cash and cash equivalents, are comprised of the following for the years ended June 30, 2016 and 2015 (in thousands):

	2016	2015
Interest and dividend income	$ 11,343	$ 12,465
Net realized (losses) gains on sales of investments	(1,154)	3,756
Recognition of other-than-temporary impairment	(499)	(243)
Net unrealized losses	(5,595)	(5,630)
	$ 4,095	$ 10,348

Interest, dividends, realized and unrealized gains (losses) are reported as follows (in thousands):

	2016	2015
Consolidated statements of operations and changes in net assets:		
Unrestricted revenues — investment income	$ 807	$ 325
Unrestricted other income — investment income	6,591	12,301
Other changes in unrestricted net assets — net change in fair value	(5,526)	(5,587)
Temporarily restricted net assets — net unrealized losses	(51)	(43)
Temporarily restricted net assets — investment income	2,347	3,495
Permanently restricted net assets — net unrealized losses	(18)	-
Permanently restricted net assets — investment loss	(55)	(143)
	$ 4,095	$ 10,348

Unrealized gains (losses) are reported as a component of other changes in unrestricted net assets in the consolidated statements of operations and changes in net assets unless their use is restricted by donor.

The following tables provide information on the gross unrealized losses and fair market value of the Health System's investments with unrealized losses that are not deemed to be other-than-temporarily impaired, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at June 30, 2016 and 2015 (in thousands):

	At June 30, 2016					
	Less Than 12 months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Fixed income mutual funds	$ -	$ -	$ 32,000	$ (1,848)	$ 32,000	$ (1,848)
Equity securities and mutual funds	24,400	(943)	18,812	(5,058)	43,212	(6,001)
Total temporarily impaired securities	$ 24,400	$ (943)	$ 50,812	$ (6,906)	$ 75,212	$ (7,849)

	At June 30, 2015					
	Less Than 12 months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Fixed income mutual funds	$ 84,126	$(1,323)	$ 58,444	$ (578)	$ 142,570	$ (1,901)
Equity securities and mutual funds	20,149	(405)	-	-	20,149	(405)
Total temporarily impaired securities	$104,275	$(1,728)	$ 58,444	$ (578)	$ 162,719	$ (2,306)

With respect to the debt and equity securities in an unrealized loss position as of June 30, 2016 and 2015, the Health System has determined it is not more likely than not that the Health System may be required to sell its available-for-sale securities before their anticipated recoveries. In assessing the likelihood that the Health System will be required to sell a security before its anticipated recovery, the Health System considers various factors including its future cash flow requirements, legal and regulatory requirements, the level of its cash, cash equivalents, short-term investments and fixed maturity investments available-for-sale in an unrealized gain position, and other relevant factors.

In evaluating credit losses, the Health System considers a variety of factors in the assessment of a security including: (1) the time period during which there has been a significant decline below cost; (2) the extent of the decline below cost and par; (3) the potential for the security to recover in value; (4) an analysis of the financial condition of the issuer; (5) the rating of the issuer; and (6) failure of the issuer of the security to make scheduled interest or principal payments.

During fiscal years 2016 and 2015, the Health System recorded other-than-temporary impairment charges of $499,000 and $243,000, respectively, on certain investments in debt and equity securities.

TUHIC Debt Securities — At June 30, 2016 and 2015, TUHIC held investments in debt securities which are included as assets limited as to use in the Health System's consolidated balance sheets. The amortized cost and estimated fair value of debt securities at June 30, 2016 and 2015, by contractual maturity, are shown below (in thousands). Expected maturities may differ from contractual maturities because borrowers may have the right to call or repay obligations with or without call or prepayment penalties. Gross unrealized holding gains on these securities aggregated $1,078,000 and $194,000 at June 30, 2016 and 2015, respectively. Gross unrealized holding losses on these securities aggregated $6,000 and $205,000 at June 30, 2016 and 2015, respectively.

	2016		2015	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due within one year	$ 1,014	$ 1,018	$ -	$ -
Due after one year through five years	30,709	31,160	26,864	26,960
Due after five years through ten years	21,177	21,793	21,472	21,343
	52,900	53,971	48,336	48,303
Mortgage and asset-backed securities	920	922	2,282	2,304
	$ 53,820	$ 54,893	$ 50,618	$ 50,607

7. PLEDGES

As of June 30, 2016 and 2015, pledges are included in the consolidated financial statements at their net present value, less estimated uncollectible amounts, as follows (in thousands):

	2016	2015
Total value of pledges	$ 4,024	$ 5,959
Unamortized discount for gross pledges	(58)	(815)
Reserve for uncollectible pledges	-	(218)
Reported value for pledges	$ 3,966	$ 4,926

The discount rates applied to pledges were between 0.45% to 1.29% for 2016 and 6.0% for 2015.

Based upon payment schedules that are either specified by donors or estimated by the Health System, payments on pledges are due as follows (in thousands):

	2016	2015
Amounts due within one year	$ 1,677	$ 2,014
Amounts due in two to five years	2,195	2,593
Amounts due thereafter	94	319
Reported value for pledges	$ 3,966	$ 4,926

The current and long-term portion of pledges receivable are presented within other receivables and other assets, respectively, on the consolidated balance sheets.

8. GOODWILL AND OTHER INTANGIBLES

At June 30, 2015 the Health System had $22,415,000 of goodwill and other intangibles related to our affiliation with AOH and acquisitions of community-based primary care practices by TPI. Intangible assets acquired during 2016 relate to additional acquisitions by TPI of $514,000.

Goodwill and other intangibles at June 30, 2016 and 2015 are summarized as follows (in thousands):

	Goodwill	Other Intangible Assets	Total
Balance at June 30, 2015	$ 524	$ 21,891	$ 22,415
Adjustments:			
Intangible assets acquired	-	514	514
Impairment	-	(108)	(108)
Amortization	-	(946)	(946)
Balance at June 30, 2016	$ 524	$ 21,351	$ 21,875

The intangible assets with indefinite lives were $14,984,000 at June 30, 2016 and 2015. The following table summarizes intangible assets with indefinite lives at June 30, 2016 and 2015 (in thousands):

	2016		
	Gross	Impairment	Net
AOH trade name	$ 13,000	$ -	$ 13,000
Research and development of intellectual property	1,984	-	1,984
Total intangibles with indefinite lives	$ 14,984	$ -	$ 14,984

	2015		
	Gross	Impairment	Net
AOH trade name	$ 13,000	$ -	$ 13,000
Research and development of intellectual property	1,984	-	1,984
Total intangibles with indefinite lives	$ 14,984	$ -	$ 14,984

At June 30, 2016 and 2015, amortizing intangible assets were $6,367,000 and $6,907,000, respectively. The following table summarizes amortizing intangible assets at June 30, 2016 and 2015 (in thousands):

	2016			
	Gross	Accumulated Amortization	Impairment	Net
Intellectual property	$ 5,615	$ (1,648)	$ -	$ 3,967
Contracts and agreements	1,860	(580)	-	1,280
Physician contracts	2,283	(1,364)	(108)	811
Other	619	(310)	-	309
Total amortizing intangibles	$ 10,377	$ (3,902)	$ (108)	$ 6,367

	2015			
	Gross	Accumulated Amortization	Impairment	Net
Intellectual property	$ 5,615	$ (1,236)	$ -	$ 4,379
Contracts and agreements	1,860	(435)	-	1,425
Physician contracts	1,769	(1,021)	-	748
Other	619	(264)	-	355
Total amortizing intangibles	$ 9,863	$ (2,956)	$ -	$ 6,907

During fiscal year 2016, newly acquired intangible assets relate to community-based primary care practices of $514,000. The weighted average life of this newly acquired intangible asset is 3.4 years.

Aggregate amortization expense was $946,000 for the year ended June 30, 2016. Amortization expense for the next five years and thereafter is expected to be as follows (in thousands):

2017	$ 893
2018	893
2019	806
2020	593
2021	536
Thereafter	2,646
Total	$ 6,367

9. LONG-TERM DEBT

Long-term debt at June 30, 2016 and 2015, was as follows (in thousands):

	2016	2015
2012 TUHS Series A and B Hospital Revenue Bonds issued by the Hospitals and Higher Education Facilities Authority of Philadelphia (the "Authority") at fixed interest rates of 5.0%, 5.625%, and 6.25% due in installments through 2043		
Principal amount	$ 302,905	$ 311,105
Less unamortized discount, premium, debt issuance costs, and underwriter's discount	(7,154)	(7,069)
Long-term debt less unamortized discount, premium, and debt issuance costs	295,751	304,036
2007 TUHS Series A and B Hospital Revenue Bonds, issued by the Authority at fixed interest rates of 5.0% and 5.5%, due in installments through 2035		
Principal amount	203,985	206,425
Less unamortized discount, premium, and debt issuance costs	(1,278)	(1,374)
Long-term debt less unamortized discount, premium, and debt issuance costs	202,707	205,051
Loan payable to Episcopal Healthcare Foundation due in December 2020 at a fixed interest rate of 4.0%	2,748	3,294
Various capital lease obligations due in installments through 2022 at varied fixed interest rates ranging from 5.79% to 6.00%	7,696	2,335
Equipment financing arrangements due in installments through 2020 at varied fixed interest rates ranging from 1.34% to 3.80%	8,910	11,358
	517,812	526,074
Less current portion of long-term debt	17,427	15,685
	$ 500,385	$ 510,389

The bond issues and notes payable are generally collateralized by the assets and gross revenues of the TUHS Obligated Group and are subject to various financial covenants. The TUHS Obligated Group includes TUHS, TUH, JH, TPI, T3, AOH, ICR, MGI and Network. The Health System is in compliance with its debt covenants for 2016 and 2015.

At June 30, 2016, total aggregate principal payments under long-term debt and capital lease obligations for the next five years and thereafter are (in thousands):

	Long-Term Debt	Capital Leases
2017	$ 15,751	$ 1,676
2018	14,322	1,773
2019	13,661	1,821
2020	13,252	1,674
2021	12,207	715
Thereafter	449,355	37
Total	$ 518,548	$ 7,696

10. LEASE COMMITMENTS

The Health System leases certain property and equipment under operating lease agreements with remaining terms expiring at various dates through 2046. Lease expenses for 2016 and 2015 were $20,211,000 and $25,071,000, respectively.

At June 30, 2016, future minimum payments by year and in the aggregate under non-cancelable operating leases with initial or remaining terms of more than one year are as follows (in thousands):

2017	$ 11,807
2018	9,847
2019	8,005
2020	7,945
2021	6,410
Thereafter	10,400
Total	$ 54,414

11. RELATED PARTY TRANSACTIONS

Temple University — The Health System has made various transfers of unrestricted net assets to the University to be used for health-related programs and initiatives. In fiscal years 2016 and 2015, $7,680,000 and $9,680,000, respectively, in net asset transfers were recognized. In addition, the University has made transfers of unrestricted net assets to the Health System to be used for research initiatives. In fiscal years 2016 and 2015, $1,000,000 and $960,000, respectively, in net asset transfers were recognized. All of the 2016 and 2015 transfers were disbursed by June 30, 2016 and 2015, respectively.

The Health System and University allocate certain costs for services provided to each other. Costs billed to the Health System by the University in 2016 and 2015 include (in thousands):

	Health System Expense	
	2016	2015
Medical school clinical physicians	$ 89,814	$ 81,027
Maintenance	8,066	8,434
Telecommunications	6,449	6,980
Institutional support	5,369	3,324
Security	2,394	2,345
Employee tuition	1,662	1,553
Other administrative support	13,527	10,828
Total expenses billed	$ 127,281	$ 114,491

The University also billed the Health System for capital projects in the amount of $191,000 and $312,000 for the years ended June 30, 2016 and 2015, respectively.

TUH is the teaching hospital for Temple University School of Medicine and its clinical practice plan physicians (TUP). TUH purchases administrative, supervisory and teaching physician services from TUP. TUH also provides other support to TUP to further the missions of TUH and the medical school. These charges are recorded on the consolidated statements of operations and changes in net assets as a professional fee expense.

The Health System charges the University for the cost of services provided to the University. Amounts billed to the University in 2016 and 2015 include (in thousands):

	2016	2015
Salaries and fringe benefits, primarily for residents	$ 12,029	$ 12,854
Rent	6,058	4,942
Other	3,743	1,376
Total expenses billed to the University	$ 21,830	$ 19,172

Such amounts are included as other revenue or a reduction of expenses reported in the consolidated financial statements.

At June 30, 2016 and 2015, $52,497,000 and $29,422,000, respectively, are due to the University for transactions during those years and are included in accounts payable. At June 30, 2016 and 2015, $3,674,000 and $1,907,000, respectively, are due from the University for transactions during those years and are included in other receivables.

Health Partners Plans — TUH and Episcopal are participants and governing members in a Medicaid, Medicare, and Children's Health Insurance Program ("CHIP") HMO known as Health Partners Plans ("HPP"). Under certain of its contracts with HPP, the Health System is the beneficiary of, or is responsible for, allocated HPP gains and losses that are based primarily on the number of HPP members enrolled in the Health System's primary care physicians' network and other factors as approved by the HPP board.

HPP's annual premium revenues for Medicaid were $1,317,899,000 and $1,079,105,000 for fiscal years 2016 and 2015. For fiscal years 2016 and 2015, the Health System recognized a gain of $16,300,000 and $6,901,000, respectively, for Medicaid in net patient service revenue from HPP members.

HPP's annual premium revenues for Medicare were $257,082,000 and $142,438,000 for fiscal years 2016 and 2015. For fiscal years 2016 and 2015, the Health System recognized a loss of ($7,583,000) and ($4,856,000), respectively, for Medicare in net patient service revenue from HPP members.

HPP's annual premium revenues for CHIP were $16,451,000 and $15,193,000 for fiscal years 2016 and 2015. For fiscal years 2016 and 2015, the Health System recognized a loss and a gain of ($6,000) and $563,000, respectively, for CHIP in net patient service revenue from HPP members.

The Health System's estimated gains and losses are included in the accompanying consolidated statements of operations and changes in net assets as a component of net patient service revenue. The net gain recorded in 2016 and 2015 was $8,711,000 and $2,608,000, respectively.

In fiscal year 2016, the Health System obtained a letter of credit in the amount of $20,000,000, of which HPP is the beneficiary. No amounts were drawn on the letter of credit during fiscal year 2016.

12. MEDICAL PROFESSIONAL LIABILITY AND WORKERS' COMPENSATION INSURANCE

The Health System members participate in the Health System's insurance programs for medical professional liability claims. Primary coverage is provided by an insurance company and reinsured to TUHIC.

Because primary losses are reinsured through TUHIC, primary losses are essentially self-insured up to certain limits, which are coordinated with statutory excess coverage provided through the Pennsylvania Medical Care Availability and Reduction of Error Fund ("MCare Fund"). Also, additional excess liability coverage has been obtained through a commercial insurance carrier.

The Health System accrues liabilities for the estimated losses on asserted and unasserted claims. The discount rate used in determining the liability at June 30, 2016 and 2015, was 1.25% and 1.50%, respectively. The liabilities are comprised of asserted claims for self-insured components of the program and accruals for unasserted claims. Asserted claims are specifically identified, with actuarial determination of the ultimate liability on asserted and unasserted claims based on claims settlement history. The estimated discounted liability accrued for asserted and unasserted claims for the Health System was $120,197,000 and $136,706,000 at June 30, 2016 and 2015, respectively. The estimated liability accrued for asserted and unasserted claims for TUHIC was $31,341,000 and $37,595,000 at June 30, 2016 and 2015, respectively. The Health System incurred net medical professional liability insurance expense of $18,681,000 and $11,266,000 in 2016 and 2015, respectively. These costs are recorded in the consolidated statements of operations and changes in net assets as insurance expense.

The activity in the liability for claims reported and claims incurred but not reported for TUHIC for the years ended June 30, 2016 and 2015, is summarized as follows (in thousands):

	2016	2015
Outstanding	$ 14,660	$ 13,321
Incurred but not reported	16,681	24,274
	$ 31,341	$ 37,595
Balance — July 1	$ 37,595	$ 37,399
Incurred related to current year	14,313	14,140
Incurred related to prior year	(10,852)	(4,356)
	3,461	9,784
Paid related to current year	249	125
Paid related to prior year	9,466	9,463
	9,715	9,588
Net balance — June 30	$ 31,341	$ 37,595

As a result of changes in estimates of insured events in prior years, loss and loss adjustment expenses relating to prior years decreased by ($10,852,000) for the year ended June 30, 2016 and decreased by ($4,356,000) for the year ended June 30, 2015.

TUHIC is registered under the Bermuda Insurance Act of 1978, amendments thereto and the Related Regulations (the "Insurance Act") and is obliged to comply with various provisions of the Insurance Act regarding solvency and liquidity. The minimum required statutory capital and surplus at June 30, 2016 and 2015, was $3,134,000 and $3,760,000, respectively, and the actual statutory capital and surplus was $25,272,000 and $18,042,000, respectively. The minimum required level of liquid assets was

$26,459,000 and $34,009,000 and actual liquid assets were $60,551,000 and $63,387,000 at June 30, 2016 and 2015, respectively.

The Health System is primarily self-insured for workers' compensation. Program assets at June 30, 2016 and 2015, were $11,788,000 and $11,138,000, respectively. Program liabilities were determined using a discount rate of 1.50% and 2.25% for fiscal years 2016 and 2015, respectively. The estimated discounted liability accrued at June 30, 2016 and 2015, was $25,301,000 and $26,872,000, respectively. Workers' compensation expense was $6,440,000 and $6,109,000 for fiscal years 2016 and 2015, respectively. These costs are recorded in the consolidated statements of operations and changes in net assets as employee benefit expense.

The Health System follows ASU 2010-24, which clarifies that a health care entity should not net insurance recoveries against a related claim liability. The ASU requires that the ultimate costs of claims or similar contingent liabilities shall be accrued when the incidents that give rise to the claims occur. This guidance also requires recognition of additional offsetting assets and liabilities on the balance sheet relating to workers' compensation and medical professional liability recoveries and claims. The current and long-term asset balances recorded due to this guidance are reflected on the consolidated balance sheets as current portion of self-insurance program receivables and self-insurance program receivables, while the offsetting liabilities are reflected within current portion of self-insurance liabilities and self-insurance liabilities. The amounts below are also included in the disclosure of liabilities within this footnote above. The balances recorded for the years ended June 30, 2016 and 2015 are summarized as follows (in thousands):

	2016			2015		
	Current	Long-Term	Total	Current	Long-Term	Total
Workers' Compensation:						
Open Reserves in excess of retention	$ -	$ 1,987	$ 1,987	$ -	$ 2,343	$ 2,343
Incurred but not recorded reserves in excess of retention	-	1,088	1,088	-	1,567	1,567
Professional Liability:						
Claims settled within the MCare Layer	2,000	-	2,000	2,500	-	2,500
Open Reserves within the MCare Layer	-	6,283	6,283	-	5,000	5,000
Incurred but not recorded reserves in excess of the MCare Layer	-	6,326	6,326	-	7,455	7,455
Incurred but not recorded reserves in excess of the Buffer Layer	-	767	767	-	603	603
	$ 2,000	$ 16,451	$ 18,451	$ 2,500	$ 16,968	$ 19,468

13. PENSION AND OTHER POSTRETIREMENT BENEFITS

The Health System sponsors various defined benefit plans at the individual affiliate level based on prescribed eligibility requirements and certain Health System employees participate in the University's defined benefit plan. In addition, certain Health System members participate in the defined contribution retirement plans and defined benefit retirement plans for eligible employees that provide benefits through contributions made by the Health System and its employees. Beginning January 1, 2007, the Health System established new defined contribution plans for its employees and no longer actively participated in the University's defined contribution plans. Also, on November 1, 2007, the last of the TUHS defined benefit retirement plans was closed to new participants; only certain grandfathered employees are eligible to participate in the defined benefit pension plans. These employees are not eligible to participate in the Health System's defined contribution plans.

The Health System makes contributions to participants' accounts under the Health System's defined contribution plans based on a defined percentage of the employee's base wages and length of service. The Health System contributions to the plans for fiscal years 2016 and 2015 were $25,807,000 and $24,005,000, respectively. Contributions to the plans for fiscal year 2017 are expected to be $28,253,000.

Multiemployer Plans — Also, certain Health System employees participate in multiemployer pension plans based on collective-bargaining agreements. The Health System contributes to two multiemployer pension plans under the terms of collective-bargaining agreements that cover these union-represented employees. The risks of participating in these multiemployer plans are different from a single-employer plan in the following aspects:

a. Assets contributed to the multiemployer plan by one employer may be used to provide benefits to employees of other participating employers.

b. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers.

c. If the Health System chooses to stop participating in one or both of its multiemployer plans, the Company may be required to pay that plan(s) an amount based on the underfunded status of the plan(s), referred to as a withdrawal liability.

The Health System's participation in these plans for the annual period ended June 30, 2016, is outlined in the table below. The "EIN/Pension Plan Number" column provides the Employer Identification Number (EIN) and the three-digit plan number, if applicable. The most recent Pension Protection Act (PPA) zone status available in 2016 and 2015 is also noted below. The zone status is based on information that the Health System received from the plan and is certified by the plan's actuary. Among other factors, plans in the red zone are generally less than 65% funded, plans in the yellow zone are less than 80% funded, and plans in the green zone are at least 80% funded. The "FIP/RP Status Pending/Implemented" column indicates plans for which a financial improvement plan (FIP) or a rehabilitation plan (RP) is either pending or has been implemented. The last column lists the expiration date(s) of the collective-bargaining agreement(s) to which the plans are subject.

Pension Fund	EIN/Pension Plan Number	Pension Protection Act Zone Status 2016	Pension Protection Act Zone Status 2015	FIP/RP Status Pending/ Implemented	Contributions of TUHS 2016	Contributions of TUHS 2015	Surcharge Imposed	Expiration Date of Collective Bargaining Agreement
The Pension Fund for Hospital and Health Care Employees Philadelphia and Vicinity (1)	23-2627428/001	Red	Yellow	Yes	$ 5,819,000	$ 4,991,000	Yes	Various up to 2018
Central Pension Fund of the International Union of Operating Engineers and Participating Employers (2)	36-6052390/001	Green	Green	No	94,000	97,000	No	November 2018
				Total contributions	$ 5,913,000	$ 5,088,000		

(1) Plan years began 1/1/16 and 1/1/15
(2) Plan years began 2/1/16 and 2/1/15

The Health System was listed in its plan's Form 5500 as providing more than 5% of the total contributions for the following plan and plan year:

Pension Fund	Exceeded More Than 5% of Total Contributions (as of December 31 of the Plan's Year End)
The Pension Fund for Hospital and Health Care Employees — Philadelphia and Vicinity	2015

At the date these consolidated financial statements were issued, Forms 5500 were not available for the plan year ending in 2016.

Certain Health System employees participate in the University's postretirement health and life insurance plan. Benefits begin for eligible employees at age 62, and upon the accumulation of 10 years' service.

Postretirement Health Care Plan Trends — For measurement purposes, 6.6% and 11.0% annual rates of increase in the per-capita cost of postretirement benefits were assumed for 2016 for the shared plan of the Health System and University and the AOH and Affiliates plan, respectively, compared to the rates of 7.0% and 7.2% for 2015. For 2016, these rates are assumed to decrease gradually to 4.5% in 2028 and 4.5% in 2026, respectively, and to remain at those levels thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement benefit plan. A one-percentage-point change in assumed health care cost trend rates would have the following effects on the year ended June 30, 2016 (in thousands) for all Health System and University participants:

	1% Increase	1% (Decrease)
Incremental effect on total of service and interest cost components	$ 5,348	$ (4,323)
Incremental effect on postretirement benefit obligation	59,454	(50,013)

Defined Benefit Pension, Defined Contribution and Postretirement Benefit Plans — Total defined benefit pension, defined contribution, and other postretirement benefit plans expense under all Health System programs amounted to $37,784,000 and $33,282,000 for the fiscal years ended June 30, 2016 and 2015, respectively.

The following table sets forth the activity of the pension and other postretirement benefit plans (which includes the joint Health System and University plans) as of and for the years ended June 30, 2016 and 2015 (dollars in thousands). A measurement date of June 30 is used for the plans.

	Pensions		Other Postretirement Benefit Plan	
	2016	2015	2016	2015
Change in benefit obligation:				
Benefit obligation — beginning of year	$ 191,079	$ 180,582	$ 418,619	$ 406,635
Affiliation impact	-	-	-	-
Service cost	2,203	2,422	15,378	15,957
Interest cost	8,728	7,706	18,376	17,320
Plan participant contributions	205	189	2,274	2,409
Actuarial (gain) loss	20,238	8,843	17,127	(6,045)
Benefits paid	(7,864)	(7,474)	(17,163)	(17,657)
Administrative expenses paid	(1,178)	(1,189)	-	-
Settlement	(24)	-	-	-
Benefit obligation — end of year	213,387	191,079	454,611	418,619
Change in plan assets:				
Fair value of plan assets — beginning of year	158,383	161,591	290,465	301,551
Actual return on plan assets	303	1,392	(5,170)	(3,597)
Employer contributions	2,298	3,874	13,400	7,759
Plan participant contributions	205	189	2,274	2,409
Plan expenses	(1,178)	(1,189)	-	-
Benefits paid	(7,864)	(7,474)	(17,163)	(17,657)
Fair value of plan assets — end of year	152,147	158,383	283,806	290,465
Funded status	(61,240)	(32,696)	(170,805)	(128,154)
Less University prepaid (accrued) cost	(6,325)	(2,759)	(131,229)	(97,361)
Net funded status — TUHS Only	$ (54,915)	$ (29,937)	$ (39,576)	$ (30,793)
Amount recognized in the balance sheets, include:				
Other noncurrent assets	$ -	$ 2,113	$ -	$ -
Other current liabilities	-	-	(535)	(598)
Accrued postretirement benefits — noncurrent	(54,915)	(32,050)	(39,041)	(30,195)
Net funded status — TUHS Only	$ (54,915)	$ (29,937)	$ (39,576)	$ (30,793)

	Pensions		Other Postretirement Benefit Plan	
	2016	2015	2016	2015
Amounts recognized in unrestricted net assets:				
Prior service cost (credit)	$ -	$ -	$ (2,740)	$ (6,294)
Net actuarial loss	103,278	81,310	27,633	18,965
Net amount recognized in unrestricted net assets	$ 103,278	$ 81,310	$ 24,893	$ 12,671
Weighted-average assumptions to determine benefit obligation:				
Discount rate	3.36%-4.02%	4.45%-4.65%	2.34%-3.83%	2.95%-4.50%
Rate of compensation increase	2.50%-3.00%	3.00%-4.00%	N/A	N/A
Weighted-average assumptions to determine net periodic cost:				
Discount rate	4.45%-4.65%	4.25%-4.50%	2.95%-4.50%	2.65%-4.35%
Rate of compensation increase	3.00%-4.00%	3.00%–4.00%	N/A	N/A
Expected return on plan assets	6.50%-7.00%	6.50%–7.50%	7.50%	7.50%
Components of net periodic cost (benefit):				
Service cost	$ 2,203	$ 2,422	$ 15,378	$ 15,957
Interest cost	8,727	7,706	18,376	17,320
Expected return on plan assets	(10,731)	(10,391)	(21,617)	(22,309)
Amortization	-	1	(6,916)	(8,092)
Recognized net actuarial loss	5,759	4,961	4,403	2,718
Settlement	256	-	-	-
Net periodic cost	6,214	4,699	9,624	5,594
Less: University net periodic cost	(906)	(709)	-	(5,395)
TUHS net periodic cost	$ 5,308	$ 3,990	$ 9,624	$ 199

The estimated net actuarial loss for the defined benefit plans that will be amortized from unrestricted net assets into net periodic benefit cost in fiscal year 2017 is $6,802,000. The estimated net actuarial loss and net prior service credit for the postretirement health and life insurance plan that will be amortized from unrestricted net assets into net periodic benefit cost in fiscal year 2017 is $9,802,000 and $2,491,000, respectively.

Effective July 1, 2016, the Health System will change the method used to estimate the service and interest costs for pension and postretirement benefits. The new method utilizes a full yield curve approach to estimate service and interest costs by applying specific spot rates along the yield curve used to determine the benefit obligation of relevant projected cash outflows. The Health System made the change to provide a more precise measurement of service and interest costs by aligning the timing of the plan's liability cash flows to the corresponding spot rate on the yield curve. The change does not impact the measurement of the plan's obligations. The Health System has accounted for this change as a change in accounting estimate and it will be applied prospectively starting in 2017.

Assets Allocations — The following details the Health System's defined benefit plans asset allocations:

Pension Plans Assets	Target Allocation Fiscal Year Ending June 30, 2017	Percentage of Plan Assets at June 30, 2016	Percentage of Plan Assets at June 30, 2015
Equity funds and alternative funds	68-95%	70 %	76 %
Cash and fixed income	5-32%	30	24
Total		100 %	100 %

The following details the University-sponsored pension and other postretirement defined benefit plan asset allocations:

Pension and Other Postretirement Benefit Plan Assets	Target Allocation Fiscal Year Ending June 30, 2017	Percentage of Plan Assets at June 30, 2016	Percentage of Plan Assets at June 30, 2015
Equity funds and securities	25-75%	67 %	73 %
Cash and fixed income	25-75%	33	27
Total		100 %	100 %

Investment Strategy — The long-term investment strategy for pension and other postretirement benefit plans assets is to: meet present and future benefit obligations to all participants and beneficiaries; cover reasonable expenses incurred to provide such benefits; and provide a total return that maximizes the ratio of assets to liabilities by maximizing investment return at the appropriate level of risk.

The pension plans assets of the joint Health System and Temple University plans were $152,147,000 and $158,383,000 at June 30, 2016 and 2015, respectively. The fair values of the pension plan assets at June 30, 2016, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 3,936	$ -	$ -	$ 3,936
Equity funds and securities	59,157	10,103	-	69,260
Alternative funds	-	-	4,855	4,855
Fixed income mutual funds	60,107	-	-	60,107
Limited partnerships	-	2,488	11,501	13,989
Total market value	$ 123,200	$ 12,591	$ 16,356	$ 152,147

The fair values of the pension plan assets at June 30, 2015, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 3,170	$ -	$ -	$ 3,170
Equity funds and securities	75,500	10,768	-	86,268
Alternative funds	-	-	3,459	3,459
Fixed income mutual funds	53,957	-	-	53,957
Limited partnerships	-	2,264	9,265	11,529
Total market value	$ 132,627	$ 13,032	$ 12,724	$ 158,383

Transfers between Levels 1 and 2 — During the years ended June 30, 2016 and 2015, there were no transfers between Levels 1 and 2.

Transfers into or out of Level 3 — Transfers into or out of Levels are reflected as of the beginning of the period when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable / unobservable, or when the Health System determines it has the ability, or no longer has the ability, to redeem in the near term certain investments that the Health System values using a NAV (or a capital account).

The following is a reconciliation of investments in securities for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2016:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)								
		Total Realized/Unrealized Gains (Losses) Included in:							
	Balance, July 1	Net Income	Net Assets	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3	Transfers Between Categories	Balance, June 30
Year Ended June 30, 2016:									
Alternative funds	$ 3,459	$ 56	$ 411	$ -	$ (250)	$ 4,413	$ -	$ (3,234)	$ 4,855
Limited partnerships	9,265	-	(998)	-	-	-	-	3,234	$ 11,501
Total investments	$ 12,724	$ 56	$ (587)	$ -	$ (250)	$ 4,413	$ -	$ -	$ 16,356

The following is a reconciliation of investments in securities for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2015:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	Balance, July 1	Net Income	Net Assets	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3	Balance, June 30
Year Ended June 30, 2015:								
Alternative funds	$ 6,872	$ 408	$ 141	$ 130	$ (4,092)	$ -	$ -	$ 3,459
Limited partnerships	8,681	-	288	296	-	-	-	$ 9,265
Total investments	$ 15,553	$ 408	$ 429	$ 426	$ (4,092)	$ -	$ -	$ 12,724

Detailed information for Level 2 and Level 3 investments as of June 30, 2016 and 2015, follows. The fair values of these investments have been estimated using a net asset value equivalent (e.g. ownership interest in partners' capital to which a proportionate share of net assets is attributable).

	Fair Value (In Thousands)	Unfunded Commitments (In Thousands)	Redemption Frequency (If Currently Eligible)	Redemption Notice Period (If Applicable)
As of June 30, 2016:				
Cash*	$ 140	$ -	Quarterly	90 days
Multi-Strategy Hedge Funds (a)	14,138	-	Daily, Quarterly	0–95 days
Distressed Debt Hedge Funds (b)	364	-	Quarterly	65–90 days
Private Equity Funds (c)	23	-	Quarterly	90 days
Global/Macro Hedge Funds (d)	749	-	Quarterly	90 days
Real Estate Funds (e)	7,343	-	Monthly, Quarterly	30–45 days
Equity Funds (f)	6,190	-	Daily	0 days
	$ 28,947	$ -		
As of June 30, 2015:				
Multi-Strategy Hedge Funds (a)	$ 16,558	$ -	Daily, Quarterly	0–95 days
Real Estate Funds (e)	6,677	-	Monthly, Quarterly	45 days
	$ 23,235	$ -		

* Cash holdings of underlying managers

(a) This category includes investments that seek to earn above-average, risk adjusted, long-term returns that have a low correlation to traditional equity and fixed income markets. The investments include futures contracts, call options, warrants and structured products all of which are referenced as derivative instruments.

(b) This category includes investments in hedge funds that invest in debt obligations of distressed companies at a discount and sell the obligations following reorganization or restructuring of the companies.

(c) This category includes real estate loans and non-public company equity and debt securities.

(d) This category includes investments in a broad diversity of asset classes and geographic markets. They may invest in the equity, global fixed income, currency and commodity sectors.

(e) This category includes investments that maintain exposure to real estate and natural resources through public and private investments whose value is strongly controlled by commodities and real estate and may act as a hedge against unanticipated inflation.

(f) This category includes investments in U.S., International Developed Markets and Emerging Markets equities via commingled funds and index funds. The funds seek to balance the long term growth of capital with income and high total return.

The postretirement plan assets of the joint Health System and Temple University were $283,806,000 and $290,465,000 at June 30, 2016 and 2015, respectively, of which only a portion of this pool of assets belongs to the Health System. The fair values of the postretirement plan assets at June 30, 2016, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 6,974	$ -	$ -	$ 6,974
Equity funds and securities	133,885	24,581	-	158,466
Fixed income index funds	-	67,457	-	67,457
Limited partnerships	-	8,392	42,517	50,909
Total market value	$ 140,859	$ 100,430	$ 42,517	$ 283,806

The fair values of the postretirement plan assets at June 30, 2015, by asset category are as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 5,798	$ -	$ -	$ 5,798
Equity funds and securities	134,386	30,623	-	165,009
Fixed income index funds	-	73,459	-	73,459
Limited partnerships	-	-	46,199	46,199
Total market value	$ 140,184	$ 104,082	$ 46,199	$ 290,465

The following is a reconciliation of investments in securities for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2016:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	Balance, July 1	Net Income	Net Assets	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3	Balance, June 30
Year Ended June 30, 2016:								
Limited partnerships	$46,199	$ -	$(3,682)	$ -	$ -	$ -	$ -	$42,517
Total investments	$46,199	$ -	$(3,682)	$ -	$-	$ -	$ -	$42,517

The following is a reconciliation of investments in securities for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2015:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	Balance, July 1	Net Income	Net Assets	Purchases	Sales	Transfers Into Level 3	Transfers Out of Level 3	Balance, June 30
Year Ended June 30, 2015:								
Limited partnerships	$28,610	$ -	$1,839	$ 15,750	$ -	$ -	$ -	$46,199
Total investments	$28,610	$ -	$1,839	$ 15,750	$-	$ -	$ -	$46,199

Detailed information for Level 2 and Level 3 investments as of June 30, 2016 and 2015, follows. The fair values of these investments have been estimated using a net asset value equivalent (e.g. ownership interest in partners' capital to which a proportionate share of net assets is attributable).

	Fair Value (In Thousands)	Unfunded Commitments (In Thousands)	Frequency (If Currently Eligible)	Notice Period (If Applicable)
As of June 30, 2016:				
Cash*	$ 1,385	$ -	Quarterly	90 days
Multi-Strategy Hedge Funds (a)	29,996	-	Quarterly	65–90 days
Distressed Debt Hedge Funds (b)	3,563	-	Quarterly	65–90 days
Private Equity Funds (c)	227	-	Quarterly	90 days
Global/Macro Hedge Funds (d)	7,346	-	Quarterly	90 days
Real Estate Funds (e)	8,392	-	Monthly	30 days
Fixed Income Funds (f)	67,457	-	Daily	2–6 days
Equity Funds (g)	24,581	-	Daily	0 days
	$ 142,947	$ -		
As of June 30, 2015:				
Multi-Strategy Hedge Funds (a)	$ 46,199	$ -	Quarterly	65–90 days
	$ 46,199	$ -		

* Cash holdings of underlying managers

(a) This category includes investments that seek to earn above-average, risk adjusted, long-term returns that have a low correlation to traditional equity and fixed income markets. The investments include futures contracts, call options, warrants and structured products all of which are referenced as derivative instruments.

(b) This category includes investments in hedge funds that invest in debt obligations of distressed companies at a discount and sell the obligations following reorganization or restructuring of the companies.

(c) This category includes real estate loans and non-public company equity and debt securities.

(d) This category includes investments in a broad diversity of asset classes and geographic markets. They may invest in the equity, global fixed income, currency and commodity sectors.

(e) This category includes investments that maintain exposure to real estate and natural resources through public and private investments whose value is strongly controlled by commodities and real estate and may act as a hedge against unanticipated inflation.

(f) This category includes investments in intermediate and long term U.S. government securities and credit securities and U.S. fixed income index funds and commingled funds.

(g) This category includes investments in U.S., International Developed Markets and Emerging Markets equities via commingled funds and index funds. The funds seek to balance the long term growth of capital with income and high total return.

Expected Return on Plan Assets — The expected long-term rate of return for the plans' total assets is based on the expected return of each of the above investment categories, weighted based on the median of the target allocation for each class. Equity securities are expected to return 5.5% to 11.0% over the long-term, while fixed income is expected to return between 2.25% and 6.5%.

Expected Cash Flows — The following table shows expected cash flows related to the defined benefit pension and other postretirement benefit plans (in thousands):

	Pension Plans TU/ Health System	Other Postretirement Benefit Plan TU/ Health System
Expected Health System contributions for fiscal year ending June 30, 2017:		
Expected employer contributions	$ 13,917	$ 20,933
Expected employee contributions	-	2,302
Estimated future benefit payments from plan assets reflecting expected future service for the fiscal year ending June 30:		
2017	8,699	18,426
2018	9,383	19,277
2019	9,657	20,483
2020	10,078	21,546
2021	10,490	22,675
2022 to 2026	58,903	124,976

14. ENDOWMENT

The Health System's endowment consists of several funds established for a variety of purposes. As required by GAAP, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

Interpretation of Relevant Law — The Health System classifies as permanently restricted net assets (a) the original value of the gifts donated to the permanent endowment when explicit donor stipulations requiring permanent maintenance of the historical fair value are present, and (b) the original value of the subsequent gifts to the permanent endowment when explicit donor stipulations requiring permanent maintenance of the historical fair value are present. The remaining portion of the donor-restricted endowment fund comprised of accumulated investment earnings not required to be maintained in perpetuity is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Health System in a manner consistent with the donor's stipulations. The Health System considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds: duration and preservation of the fund, purposes of the donor-restricted endowment funds, general economic conditions, the possible effect of inflation and deflation, the expected total return from income and the appreciation of investments, other resources of the Health System, and the investment policies of the Health System.

Endowment net asset composition by type of fund as of June 30, 2016 (in thousands):

	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	$ 8,985	$ 10,680	$ 19,665

Endowment net asset composition by type of fund as of June 30, 2015 (in thousands):

	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	$ 9,090	$ 9,810	$ 18,900

Changes in endowment net assets for the fiscal years ended June 30, 2016 and 2015 (in thousands):

	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets — June 30, 2014	$ 8,543	$ 7,710	$ 16,253
Contributions	-	1,498	1,498
Investment return — investment income	3,451	(143)	3,308
Appropriations of endowment assets for expenditure	(2,904)	-	(2,904)
Interfund transfers	-	745	745
Endowment net assets — June 30, 2015	9,090	9,810	18,900
Contributions	-	943	943
Investment return — investment income	2,295	(73)	2,222
Appropriations of endowment assets for expenditure	(2,400)	-	(2,400)
Endowment net assets — June 30, 2016	$ 8,985	$ 10,680	$ 19,665

From time to time, the fair value of assets associated with individual donor restricted endowment funds may fall below the level that the donor requires the Health System to retain as a fund of perpetual duration. There were no such deficiencies at June 30, 2016 and 2015.

Investment Return Objectives and Spending Policy — The Health System has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to the programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets. Under this policy, as approved by the Board of Directors, the endowment assets are invested in a manner to generate returns at least equal to and preferably greater than the consumer price index plus 4.5%. To satisfy its long-term rate-of-return objectives, the Health System targets a diversified asset allocation that places a greater emphasis on equity based investments within prudent risk constraints.

The Health System has a policy of appropriating for distribution each year 2% to 7% of its endowment fund's average fair value over the prior three years. The Board of Directors approved an appropriation of 4.5% for each of the years ended June 30, 2016 and 2015, respectively.

15. TEMPORARILY AND PERMANENTLY RESTRICTED NET ASSETS

Temporarily restricted net assets were held for the following purposes at June 30, 2016 and 2015 (in thousands):

	2016	2015
Property and equipment additions	$ 850	$ 1,225
Specific health care programs	23,379	22,983
	$ 24,229	$ 24,208

Permanently restricted net assets consist of the following at June 30, 2016 and 2015 (in thousands):

	2016	2015
Beneficial interest in perpetual trusts, income from which is expendable to support health care services (income reported as unrestricted)	$ 37,572	$ 39,900
Beneficial interest in assets held by Episcopal Foundation	22,836	23,773
Beneficial interest in assets held by Fox Chase Cancer Center Foundation	44,769	49,189
	105,177	112,862
Endowment funds, income from which is expendable for specific health care programs (income is temporarily restricted)	10,680	9,810
	$ 115,857	$ 122,672

The Episcopal Healthcare Foundation (the "EH Foundation") controls certain investments that, according to its organizational structure, are held for the benefit of TUH's Episcopal campus operations. TUH has recognized the fair market value of investments held by the EH Foundation as an asset (beneficial interest in the assets held by Episcopal Foundation) and permanently restricted net assets of $22,836,000 and $23,773,000 at June 30, 2016 and 2015, respectively.

The Fox Chase Cancer Center Foundation (the "FCCC Foundation") controls certain investments that, according to its organizational structure, are held for the benefit of ICR's research operations and AOH's clinical operations. ICR and AOH have recognized the fair market value of investments held by the FCCC Foundation as an asset (beneficial interest in the assets held by Fox Chase Cancer Center

Foundation) and permanently restricted net assets of $44,769,000 and $49,189,000 at June 30, 2016 and 2015, respectively.

As reported by the respective trustees, the composition of the above funds in which the Health System has a beneficial interest is approximately 68% and 81% marketable equity securities and 32% and 19% fixed income securities at June 30, 2016 and 2015, respectively.

16. COMMITMENTS AND CONTINGENCIES

The Commonwealth of Pennsylvania owns the land upon which certain TUH facilities are located. The land is leased to the University for a term ending December 31, 2043, for a nominal rent. The University subleases these facilities to TUH.

The Friends Fiduciary Corporation owns the land upon which the JH facilities are located. The land is leased to JH for a term ending June 30, 2046, for a nominal rent.

There are reversionary rights held by the land grantor, Friends Fiduciary Corporation, in certain deeds to the properties that make up the main campus of Fox Chase Cancer Center. The grantor may exercise its reversionary rights if ICR or AOH, respectively, no longer manages, operates and controls the premises or if the premises are no longer used for permitted purposes.

JH has committed to making $207,000 in additional investments at June 30, 2016, into partnerships (a private equity fund and a real estate fund), which may be requested through capital calls from the partnerships. Detail regarding the unfunded commitments is disclosed in Notes 13 and 18.

TUHIC holds cash and investments in debt securities in the amount of $55,061,000 and $51,653,000 as of June 30, 2016 and 2015, respectively, which are being held in trust in order to secure TUHIC's liabilities under certain reinsurance contracts.

In addition, the Health System is involved in litigation and regulatory investigations arising in the course of business. After consultation with legal counsel, management estimates that these matters will be resolved without material adverse effect on the Health System's financial position, results of operations, or cash flows.

17. COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF HUMAN SERVICES GRANTS AND OTHER SUPPORT

The Health System receives grants and support primarily related to providing access to health care services, including care for the uninsured and indigent population (see Note 5). These grants and other support payments are included in net patient service revenue in the accompanying consolidated statements of operations and changes in net assets. To the extent that these grants and other support payments are dependent on a provider tax from the hospitals, those expenses are included in purchased services and other in the accompanying consolidated statements of operations and changes in net assets. There is no guarantee that this funding will continue in future years. Under certain circumstances, the Health System could be required to repay certain of the grants received from the Commonwealth. Management believes that the likelihood of such repayment is remote.

Grants and support received from the Commonwealth for the fiscal years ended June 30, 2016 and 2015, including any provider tax expenses, are as follows:

	2016	2015
Base supplemental revenues	$ 80,562,182	$ 93,312,513
State and local hospital assessment revenues	87,900,254	64,337,044
State and local hospital assessment expenses	(48,160,121)	(45,839,000)
Net state and local hospital assessment program	39,740,133	18,498,044
Academic Health Center	6,209,772	6,210,000
Total net supplemental funding	$ 126,512,087	$ 118,020,557

18. FAIR VALUE MEASUREMENTS

FASB ASC Topic 820, which defines fair value, provides a framework for measuring fair value, and expands disclosures required for fair value measurements.

FASB ASC Topic 820 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, FASB ASC Topic 820 establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity's own assumption about market participant assumptions (unobservable inputs classified within Level 3 of the hierarchy).

FASB ASC Topic 820 classifies the inputs used to measure fair value into the following hierarchy:

Level 1 — Level 1 inputs are quoted prices in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 — Level 2 inputs include the following:

- Quoted prices in active markets for similar assets or liabilities.
- Quoted prices in markets that are not active for identical or similar assets or liabilities.
- Inputs other than quoted prices, that are observable for the asset or liability.
- Inputs that are derived primarily from or corroborated by observable market data by correlation or other means.

Level 3 — Level 3 inputs are unobservable inputs for the asset or liability.

The following table sets forth, by level within the fair value hierarchy, the financial assets and liabilities recorded at fair value on a recurring basis as of June 30, 2016 (in thousands):

Assets	Level 1	Level 2	Level 3	Total
Assets limited as to use:				
U.S. government securities	$ 82,104	$ 10,764	$ -	$ 92,868
Fixed income mutual funds	2,083	-	-	2,083
Corporate bonds, notes, and other debt securities	-	12,672	-	12,672
Cash, money market funds, and certificates of deposit	79,203	707	-	79,910
Equity securities and mutual funds	6,971	-	-	6,971
Alternative funds	-	-	351	351
	170,361	24,143	351	194,855
Workers' Compensation Fund:				
U.S. government securities	7,981	217	-	8,198
Corporate bonds, notes, and other debt securities	-	2,919	-	2,919
Cash, money market funds, and certificates of deposit	306	-	-	306
	8,287	3,136	-	11,423
Investments:				
Fixed income mutual funds	55,273	-	-	55,273
Equity securities and mutual funds	71,949	-	-	71,949
Real estate	-	365	-	365
Alternative funds	-	11,403	10,171	21,574
Limited liability partnerships	-	16,915	1,208	18,123
	127,222	28,683	11,379	167,284
Beneficial interest in perpetual trusts	-	-	37,572	37,572
Beneficial interest in the assets held by Episcopal Foundation	-	-	22,836	22,836
Beneficial interest in the Fox Chase Cancer Center Foundation	-	-	44,769	44,769
Total	$ 305,870	$ 55,962	$ 116,907	$ 478,739

The following table sets forth, by level within the fair value hierarchy, the financial assets recorded at fair value on a recurring basis as of June 30, 2015 (in thousands):

Assets	Level 1	Level 2	Level 3	Total
Assets limited as to use:				
U.S. government securities	$ 34,347	$ 72,306	$ -	$ 106,653
Fixed income mutual funds	2,337	-	-	2,337
Corporate bonds, notes, and other debt securities	-	14,229	-	14,229
Cash, money market funds, and certificates of deposit	77,407	1,131	-	78,538
Equity securities and mutual funds	5,708	-	-	5,708
Alternative funds	-	-	380	380
	119,799	87,666	380	207,845
Workers' Compensation Fund:				
U.S. government securities	5,498	1,316	-	6,814
Corporate bonds, notes, and other debt securities	-	3,537	-	3,537
Cash, money market funds, and certificates of deposit	468	-	-	468
	5,966	4,853	-	10,819
Investments:				
Fixed income mutual funds	142,570	-	-	142,570
Equity securities and mutual funds	93,831	-	-	93,831
Real estate	-	3,665	-	3,665
Alternative funds	-	7,700	7,172	14,872
Limited liability partnerships	-	10,663	1,598	12,261
	236,401	22,028	8,770	267,199
Beneficial interest in perpetual trusts	-	-	39,900	39,900
Beneficial interest in the assets held by Episcopal Foundation	-	-	23,773	23,773
Beneficial interest in the Fox Chase Cancer Center Foundation	-	-	49,189	49,189
Total	$ 362,166	$ 114,547	$ 122,012	$ 598,725

Transfers between Levels 1 and 2 — During the year ended June 30, 2016 and 2015, there were no transfers between Levels 1 and 2.

Transfers into or out of Level 3 — Transfers in and/or out of Levels are reflected as of the beginning of the period when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable/unobservable, or when the Health System determines it has the ability, or no longer has the ability, to redeem in the near term certain investments that the Health System values using a NAV (or a capital account).

The following is a reconciliation of financial instruments for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2016:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	July 1, 2015	Net Income (Loss)	Net Asset	Purchases	Sales	Transfer Into Level 3	Transfer Out of Level 3	June 30, 2016
Year ended June 30, 2016:								
Assets — investments:								
Alternative funds	$ 7,552	$ (832)	$ -	$ 3,802	$ -	$ -	$ -	$ 10,522
Limited liability partnerships	1,598	120	-	-	(510)	-	-	1,208
Total investments	$ 9,150	$ (712)	$ -	$ 3,802	$ (510)	$ -	$ -	$ 11,730
Beneficial interest in perpetual trusts	$ 39,900	$ -	$ (2,328)	$ -	$ -	$ -	$ -	$ 37,572
Beneficial interest in the assets held by Episcopal Foundation	$ 23,773	$ -	$ (937)	$ -	$ -	$ -	$ -	$ 22,836
Beneficial interest in Fox Chase Cancer Center Foundation	$ 49,189	$ -	$ (4,420)	$ -	$ -	$ -	$ -	$ 44,769

The following is a reconciliation of financial instruments for which significant unobservable inputs (Level 3) were used in determining fair value (in thousands) for the year ended June 30, 2015:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
		Total Realized/Unrealized Gains (Losses) Included in:						
	July 1, 2014	Net Income (Loss)	Net Asset	Purchases	Sales	Transfer Into Level 3	Transfer Out of Level 3	June 30, 2015
Year ended June 30, 2015:								
Assets — investments:								
Alternative funds	$ 10,877	$ 549	$ -	$ -	$ (3,874)	$ -	$ -	$ 7,552
Limited liability partnerships	2,217	212	-	-	(831)	-	-	1,598
Total investments	$ 13,094	$ 761	$ -	$ -	$ (4,705)	$ -	$ -	$ 9,150
Beneficial interest in perpetual trusts	$ 41,113	$ -	$ (1,213)	$ -	$ -	$ -	$ -	$ 39,900
Beneficial interest in the assets held by Episcopal Foundation	$ 23,541	$ -	$ 232	$ -	$ -	$ -	$ -	$ 23,773
Beneficial interest in Fox Chase Cancer Center Foundation	$ 50,498	$ -	$ (1,309)	$ -	$ -	$ -	$ -	$ 49,189

U.S. government securities, money market funds, equity securities and mutual funds classified as Level 1 are measured using quoted market prices.

Marketable debt securities classified as Level 1 were classified as such due to the usage of observable market prices for identical securities that are traded in active markets. These debt securities primarily include US Treasury Bonds.

The marketable debt securities classified as Level 2 were classified as such due to the usage of observable market prices for similar securities that are traded in less active markets or when observable market prices for identical securities are not available, marketable debt instruments are priced using: non-binding market consensus prices that are corroborated with observable market data; quoted market prices for similar instruments; or pricing models, such as a discounted cash flow model, with all significant inputs derived from or corroborated with observable market data. These debt securities primarily include government bonds, corporate bonds, notes and other debt securities.

The alternative investments classified as Level 3 were classified as such due to the lack of observable market data. These investments include equity funds, mutual funds and limited liability partnerships that are valued by the fund manager based on the pro-rata interest in the net assets of the underlying investments which approximates fair value and by financial information provided by the limited partnerships. In accordance with ASU 2009-12, however, those investments that are measured at net asset value per share and are redeemable at the measurement date are classified as Level 2.

The estimated fair values of the Health System's beneficial interest in perpetual trusts, in the assets held by Episcopal Foundation, and in the assets held by Fox Chase Cancer Center Foundation are classified as Level 3 due to lack of observable market data. Currently there is no market in which beneficial interest in trusts are traded and as such, no observable exit price exists for these assets. The fair values are determined based on information provided by the trustees.

Detailed information for Level 2 and Level 3 investments as of June 30, 2016 and 2015, follows. The fair values of these investments have been estimated using a net asset value equivalent (e.g. ownership interest in partners' capital to which a proportionate share of net assets is attributable).

	Fair Value (In thousands)	Unfunded Commitments (In thousands)	Redemption Frequency (if Currently Eligible)	Redemption Notice Period (if Applicable)
As of June 30, 2016:				
Multi-Strategy Hedge Funds (a)	$ 22,201	$ -	Annual, Quarterly	45–95 days
Distressed Debt Hedge Funds (b)	25	-		
Private Equity Funds (c)	571	156		
Stock Funds (d)	103	-		
Real Estate Funds (e)	17,148	51	Monthly	45 days
	$ 40,048	$ 207		
As of June 30, 2015:				
Multi-Strategy Hedge Funds (a)	$ 14,759	$ -	Annual, Quarterly	45–95 days
Distressed Debt Hedge Funds (b)	35	-		
Private Equity Funds (c)	736	147		
Stock Funds (d)	871	-		
Real Estate Funds (e)	11,112	51	Monthly	45 days
	$ 27,513	$ 198		

(a) This category includes investments in hedge funds that use a variety of strategies. These strategies may include long/short equity, long/short credit, event-driven, capital structure arbitrage, fixed income arbitrage, credit of distressed companies, and restructuring and underpriced companies. The remaining restriction period for these investments ranged from three to twelve months.

(b) This category includes investments in hedge funds that invest in debt obligations of distressed companies at a discount and sell the obligations following reorganization or restructuring of the companies. In September 2010, Private Advisors Distressed Opportunities Fund notified the Health System that the fund has begun liquidation. Investors are no longer eligible for voluntary redemptions.

(c) This category includes investments in private equity partnerships whose strategy is to add 5% in value comparable public investments and that will be in the top 25% of comparable private equity managers. In 2016 and 2015, investments representing 98% of the value of the investments in this category cannot be redeemed.

(d) This category includes investments (typically through traditional, long-only stock managers) that maintain (beta) exposure to stocks and achieve (alpha) value added of at least 2% per year over a passive portfolio. Investments in this category are not currently eligible for redemption.

(e) This category includes investments that maintain exposure to real estate and natural resources through public and private investments whose value is strongly controlled by commodities and real estate and may act as a hedge against unanticipated inflation.

The fair value of the Health System's pension assets is disclosed in Note 13.

The following methods and assumptions were used by the Health System in estimating fair value for disclosures in the consolidated financial statements:

Long-Term Debt — The fair value of long-term debt is based on quoted market prices or is estimated using discounted cash flow analyses for similar types of borrowing arrangements based on incremental borrowing rates. The carrying and fair values of long-term debt, excluding capital lease obligations, the Episcopal Healthcare Foundation debt and equipment financing arrangements at June 30, 2016, are $498,458,000 and $528,866,000, respectively. The carrying and fair values of long-term debt, excluding capital lease obligations, the Episcopal Healthcare Foundation debt and equipment financing arrangements at June 30, 2015, are $509,087,000 and $521,740,000, respectively.

Other — Cash and cash equivalents, patient and other accounts receivable, and all other current assets and liabilities are reported at amounts that approximate fair value due to the relatively short period to maturity.

19. FUNCTIONAL EXPENSES

The Health System provides general health care services to residents within its geographic location. Expenses related to providing these services are as follows (in thousands):

	2016	2015
Health care services	$1,299,135	$1,175,295
Research	39,976	36,967
General and administrative	289,803	289,978
Institutional support	3,182	2,891
	$1,632,096	$1,505,131

20. SUBSEQUENT EVENTS

The Health System has evaluated subsequent events through October 14, 2016, the date the financial statements were issued. There were no additional subsequent events requiring recording or disclosure in the consolidated financial statements.

* * * * * *

SUPPLEMENTAL SCHEDULES

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2016
(In thousands)

ASSETS	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
CURRENT ASSETS:											
Cash and cash equivalents	$ 45,704	$ 9,515	$ 5,733	$ 46,292	$ 1,961	$ 31	$ 2,874	$ 228	$ 19,134	$ -	$ 131,472
Patient accounts receivable — net of allowance for doubtful accounts	137,179	18,880	-	31,963	3,496	-	3,702	-	-	-	195,220
Other receivables — net of allowance for doubtful accounts	90,459	1,630	1,895	1,232	882	712	494	513	1,652	-	99,469
Inventories and other current assets	22,610	4,628	1,032	6,732	22	-	456	11	2,115	(264)	37,342
Current portion of assets limited as to use	-	-	507	803	-	-	-	-	38,794	-	40,104
Investments	92,187	1,810	-	14	-	-	-	-	14,858	-	108,869
Current portion of workers' compensation fund	5,833	522	-	-	-	-	114	-	254	-	6,723
Current portion of self-insurance program receivables	-	-	-	-	-	-	-	-	2,000	-	2,000
Expenditures reimbursable by research grants and awards	-	-	1,490	907	-	445	-	-	-	-	2,842
Due from affiliates — current portion	20,712	3,397	8,033	1,953	2,466	36	4,448	138	47,304	(82,814)	5,673
Total current assets	414,684	40,382	18,690	89,896	8,827	1,224	12,088	890	126,111	(83,078)	629,714
PROPERTY, PLANT AND EQUIPMENT:											
Land and land improvements	5,598	1,785	1,221	3,083	-	-	-	-	9	-	11,696
Buildings	313,030	82,685	23,342	22,161	-	-	4,731	-	25,786	-	471,735
Fixed and movable equipment	276,776	45,423	18,595	31,852	167	-	4,708	1,144	65,255	-	443,920
Construction-in-progress	36,464	801	499	3,254	-	-	7	-	2,270	-	43,295
	631,868	130,694	43,657	60,350	167		9,446	1,144	93,320		970,646
Less accumulated depreciation	409,178	108,917	14,481	23,856	160	-	6,536	490	55,366	-	618,984
Net property, plant and equipment	222,690	21,777	29,176	36,494	7	-	2,910	654	37,954	-	351,662
ASSETS LIMITED AS TO USE	4,262	583	16,531	6,425	24	-	-	-	71,865	-	99,690
INVESTMENTS	32,880	2,446	365	1,072	-	-	-	-	492	-	37,255
WORKERS' COMPENSATION FUND	4,323	438	-	59	-	-	14	-	230	-	5,064
SELF-INSURANCE PROGRAM RECEIVABLES	24,795	2,514	-	365	2,742	-	5,656	-	16,450	(36,071)	16,451
INVESTMENT IN TUHIC	-	-	-	-	-	-	-	-	25,280	-	25,280
GOODWILL AND OTHER INTANGIBLES	-	-	5,951	13,308	-	1,804	812	-	-	-	21,875
BENEFICIAL INTEREST IN ASSETS HELD BY OTHERS	28,616	17,418	54,074	5,069	-	-	-	-	-	-	105,177
DUE FROM AFFILIATES	11,241	-	-	-	-	-	-	-	362,293	(373,534)	-
OTHER ASSETS	14,444	905	6,633	1,039	157	-	200	-	3,460	-	26,838
TOTAL ASSETS	$ 757,935	$ 86,463	$ 131,420	$ 153,727	$ 11,757	$ 3,028	$ 21,680	$ 1,544	$ 644,135	$ (492,683)	$ 1,319,006

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2016
(In thousands)

ASSETS	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
CURRENT ASSETS:								
Cash and cash equivalents	$ 578	$ 1,419	$ 13,579	$ -	$ 4,276	$ 19,852	$ -	$ 151,324
Patient accounts receivable — net of allowance for doubtful accounts	-	-	-	-	-	-	-	195,220
Other receivables — net of allowance for doubtful accounts	37	763	2	-	502	1,304	-	100,773
Inventories and other current assets	6	3,833	-	-	13	3,852	-	41,194
Current portion of assets limited as to use	-	2,109	-	-	-	2,109	-	42,213
Investments	3,532	-	14,822	-	-	18,354	-	127,223
Current portion of workers' compensation fund	-	-	-	-	-	-	-	6,723
Current portion of self-insurance program receivables	-	-	-	-	-	-	-	2,000
Expenditures reimbursable by research grants and awards	-	-	-	-	-	-	-	2,842
Due from affiliates — current portion	178	-	-	17	2,239	2,434	(8,107)	-
Total current assets	4,331	8,124	28,403	17	7,030	47,905	(8,107)	669,512
PROPERTY, PLANT AND EQUIPMENT:								
Land and land improvements	231	-	-	-	-	231	-	11,927
Buildings	12,490	-	-	-	-	12,490	-	484,225
Fixed and movable equipment	4	-	-	-	-	4	-	443,924
Construction-in-progress	-	-	-	-	-	-	-	43,295
	12,725					12,725		983,371
Less accumulated depreciation	11,227	-	-	-	-	11,227	-	630,211
Net property, plant and equipment	1,498					1,498		353,160
ASSETS LIMITED AS TO USE	-	52,952	-	-	-	52,952	-	152,642
INVESTMENTS	365	-	5,440	27	-	5,832	-	43,087
WORKERS' COMPENSATION FUND	-	-	-	-	-	-	-	5,064
SELF-INSURANCE PROGRAM RECEIVABLES	-	-	-	-	-	-	-	16,451
INVESTMENT IN TUHIC	-	-	-	-	-	-	(25,280)	-
GOODWILL AND OTHER INTANGIBLES	-	-	-	-	-	-	-	21,875
BENEFICIAL INTEREST IN ASSETS HELD BY OTHERS	22,836	-	-	-	-	22,836	(22,836)	105,177
DUE FROM AFFILIATES	-	-	-	-	-	-	-	-
OTHER ASSETS	(614)	-	-	-	-	(614)	-	26,224
TOTAL ASSETS	$ 28,416	$ 61,076	$ 33,843	$ 44	$ 7,030	$ 130,409	$ (56,223)	$ 1,393,192

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2016
(In thousands)

LIABILITIES AND NET ASSETS	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
CURRENT LIABILITIES:											
Current portion of long-term debt	$ 2,757	$ 388	$ 150	$ 886	$ -	$ -	$ -	$ -	$ 12,677	$ -	$ 16,858
Accounts payable	80,267	4,347	3,363	9,871	925	5	344	741	7,940	-	107,803
Accrued expenses	45,487	7,903	1,797	4,371	4,917	141	4,319	212	48,858	(30,319)	87,686
Current portion of estimated settlements with third-party payors	9,095	-	-	12,984	-	-	-	-	-	(264)	21,815
Current portion of self-insurance program liabilities	9,365	994	178	999	337	-	936	139	2,254	-	15,202
Unexpended research grants and awards	-	-	1,034	40	22	-	-	-	-	-	1,096
Due to affiliates — current portion	40,235	6,640	3,354	16,297	2,969	141	2,101	556	12,956	(82,814)	2,435
Other current liabilities	24,992	3,477	304	6,160	963	-	183	-	14,835	-	50,914
Total current liabilities	212,198	23,749	10,180	51,608	10,133	287	7,883	1,648	99,520	(113,397)	303,809
LONG-TERM DEBT	8,092	1,168	637	171	-	-	-	-	488,138	-	498,206
SELF-INSURANCE PROGRAM LIABILITIES	56,471	9,877	787	5,948	4,442	-	10,265	313	16,604	(5,752)	98,955
ACCRUED POSTRETIREMENT BENEFITS	48,516	21,429	1,634	3,180	654	-	-	-	-	-	75,413
DUE TO AFFILIATES	228,898	48,721	13,546	71,128	-	-	-	-	11,241	(373,534)	-
OTHER LONG-TERM LIABILITIES	22,329	2,749	1,458	1,302	502	-	356	-	1,994	-	30,690
Total liabilities	576,504	107,693	28,242	133,337	15,731	287	18,504	1,961	617,497	(492,683)	1,007,073
NET ASSETS (DEFICIT):											
Unrestricted	148,966	(39,003)	27,571	6,154	(3,974)	2,741	3,176	(417)	26,633	-	171,847
Temporarily restricted	2,402	279	15,653	5,890	-	-	-	-	5	-	24,229
Permanently restricted	30,063	17,494	59,954	8,346	-	-	-	-	-	-	115,857
Total net assets (deficit)	181,431	(21,230)	103,178	20,390	(3,974)	2,741	3,176	(417)	26,638	-	311,933
TOTAL LIABILITIES AND NET ASSETS	$ 757,935	$ 86,463	$ 131,420	$ 153,727	$ 11,757	$ 3,028	$ 21,680	$ 1,544	$644,135	$ (492,683)	$ 1,319,006

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING BALANCE SHEET INFORMATION
AS OF JUNE 30, 2016
(In thousands)

LIABILITIES AND NET ASSETS	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
CURRENT LIABILITIES:								
Current portion of long-term debt	$ 569	$ -	$ -	$ -	$ -	$ 569	$ -	$ 17,427
Accounts payable	235	518	-	-	-	753	-	108,556
Accrued expenses	-	112	-	-	1,786	1,898	2,416	92,000
Current portion of estimated settlements with third-party payors	-	-	-	-	-	-	-	21,815
Current portion of self-insurance program liabilities	-	8,932	-	-	-	8,932	-	24,134
Unexpended research grants and awards	-	-	-	-	-	-	-	1,096
Due to affiliates — current portion	163	-	-	86	5,423	5,672	(8,107)	-
Other current liabilities	4,313	3,825	-	-	-	8,138	-	59,052
Total current liabilities	5,280	13,387	-	86	7,209	25,962	(5,691)	324,080
LONG-TERM DEBT	2,179	-	-	-	-	2,179	-	500,385
SELF-INSURANCE PROGRAM LIABILITIES	2,416	22,409	-	-	-	24,825	(2,416)	121,364
ACCRUED POSTRETIREMENT BENEFITS	18,543	-	-	-	-	18,543	-	93,956
DUE TO AFFILIATES	-	-	-	-	-	-	-	-
OTHER LONG-TERM LIABILITIES	24,665	-	-	-	-	24,665	(22,836)	32,519
Total liabilities	53,083	35,796	-	86	7,209	96,174	(30,943)	1,072,304
NET ASSETS (DEFICIT):								
Unrestricted	(24,667)	25,280	33,843	(42)	(179)	34,235	(25,280)	180,802
Temporarily restricted	-	-	-	-	-	-	-	24,229
Permanently restricted	-	-	-	-	-	-	-	115,857
Total net assets (deficit)	(24,667)	25,280	33,843	(42)	(179)	34,235	(25,280)	320,888
TOTAL LIABILITIES AND NET ASSETS	$ 28,416	$ 61,076	$ 33,843	$ 44	$ 7,030	$ 130,409	$ (56,223)	$ 1,393,192

(Concluded)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2016
(In thousands)

	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
UNRESTRICTED NET ASSETS:											
Unrestricted revenues and other support:											
Net patient service revenue before allowance for doubtful accounts	$ 1,028,571	$ 150,383	$ -	$ 318,505	$ 36,822	$ -	$ 59,798	$ -	$ -	$ (6,329)	$ 1,587,750
Allowance for doubtful accounts	(15,516)	(3,777)	-	(4,424)	(1,215)	-	(1,409)	-	-	-	(26,341)
Total net patient service revenue	1,013,055	146,606		314,081	35,607		58,389			(6,329)	1,561,409
Research revenue	-	-	31,568	-	-	473	-	-	-	(5)	32,036
Contribution revenue	1,608	4	2,833	1,183	-	-	-	-	-	-	5,628
Other revenue	16,271	6,858	1,318	2,487	24,246	953	17,403	5,319	104,087	(141,354)	37,588
Investment income	-	-	-	-	-	-	-	-	807	-	807
Net assets released from restrictions used for operations	503	47	4,493	440	-	-	-	-	-	-	5,483
Unrestricted revenues and other support	1,031,437	153,515	40,212	318,191	59,853	1,426	75,792	5,319	104,894	(147,688)	1,642,951
Expenses:											
Salaries	347,249	60,784	38,708	79,652	50,311	554	50,591	4,030	27,542	(1,090)	658,331
Employee benefits	111,613	18,860	11,515	20,952	6,106	147	9,612	1,386	7,861	(125)	187,927
Professional fees	117,202	14,434	983	20,532	104	428	7,100	103	6,628	(29,717)	137,797
Supplies and pharmaceuticals	193,669	25,630	7,545	89,935	151	3	3,607	157	2,530	174	323,401
Purchased services and other	151,890	23,273	2,666	43,974	910	93	6,887	938	14,080	(81,937)	162,774
Maintenance	13,016	3,114	-	-	-	-	247	30	1,155	5	17,567
Utilities	10,571	874	3,382	2,512	-	-	1,071	65	1,597	6	20,078
Leases	13,735	1,152	447	2,244	-	-	3,888	1,105	4,904	(4,949)	22,526
Insurance	13,652	2,070	126	2,619	512	-	2,187	24	225	(11)	21,404
Depreciation and amortization	25,851	3,941	3,954	6,634	7	145	1,476	7	7,758	-	49,773
Interest	17,952	3,596	855	5,724	8	-	49	5	28,759	(30,044)	26,904
Asset impairment	-	-	-	-	-	-	108	-	-	-	108
Loss on disposal of fixed assets	(246)	3	210	254	-	-	-	-	-	-	221
Expenses	1,016,154	157,731	70,391	275,032	58,109	1,370	86,823	7,850	103,039	(147,688)	1,628,811
Operating income (loss)	15,283	(4,216)	(30,179)	43,159	1,744	56	(11,031)	(2,531)	1,855	-	14,140
Other income — net:											
Investment income (loss)	3,484	832	1,033	299	188	-	364	-	(80)	-	6,120
Other income — net	3,484	832	1,033	299	188	-	364	-	(80)	-	6,120
Excess (deficiency) of revenues and other support over expenses from continuing operations	$ 18,767	$ (3,384)	$ (29,146)	$ 43,458	$ 1,932	$ 56	$ (10,667)	$ (2,531)	$ 1,775	$ -	$ 20,260

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2016
(In thousands)

	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
UNRESTRICTED NET ASSETS:								
Unrestricted revenues and other support:								
Net patient service revenue before allowance for doubtful accounts	$ (2,546)	$ -	$ -	$ -	$ -	$ (2,546)	$ -	$ 1,585,204
Allowance for doubtful accounts	-	-	-	-	-	-	-	(26,341)
Total net patient service revenue	(2,546)	-	-	-	-	(2,546)	-	1,558,863
Research revenue	-	-	-	-	-	-	-	32,036
Contribution revenue	-	-	-	-	-	-	-	5,628
Other revenue	2,686	12,390	-	-	1,885	16,961	(14,705)	39,844
Investment income	-	-	-	-	-	-	-	807
Net assets released from restrictions used for operations	-	-	-	-	-	-	-	5,483
Unrestricted revenues and other support	140	12,390	-	-	1,885	14,415	(14,705)	1,642,661
Expenses:								
Salaries	710	-	-	-	1,219	1,929	-	660,260
Employee benefits	1,125	-	-	-	391	1,516	-	189,443
Professional fees	-	-	-	-	20	20	-	137,817
Supplies and pharmaceuticals	161	-	-	-	53	214	-	323,615
Purchased services and other	133	113	10	-	202	458	(113)	163,119
Maintenance	270	-	-	-	-	270	-	17,837
Utilities	433	-	-	-	-	433	-	20,511
Leases	-	-	-	-	-	-	(2,315)	20,211
Insurance	12	3,600	-	-	-	3,612	(3,600)	21,416
Depreciation and amortization	741	-	-	-	-	741	-	50,514
Interest	120	-	-	-	-	120	-	27,024
Asset impairment	-	-	-	-	-	-	-	108
Loss on disposal of fixed assets	-	-	-	-	-	-	-	221
Expenses	3,705	3,713	10	-	1,885	9,313	(6,028)	1,632,096
Operating income (loss)	(3,565)	8,677	(10)	-	-	5,102	(8,677)	10,565
Other income — net:								
Investment income (loss)	103	1,537	402	(34)	-	2,008	(1,537)	6,591
Other income — net	103	1,537	402	(34)	-	2,008	(1,537)	6,591
Excess (deficiency) of revenues and other support over expenses from continuing operations	$ (3,462)	$ 10,214	$ 392	$ (34)	$ -	$ 7,110	$ (10,214)	$ 17,156

(Continued)

FOR THE YEAR ENDED JUNE 30, 2016
(In thousands)

	Temple University Hospital, Inc.	Jeanes Hospital	Institute for Cancer Research	American Oncologic Hospital	FCCC Medical Group, Inc.	Fox Chase Network, Inc.	Temple Physicians, Inc.	Temple Health System Transport Team, Inc.	TUHS Parent Company (1)	Obligated Group Eliminations	Obligated Group Consolidated
Excess (deficiency) of revenues and other support over expenses	$ 18,767	$ (3,384)	$ (29,146)	$ 43,458	$ 1,932	$ 56	$ (10,667)	$ (2,531)	$ 1,775	$ -	$ 20,260
Other changes in unrestricted net assets:											
Transfers (to) from affiliates/the University	(22,457)	(1,600)	34,641	(35,560)	319	-	16,000	2,100	-	-	(6,557)
Net assets released from restrictions used for purchase of property and equipment	753	-	4,558	2,141	-	-	-	-	-	-	7,452
Net change in fair value of investments	(4,459)	(723)	(25)	(90)	-	-	-	-	850	-	(4,447)
Adjustment to funded status of pension and postretirement liabilities	(17,549)	(6,893)	(417)	(810)	(155)	-	-	-	-	-	(25,824)
Adjustment to funded status of long-term disability liabilities	186	31	22	50	28	-	22	-	24	-	363
Increase (decrease) in unrestricted net assets	(24,759)	(12,569)	9,633	9,189	2,124	56	5,355	(431)	2,649	-	(8,753)
TEMPORARILY RESTRICTED NET ASSETS:											
Contribution income	947	130	7,318	2,265	-	-	-	-	-	-	10,660
Net assets released from restrictions	(1,256)	(47)	(9,051)	(2,581)	-	-	-	-	-	-	(12,935)
Net change in fair value of investments	(51)	-	-	-	-	-	-	-	-	-	(51)
Investment income	37	-	2,038	272	-	-	-	-	-	-	2,347
Increase (decrease) in temporarily restricted net assets	(323)	83	305	(44)	-	-	-	-	-	-	21
PERMANENTLY RESTRICTED NET ASSETS:											
Contribution income	-	-	761	182	-	-	-	-	-	-	943
Net change in fair value of investments	-	-	(105)	87	-	-	-	-	-	-	(18)
Investment income (loss)	-	-	(68)	13	-	-	-	-	-	-	(55)
Change in beneficial interest in assets held by others	(1,315)	(765)	(5,103)	(502)	-	-	-	-	-	-	(7,685)
Increase (decrease) in permanently restricted net assets	(1,315)	(765)	(4,515)	(220)	-	-	-	-	-	-	(6,815)
INCREASE (DECREASE) IN NET ASSETS	(26,397)	(13,251)	5,423	8,925	2,124	56	5,355	(431)	2,649	-	(15,547)
NET ASSETS (DEFICIT) — Beginning of year	207,828	(7,979)	97,755	11,465	(6,098)	2,685	(2,179)	14	23,989	-	327,480
NET ASSETS (DEFICIT) — End of year	$ 181,431	$ (21,230)	$ 103,178	$ 20,390	$ (3,974)	$ 2,741	$ 3,176	$ (417)	$ 26,638	$ -	$ 311,933

(1) TUHS Parent Company accounts for its investment in TUHIC under the equity method. The remaining entities are accounted for at cost.

(Continued)

TEMPLE UNIVERSITY HEALTH SYSTEM

SUPPLEMENTAL SCHEDULE OF CONSOLIDATING STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS INFORMATION
FOR THE YEAR ENDED JUNE 30, 2016
(In thousands)

	Episcopal Hospital	TUHS Insurance Company, Ltd.	TUHS Foundation	Fox Chase Limited	Temple Center for Population Health	Non-Obligated Group Consolidated	Remaining Eliminations	Temple University Health System Consolidated
Excess (deficiency) of revenues and other support over expenses	$ (3,462)	$ 10,214	$ 392	$ (34)	$ -	$ 7,110	$ (10,214)	$ 17,156
Other changes in unrestricted net assets:								
Transfers (to) from affiliates/the University	-	(4,000)	(123)	-	-	(4,123)	4,000	(6,680)
Net assets released from restrictions used for purchase of property and equipment	-	-	-	-	-	-	-	7,452
Net change in fair value of investments	(151)	1,016	(928)	-	-	(63)	(1,016)	(5,526)
Adjustment to funded status of pension and postretirement liabilities	(8,140)	-	-	-	-	(8,140)	-	(33,964)
Adjustment to funded status of long-term disability liabilities	-	-	-	-	-	-	-	363
Increase (decrease) in unrestricted net assets	(11,753)	7,230	(659)	(34)	-	(5,216)	(7,230)	(21,199)
TEMPORARILY RESTRICTED NET ASSETS:								
Contribution income	-	-	-	-	-	-	-	10,660
Net assets released from restrictions	-	-	-	-	-	-	-	(12,935)
Net change in fair value of investments	-	-	-	-	-	-	-	(51)
Investment income	-	-	-	-	-	-	-	2,347
Increase (decrease) in temporarily restricted net assets	-	-	-	-	-	-	-	21
PERMANENTLY RESTRICTED NET ASSETS:								
Contribution income	-	-	-	-	-	-	-	943
Net change in fair value of investments	-	-	-	-	-	-	-	(18)
Investment income (loss)	-	-	-	-	-	-	-	(55)
Change in beneficial interest in assets held by others	-	-	-	-	-	-	-	(7,685)
Increase (decrease) in permanently restricted net assets	-	-	-	-	-	-	-	(6,815)
INCREASE (DECREASE) IN NET ASSETS	(11,753)	7,230	(659)	(34)	-	(5,216)	(7,230)	(27,993)
NET ASSETS (DEFICIT) — Beginning of year	(12,914)	18,050	34,502	(8)	(179)	39,451	(18,050)	348,881
NET ASSETS (DEFICIT) — End of year	$ (24,667)	$ 25,280	$ 33,843	$ (42)	$ (179)	$ 34,235	$ (25,280)	$ 320,888

(Concluded)

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APPENDIX C

SUMMARIES OF CERTAIN PROVISIONS OF THE LOAN AND TRUST AGREEMENT, FOURTEENTH SUPPLEMENT, INCLUDING LOAN AND TRUST AGREEMENT AMENDMENTS

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DEFINITIONS OF CERTAIN TERMS

The following are the definitions of certain terms used in the Loan and Trust Agreement, as amended and supplemented, including as amended and supplemented by the Fourteenth Supplement, unless otherwise specified below. All capitalized terms used in this Appendix C and not defined below shall have the same meanings given to such terms in the forepart of this Official Statement.

"Accountant" means a firm of independent certified public accountants (which may be the external auditing firm of the Obligated Group or of any Obligated Group Member) not unsatisfactory to the Issuer.

"Additional Debt" means any Debt incurred by any Obligated Group Member subsequent to the issuance of the 1993 Bonds.

"Affiliate" of any specified corporation or other entity means any other entity directly or indirectly controlling or controlled by or under direct or indirect common control with such specified entity. For purposes of this definition, "control" when used with respect to any specified entity means the power to direct the management and policies of such entity, directly or indirectly, whether through ownership of voting securities, by contract, membership or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"Agreement" means the Original Agreement as amended by an Amendment dated as of August 1, 1993, an Amendment dated as of June 27, 1996, the First Supplemental Agreement, the Second Supplemental Agreement, the Third Supplemental Agreement, an Amendment dated as of April 22, 1999, the Fourth Supplemental Agreement (including the Amendment dated June 1, 1999 to Second Supplemental Loan and Trust Agreement), the Fifth Supplemental Agreement, the Sixth Supplemental Agreement, the Seventh Supplemental Agreement, the Eighth Supplemental Agreement, the Ninth Supplemental Agreement, the Tenth Supplemental Agreement, the Eleventh Supplemental Agreement, the Twelfth Supplemental Agreement, the Thirteenth Supplemental Agreement, the Fourteenth Supplemental Agreement, the Joinder Agreements dated June 30, 1996, the Release Agreement dated as of May 15, 1997, the Joinder Agreements dated as of June 20, 2005, the Termination Agreement and the Joinder Agreement dated as of July 1, 2012.

"Annual Debt Service" means the Long-Term Debt Service Requirements for the Fiscal Year in question.

"Architect" means a person or firm, not unsatisfactory to the Issuer, which is not, and no member, stockholder, director, officer or employee of which is, an officer or employee of any Obligated Group Member and which is retained for the purpose of passing on questions relating to the design and construction of any particular facility, has all licenses and certifications necessary for the performance of such services, and has a favorable reputation for skill and experience in performing similar services in respect of facilities of a comparable size and nature.

"Authorized Officer" means (i) in the case of the Issuer, the Chairman or Vice-Chairman of the Issuer, and when used with reference to an act or document of the Issuer also means any other person authorized to perform the act or execute the document, and (ii) in the case of the Institution, the Obligated Group Agent or any other Obligated Group Member, the Chairman of the Board of Trustees, the President, the Vice President, Chief Financial Officer and Treasurer, or the Associate Vice President and Assistant Treasurer of the Institution, and when used with reference to an act or document of the Obligated Group Agent or any other Obligated Group Member, also means any other person or persons authorized by a resolution of the Board of Trustees to perform the act or execute the document.

"Bond" or "Bonds" means, collectively (i) the 2007 Bonds, the 2012 Bonds and the 2017 Bonds; (ii) except as otherwise expressly excepted by the terms of any specific section under the Agreement, all Parity Bonds, and (iii) except as otherwise provided in the Agreement, any Bond or Bonds duly issued in exchange or replacement therefor and, where appropriate with respect to redemption and required purchase, portions thereof in authorized denominations.

"Bond Index" means the index or interest rate as may be submitted in writing to the Trustee by a firm which provides municipal investment banking or financial advisory services selected by the Obligated Group Agent, as the index or interest rate reasonably reflecting the terms and provisions of the Debt in question, as having the same frequency of interest rate adjustment and, where applicable, secured or backed by an entity having a credit rating in the same category as the proposed Debt.

"Capitalization Ratio" means, as of any date of calculation, the ratio of Long-Term Debt of the Obligated Group to the sum of such Long-Term Debt and the general fund balance of the Obligated Group.

"Code" means the Internal Revenue Code of 1986, as amended from time to time. References to the Code and Sections of the Code include the relevant regulations, temporary regulations and proposed regulations thereunder and under the Internal Revenue Code of 1954, as amended, and any successor provisions to those Sections, regulations, temporary regulations or proposed regulations.

"Completion Debt" means any Debt incurred by any Obligated Group Member for the purpose of financing the completion of the constructing or equipping of facilities for which Debt has theretofore been incurred in accordance with the provisions of the Agreement, to the extent necessary to provide a completed and equipped facility of the type and scope contemplated at the time of the initial funding of the facilities.

"Consultant" means a person or firm which is not, and no member, stockholder, director, officer or employee of which is, an officer or employee of any Obligated Group Member, and which is a financial consulting firm or an Accountant having a favorable reputation for skill and experience in preparing or reviewing financial forecasts for hospitals, appointed by an Authorized Officer of the Obligated Group Agent and not unsatisfactory to the Trustee or the Issuer.

"Continuing Disclosure Agreement" means the Continuing Disclosure Agreement dated as of October 1, 2017 by and among the Obligated Group and Digital Assurance Certification, L.L.C.

"Costs of Issuance" means underwriter's discount or fees, counsel fees (including bond counsel, Issuer's counsel, counsel to an Obligated Group Member, Trustee's counsel, or any other specialized counsel fees incurred in connection with the issuance of the Bonds or any other Obligations), any bond insurance premium, financial advisor fees, rating agency fees, Trustee's fee incurred in connection with the issuance of the Bonds and any other Obligations and the Trustee's acceptance fee and first year administration fee, Accountant fees related to the issuance of the Bonds or any other Obligations, printing costs, costs incurred in connection with the public approval process for the 2007 Bonds or any other Obligations, costs of engineering and feasibility studies necessary to the issuance of the Obligations, the application fee of the Issuer and any other fees or costs which, in the Opinion of Bond Counsel, in the case of Bonds, are deemed costs of issuance for purposes of Section 147(g) of the Code.

"Counsel" means an attorney or firm of attorneys, not unsatisfactory to the Issuer or the Trustee, selected by the Obligated Group Agent and (except as otherwise provided in the Agreement) may either be counsel (including inside counsel) for an Obligated Group Member or for the Trustee.

"Current Assets" means cash and cash equivalent deposits, marketable securities, accounts receivable, accrued interest receivable, funds permitted to be designated by the Governing Body of any Obligated Group Member for any specific purpose and any other assets of any Obligated Group Member ordinarily considered current assets under generally accepted accounting principles.

"Days-Cash-On-Hand" shall mean, for each Fiscal Year, Unrestricted Cash and Investments (as defined herein), divided by total operating expenses, net of Depreciation, Amortization, Restructuring Costs, Asset Impairment, Gain or Losses (as such terms are defined in accordance with GAAP) on the sale of fixed assets, bad debt expense and other non cash expense items, divided by 365. For purposes of this definition, "total operating expenses," "bad debt expense" and "non cash expense items" shall mean such line items as reported on the consolidated statements of operations and changes in net assets of the audited financial statements of the Obligated Group delivered pursuant to the Agreement.

"Debt" means all obligations for payments of principal and interest with respect to money borrowed, incurred or assumed by one or more Obligated Group Members, including without limitation, all Obligations issued under the Agreement, guarantees, purchase money mortgages, finance lease obligations, installment purchase contracts or other similar instruments in the nature of a borrowing by which the Obligated Group Member will be unconditionally obligated to pay, except obligations of one Obligated Group Member to another Obligated Group Member. Debt shall not include operating leases. Nothing in this definition or otherwise shall be construed to count Debt more than once, and Debt incurred as described in clause (g) under the heading "Limitations on Incurrence of Additional Debt" hereof shall be counted only to the extent the reimbursement obligation on amounts drawn or, in the reasonable judgment of the Obligated Group Agent, likely to be drawn on, the Credit Facility exceeds the obligation on the Debt for which such Credit Facility is provided.

"Debt Service Reserve Fund Bonds" means Bonds for which a deposit to the Debt Service Reserve Fund was funded at the time of the issuance thereof under the Agreement or any Supplement to the Agreement.

"Event of Bankruptcy" means (i) any Obligated Group Member shall commence a voluntary case under the federal bankruptcy laws, or shall become insolvent or unable to pay its debts as they become due, or shall make an assignment for the benefit of creditors, or shall apply for, consent to or acquiesce in the appointment of, or taking possession by, a trustee, receiver, custodian or similar official or agent for itself or any substantial part of its Property, Current Assets or Gross Receipts; (ii) a trustee, receiver, custodian or similar official or agent shall be appointed for any Obligated Group Member or for any substantial part of its Property, Current Assets or Gross Receipts and either such trustee or receiver shall not be discharged, or such Obligated Group Member shall not withdraw from the Obligated Group under the Agreement, in either case, within ninety (90) days; or (iii) any Obligated Group Member shall have an order or decree for relief in an involuntary case under the federal bankruptcy laws entered against it, or a petition seeking reorganization, readjustment, arrangement, composition, or other similar relief as to it under the federal bankruptcy laws or any similar law for the relief of debtors shall be brought against it and either such order or decree for relief is not discharged or vacated or such Obligated Group Member shall not withdraw from the Obligated Group under the Agreement, in either case within ninety (90) days.

"Event of Default" means any one of the events set forth herein under the heading "Default by the Obligated Group."

"Fiscal Year" means the fiscal year ending June 30 or any other fiscal year designated from time to time in writing by the Obligated Group Agent to the Trustee; for purposes of making historical calculations or determinations set forth in the Agreement on a Fiscal Year basis, or for purposes of combinations or consolidation of accounting information, with respect to any Obligated Group Member

whose actual fiscal year is different from that designated above, the actual fiscal year of such Obligated Group member which ended within the Fiscal Year designated above shall be used.

"Forecast" means prospective financial statements with respect to the Obligated Group which represent the expected financial position, results of operations and changes in financial position of the Obligated Group, based upon assumptions which in the opinion of the preparer, or as set forth in a certificate of an Authorized Officer, provide a reasonable basis for the Forecast. As used in the Agreement, an Officer's Forecast shall mean a forecast prepared and signed by an Authorized Officer of the Obligated Group Agent, and a Consultant's Forecast shall mean a forecast which is compiled, reviewed, or examined by a Consultant in accordance with standards established by the American Institute of Certified Public Accountants for the compilation, review or examination of a financial forecast.

"Governing Body" means, with respect to any Obligated Group Member, its board of directors, board of trustees, or other board or group of individuals, including the Board of Governors of the Hospital, in which the power to direct the management and policies of the Obligated Group Member are vested.

"Government Obligations" means direct obligations of the United States of America, including obligations issued or held in book-entry form on the books of the Department of the Treasury or any Federal Reserve Bank.

"Government Restriction" means the occurrence of the following: (i) changes in applicable laws, governmental regulations, third-party reimbursement methods or private or governmental insurance programs shall have occurred which prevent, have prevented or will prevent the Obligated Group from generating sufficient Income Available for Debt Service to comply with the particular requirement of the financing document in question, (ii) the effect upon the Obligated Group of the circumstances set forth in clause (i) above shall have been confirmed by a signed Consultant's opinion or report delivered to the Trustee, and (iii) an officer's Certificate shall have been delivered to the Trustee stating that the Obligated Group has generated the highest level of Income Available for Debt Service which, in the opinion of such officer, could reasonably be generated given the circumstances set forth in clause (i) above; provided that there shall have been delivered to the Trustee an Opinion of Counsel, but only at the request of the Trustee, as to any conclusions of law supporting the opinion or report of the Consultant.

"Gross Receipts" means, with respect to any Obligated Group Member, all receipts, revenues, income and other moneys received by or on behalf of such Obligated Group Member; including, but without limiting the generality of the foregoing, revenues derived from the ownership or operation of Property, including insurance and condemnation proceeds with respect to such Property or any portion thereof, and all rights to receive the same, whether in the form of accounts, accounts receivable, contract rights or other rights, and the proceeds of such rights, whether now owned or held or hereafter coming into existence; provided, however, that there shall be excluded from Gross Receipts (A) gifts, grants (including Hill-Burton grants), bequests, donations and contributions heretofore or hereafter made and designated or specified by the granting authority, donor or maker thereof as being for specified purposes (inconsistent with the payment of debt service on Debt) and the income derived therefrom to the extent required by such designation or specification, (B) revenues, receipts and income derived from the ownership and operation of Property which secures Non-Recourse Debt, and (C) any cash or investments held by any Obligated Group Member on the date of issuance and initial delivery of the 1993 Bonds, or with respect to any Obligated Group Member which joined or may join the Obligated Group after such date, any cash or investment held by such Obligated Group Member on the date such Obligated Group Member joined or joins the Obligated Group.

"Guaranty" means all obligations of any Obligated Group Member guaranteeing in any manner, whether directly or indirectly, any obligation of any other person which would, if such other person were an Obligated Group Member, constitute Debt under the Agreement. Nothing in this definition or otherwise shall be construed to count a Guaranty more than once and for purposes of all covenants and computations provided for in the Agreement, the aggregate annual principal and interest payments on, and the principal amount of, any indebtedness of the type described in the Agreement incurred by any person which is not an Obligated Group Member and which is the subject of a Guaranty under the Agreement shall be calculated in the manner provided in the Agreement based on the actual Annual Debt Service on, and the principal amount of, the underlying obligation on account of which a Guaranty has been issued.

"Health System" means Temple University Health System, Inc.

"Historical Test Period" means (i) the most recent Fiscal Year of the Obligated Group, if audited financial statements with respect to such Fiscal Year are available for the Obligated Group or for each Obligated Group Member or (ii) if such audited financial statements are not available, the most recent twelve month period for which such audited financial statements are available.

"Holder" or "Owner" means the registered owner of any of the Obligations from time to time as shown in the books kept by the Trustee as registrar and transfer agent.

"Hospital" means Temple University Hospital, Inc.

"Income Available for Debt Service" means, with respect to the Obligated Group, as to any period of time, the aggregate amount of net income, or excess of revenue over expenses (including investment income, gifts and bequests, but excluding donor restricted funds and the income thereon to the extent restricted by the donor thereof to other than operating expenses or debt service requirements) before depreciation, amortization, interest and other similar non-cash charges, as determined in accordance with generally accepted accounting principles, consistently applied; provided that no determination thereof shall take into account (i) any revenue or expense of the University other than revenue or expense of the Hospital as reflected on the Hospital's financial statements prepared in accordance with generally accepted accounting principles, unless the University shall be an Obligated Group Member other than the Institution hereunder, (ii) any revenue or expense of any person which is not an Obligated Group member, (iii) any extraordinary gain or loss resulting from either the extinguishment of Debt, or the sale, exchange or other disposition of capital assets not in the ordinary course of business to the extent otherwise included in the foregoing calculations of revenues and expenses, (iv) any other gains or losses resulting from changes in accounting principles not requiring the expenditure of cash, (v) the net proceeds of insurance (other than business interruption insurance) and condemnation awards, (vi) operating and nonoperating revenues and expenses attributable to the ownership and operation of Property securing Non-Recourse Debt but only in an amount equal to the actual debt service requirements for such period of time on outstanding Non-Recourse Debt, (vii) any non-recurring cash charge relating to financial or operational restructuring involving one or more members of the Obligated Group, or (viii) any non-cash adjustments resulting from market to market valuations of securities at current prices.

"Institution" means the Hospital.

"Insurance Consultant" shall mean an independent firm of insurance agents, brokers or consultants which is appointed by the Obligated Group Agent and is not unsatisfactory to the Trustee or the Issuer, for the purpose of reviewing and recommending insurance coverages for the facilities and operations of the Obligated Group, and has a favorable reputation for skill and experience in performing such services in respect of facilities and operations of a comparable size and nature.

"Interest Payment Date" means, with respect to the 2017 Bonds, each January 1 and July 1 commencing January 1, 2018. In any case, the final Interest Payment Date shall be the maturity date for the 2017 Bonds.

"Issuer" or "Authority" means The Hospitals and Higher Education Facilities Authority of Philadelphia.

"Lien" means any mortgage, pledge, security interest, lien, judgment lien, easement, or other encumbrance on title, including, but not limited to, any mortgage or pledge of, security interest in or lien or encumbrance on any Property, Current Assets or Gross Receipts of any Obligated Group Member which secures any Debt or any other obligation of any Obligated Group Member, or which secures any obligation of any person other than an obligation to any Obligated Group Member, excluding liens applicable to Property in which any Obligated Group Member has only a leasehold interest unless the lien secures Debt of any Obligated Group Member or an obligation of any person other than an obligation to any obligated Group Member.

"Long-Term Debt" means all Debt, other than Short-Term Debt and Non-Recourse Debt, including the following:

(i) Debt with respect to money borrowed for an original term, or renewable at the option of the borrower for a period from the date originally incurred, longer than one year;

(ii) Debt with respect to leases which are capitalized in accordance with generally accepted accounting principles having an original term, or renewable at the option of the lessee for a period from the date originally incurred, longer than one year; and

(iii) Debt with respect to installment purchase contracts having an original term in excess of one year.

"Long-Term Debt Service Coverage Ratio" means, for any period of time, the ratio of Income Available for Debt Service of each Obligated Group Member to Maximum Annual Debt Service.

"Long-Term Debt Service Requirements" means, for any period of time, the aggregate of the scheduled payments to be made (other than from amounts irrevocably deposited with the Trustee or otherwise held for the benefit of a lender under terms sufficient to pay all or a portion of the principal of, premium, if any, and interest on, as the same shall become due or payable upon redemption, any Debt which would otherwise be considered Outstanding, including funds held in connection with an advance refunding or a cross-over refunding) in respect of principal of and interest on Long-Term Debt of the Obligated Group during such period, also taking into account (i) with respect to Variable Rate Debt, the provisions, set forth in the Agreement pertaining to debt service on Variable Rate Debt, (ii) with respect to Capitalized Interest, the provisions set forth in the Agreement pertaining to credit for Capitalized Interest, (iii) with respect to Debt represented by a Guaranty of obligations of a person, the provisions set forth in the Agreement to restrictions on Guaranties.

"Maximum Annual Debt Service" means the highest Long-Term Debt Service Requirement for the then current or any future Fiscal Year over the remaining term of any Outstanding Obligations; provided that for the purposes of any Forecast the Maximum Annual Debt Service shall be assumed to be zero on any Debt during any Fiscal Year (or portion thereof) in which the interest on such Obligation is paid from Capitalized Interest.

"Non-Recourse Debt" means any Debt secured by a Lien on any Property, which Debt is not a general obligation of the Obligated Group or any Obligated Group Member, and the liability for which Debt is effectively limited to the Property subject to such Lien (and the revenues derived therefrom), with no recourse, directly or indirectly, to any other Property.

"Obligated Group" means the Institution, the Health System, Jeanes, Temple Physicians, Temple Transport, American Oncological Hospital, the Institute for Cancer Research, Fox Chase Cancer Center Medical Group, Inc. and Fox Chase Network, Inc.

"Obligated Group Agent" Temple University Health System, Inc. or such other Obligated Group Member as the Obligated Group Agent shall designate as a successor by an Officer's Certificate delivered to the Trustee and the Issuer.

"Obligated Group Member" means any corporation that is a constituent of the Obligated Group.

"Obligations" means collectively all Bonds and Parity Debt issued under the Agreement.

"Officer's Certificate" means a certificate signed by an Authorized Officer of the Obligated Group Agent.

"Opinion of Bond Counsel" means a written opinion of nationally recognized bond counsel not unsatisfactory to the Trustee or the Issuer.

"Opinion of Counsel" means a written opinion of Counsel.

"Outstanding," when used to modify Obligations, refers to the 2007 Bonds, the 2012 Bonds, the 2017 Bonds, and all other Parity Bonds and Parity Debt issued under or secured by the Agreement, excluding: (i) Obligations which have been exchanged or replaced, or delivered to the Trustee for credit against a sinking fund installment; (ii) Obligations which have been paid; (iii) Obligations which have become due and for the payment of which moneys have been duly provided to the Trustee; and (iv) Obligations for which there have been irrevocably set aside with the Trustee sufficient funds, or obligations described under the Agreement bearing interest at such rates and with such maturities as will provide, in the determination of the Trustee based solely upon the verification of an Accountant, sufficient funds to pay the principal of, premium, if any, and interest on such Obligations; provided, however, that if any such Obligations are to be redeemed prior to maturity, the Issuer shall have taken all action necessary to redeem such Obligations and notice of such redemption shall have been duly mailed in accordance with the Agreement or irrevocable instructions so to mail shall have been given to the Trustee. When used to modify other Debt, Outstanding refers to Debt which as of such date remains unpaid except Debt for the payment or redemption of which sufficient moneys have been deposited prior to such date in trust for the holders of such Debt (whether upon or prior to the maturity or redemption date of any such Debt), or which is certified by the Obligated Group's Accountant to have been paid pursuant to the provisions for the documents securing such Debt; provided that if such Debt is to be redeemed prior to the maturity thereof, notice of such redemption shall have been given or irrevocable arrangements shall have been made therefor.

"Parity Bonds" means any bonds issued by the Issuer pursuant to the Agreement secured, on a parity basis with the 2007 Bonds, the 2012 Bonds, the 2017 Bonds and Parity Debt, by pledge of Gross Receipts of the Obligated Group and one or more of the funds established under the Agreement (excluding the Rebate Fund, the 2007 Bonds Debt Service Reserve Fund, the 2012 Bonds Debt Service Fund, the 2017 Bonds Debt Service Reserve Fund, and the Bonds Debt Service Reserve Fund), as provided therein.

"Parity Debt" means any Debt of, the Obligated Group or any Obligated Group Member issued pursuant to the Agreement secured by a pledge of Gross Receipts of the Obligated Group or any Obligated Group Member and one or more of the funds established under the Agreement (excluding the Rebate Fund, the 2007 Bonds Debt Service Reserve Fund, the 2012 Bonds Debt Service Fund and the 2017 Bonds Debt Service Reserve Fund) on a parity basis with the 2007 Bonds, the 2012 Bonds, the 2017 Bonds and any issue of Parity Bonds.

"Paying Agent" or "Co-Paying Agent" means any national banking association, bank, bank and trust company or trust company appointed by the Trustee with the consent of the Obligated Group pursuant hereto. "Principal Office" and "Delivery Office" of any Paying Agent shall mean the office thereof designated in writing by the Paying Agent.

"Payment Office" means: (1) in the case of the Trustee or any Paying Agent, the office from which payments of principal, premium (if any) and interest are made and where 2017 Bonds may be surrendered for payment upon redemption, purchase, acceleration, or at maturity and (2) in the case of the Trustee or the Bond Registrar, the office, where 2017 Bonds may be delivered for transfer or exchange, is in each such case as follows:

If by email, hand or overnight mail:

U S Bank
Global Corporate Trust Services
Attention: Bondholders Services
EP-MN-WS2N
111 Fillmore Avenue, East
St. Paul. Minnesota 55107

Customer Service Number for notice is: 1-800-934-6802

"Permitted Encumbrances" means a Permitted Encumbrance as described herein under the heading "Limitations on Creation of Liens."

"Permitted Investments" means any of the following to the extent permitted by applicable law with respect to the moneys proposed to be invested therein:

(a) Government Obligations;

(b) Government Obligations which have been stripped of their unmatured interest coupons, interest coupons which have been stripped from Government Obligations or receipts or certificates evidencing an undivided proportionate interest in payments a pool of such Government Obligations or stripped interest coupons;

(c) Bonds, debentures, notes or other evidences of indebtedness issued by any agency or other governmental or government sponsored agency which may be hereafter created by the United States, provided, however, that the full and timely payment of the securities issued by each such agency or government-sponsored agency is secured by the full faith and credit of the United States;

(d) Direct obligations of, or obligations guaranteed as to timely payment of principal and interest in, any of the following federal agencies which obligations are not fully guaranteed by the full credit of the United States;

(i) Senior debt obligations rated in the highest long-term rating category by at least two nationally recognized rating agencies issued by Fannie Mae Federal Home Loan Mortgage Corporation or the Federal Farm Credit System.

(ii) Senior debt obligations of the Federal Home Loan Bank System, or

(iii) Senior debt obligations of other United States government sponsored agencies;

(e) U.S. dollar denominated deposit accounts, federal funds and banker's acceptances with domestic commercial banks which banks (for this purpose, a bank holding company shall not constitute a bank) have a rating on their short term certificates of deposit an the date of purchase in one of the two highest rating categories by at least two nationally recognized rating agencies and maturing no more than 360 days after the date of purchase;

(f) trust funds and certificates of deposit of, or time, trust or demand deposits in, any bank (including the Trustee and any of its affiliates) or savings and loan association having securities rated at the time of purchase in one of the three highest rating categories (without regard to modifiers) of at least two nationally recognized rating agencies;

(g) commercial paper which is rated at the time of purchase in one of the two highest rating categories by one nationally recognized rating agency and which matures not more than 270 days after the date of purchase;

(h) shares of an open-end, diversified investment company which is registered under the Investment Company Act of 1940, as amended, and which (i) invests its assets primarily (as such term is used by the Securities and Exchange Commission in regulating the use of the title "Government Fund") in any of the foregoing securities; and (ii) has aggregate net assets of not less than $100,000,000 an the date or purchase of such shares;

(i) any bonds or other obligations of any state of the United States or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and (A) which, at the time of purchase of such obligations, are rated, based on an irrevocable escrow account or fund (the "escrow"), in the highest rating category of at least two nationally recognized rating agencies; or (B) (i) which are fully secured as to principal and interest and redemption premium, if any, by an escrow consisting only of cash or Government Obligations, which escrow may be applied only to the payment of such principal of and interest and redemption premium, if any, an such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (ii) which escrow is sufficient, as verified by a nationally recognized independent certified public accountant, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this paragraph (i) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to above, as appropriate;

(j) units of a money market fund which invests solely in Government obligations or repurchase agreements backed by Government obligations, including money market funds, for which the Trustee or any of its affiliates or subsidiaries provide investment advisory or management services, or units of taxable money market funds which funds are regulated investment companies and seek to maintain a constant net asset value per share and have been rated in one of the two highest categories by

at least two nationally recognized rating agencies, including if so rated any fund which the Trustee serves as an investment advisor;

(k) investment agreements, guaranteed investment contracts, repurchase agreements and similar investment instruments the issuer or guarantor of which is rated at the time of purchase in one of the two highest rating categories by at least two nationally-recognized rating agencies or which investment agreements are collateralized by Permitted Investments rated in one of the two highest rating categories by at least two nationally-recognized rating agencies in a principal amount equal to 102% of the principal amount invested under the investment agreements; and

(l) General obligations of states with a short-term rating in one of the two highest rating categories of at least two nationally recognized rating agencies. In the event such obligations are variable rate obligations, the interest rate on such obligations must be reset not less frequently than annually.

"Project" means, as the context requires, the Project described in the Original Agreement and any other project financed with the proceeds of Obligations, as described in the Supplemental Agreement pursuant to which such Obligations are or were issued.

"Project Costs" means the costs of a Project and other costs permitted by the Act.

"Property" means any and all land, leasehold interests, building, machinery, equipment, hardware, and inventory of any Obligated Group Member or the Obligated Group, wherever located and whether now or hereafter acquired, and any and all rights, titles and interest in and to any and all tangible property of any Obligated Group Member or the Obligated Group, whether real or personal, and wherever situated and whether now or hereafter acquired.

"Rating Agency" means individually or collectively, as applicable, (i) Standard & Poor's Ratings Group and any successor thereto, if it has assigned a rating to any series of Outstanding Obligations, (ii) Moody's Investors Service and any successor thereto, if it has assigned a rating to any series of Outstanding Obligations, and (iii) Fitch Ratings Ltd, and any successor thereto, if it has assigned a rating to any series of Outstanding Obligations. With respect to any reference throughout the Fourteenth Supplemental Agreement to any rating assigned by a Rating Agency, such referenced rating shall include any rating within an applicable rating category without regard to gradations or sub-categories howsoever designated.

"Rebate Fund" means the fund by that name established pursuant to the Agreement.

"Record Date" means, as the case may be, the applicable Regular or Special Record Date.

"Regular Record Date" or "Record Date" means the December 15 and June 15 (whether or not a Business Day) next preceding each Interest Payment Date for such Interest Period.

"Refunded Bonds" means the (i) Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series A of 2007, $150,830,000 of which are currently outstanding, (ii) Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series B of 2007, $48,495,000 of which are currently outstanding, and (iii) Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series B of 2012, maturing on July 1, 2023, currently outstanding in the amount of $56,605,000.

"Series" means one or more Bonds issued at the same time or sharing some other common term or characteristic and designated as a separate series of Bonds.

"Series Issue Date" means the date of delivery of the 2017 Bonds.

"Short-Term Debt" means all Dept, other than Long-Term Debt and Non-Recourse Debt, including the following:

(i) Debt with respect to money borrowed payable on demand or for an original term, or renewable at the option of the borrower for a period from the date originally incurred, of one year or less; and

(ii) Debt with respect to installment purchase contracts having an original term of one year or less (other than contracts entered into in the ordinary course of business).

"Subordinated Debt" means any Debt incurred or assumed by one or more Obligated Group Members, the payment of which is by its terms specifically subordinated to payments on the Obligations, or the principal of and interest on which would not be paid (whether by the terms of such Debt or by agreement of the obligee) when the Obligations are in default or while bankruptcy, insolvency, receivership or other similar proceedings are instituted and implemented.

"Supplemental Agreement" means any indenture, loan agreement, financing document or other agreement amending or supplementing the terms of the Agreement or providing for the issuance or securing of Parity Bonds or Parity Debt.

"Total Revenues" means the aggregate of all patient service and other operating revenues and non-operating revenues of the Obligated Group (but before deduction of operating expenses) as determined in accordance with generally accepted accounting principles consistently applied and also less any operating and non-operating revenues attributable to the ownership and operation of properties securing Non-Recourse Debt

"Trustee" means U.S. Bank National Association or any successor appointed under the Agreement.

"2017 Account" means the account by that name established in the Debt Service Fund pursuant to the Fourteenth Supplemental Agreement.

"2017 Bonds Administrative Expenses" in respect of the Issuer means the Issuer's annual administrative fee and initial application fee with respect to the 2017 Bonds as well as all expenses of the Issuer which are properly chargeable as administrative expenses in respect to the Fourteenth Supplemental Agreement and any project financed with 2017 Bonds, including all fees and expenses of the Issuer's professional advisors reasonably necessary and fairly attributable to the Fourteenth Supplemental Agreement or any such project, including without limiting the generality of the foregoing, fees and expenses of accountants, architects, consultants or counsel.

"2017 Bonds Annual Administrative Fee" with respect to the 2017 Bonds means the annual fee for the general administrative services of the Issuer in the amount of $100,000 per annum (payable monthly from the date of closing), and in the case of any other Bonds issued under the Agreement, such additional amount as then may be approved by the Issuer and the Obligated Group Agent.

"2017 Bonds Business Day" or "Business Day" means any day other than (i) a Saturday or Sunday, (ii) a day on which commercial banking institutions in Philadelphia, Pennsylvania or in any other city where the principal corporate trust office of the Trustee responsible for the administration of the Agreement, are required or authorized by law (including executive order) to close or on which either such office is closed for a reason not related to financial condition, or (iii) a day on which the New York Stock Exchange is closed. References to any time of day in the Fourteenth Supplemental Agreement shall refer to Eastern Standard Time or Eastern Daylight Saving Time, as in effect in Philadelphia, Pennsylvania on such day.

"2017 Bonds Clearance Fund" means the Fund established in the Fourteenth Supplemental Agreement.

"2017 Bonds Debt Service Reserve Requirement" is an amount which is equal to the lesser of (a) the maximum annual debt service requirements on the Outstanding 2017 Bonds, (b) 125% of the average annual debt service requirements on the Outstanding 2017 Bonds, and (c) 10% of the original principal amount of the 2017 Bonds, less any original issue discount; provided that the 2017 Bonds Debt Service Reserve Fund Requirement shall be in such lesser amount than the amount prescribed above if necessary, in the opinion of Bond Counsel, to comply with the applicable requirements of the Code. On the Series Issue Date of the 2017 Bonds, the 2017 Bonds Debt Service Reserve Fund Requirement is $23,524,000.

"2017 Bonds Initial Application Fee" with respect to the 2017 Bonds means the initial fee, payable to the Issuer for its initial services in regard to the 2017 Bonds in the amount of $90,000, and in the case of any other Bonds issued under the Agreement, such additional amount as then may be approved by the Issuer.

"2017 Refunding Project" means financing, together with other available funds (i) the refunding of the Refunded Bonds, (ii) the funding of a deposit to a debt service reserve fund for the 2017 Bonds, and (iii) paying the costs of issuance of the 2017 Bonds.

"University" means Temple University - Of The Commonwealth System of Higher Education.

"Value" means, when used in connection with Property, Current Assets or accounts receivable of any Obligated Group Member, the cost basis of such property, net of accumulate depreciation, as it is carried on the books of such member and in conformity with generally accepted accounting principles consistently applied, and when used, in connection with Property, Current Assets or accounts receivable of the Obligated Group, means the aggregate of the cost basis so determined with respect to such Property, Current Assets or accounts receivable of each Obligated Group Member determined in such a manner that no portion of such cost basis of Property, Current Assets or accounts receivable of any Obligated Group Member is included more than once.

SUMMARY OF CERTAIN PROVISIONS OF LOAN AND TRUST AGREEMENT AND FOURTEENTH SUPPLEMENTAL AGREEMENT

The following is a summary of certain provisions of the Agreement and the Fourteenth Supplemental Agreement. These summaries should not be regarded as full statements of the document itself, or of the portions summarized. Reference is made to the document in its entirety, copies of which are on file at the principal corporate trust office of the Trustee, for the complete statements of the provisions thereof.

Assignment and Pledge of Security

Under the Agreement, the Issuer assigns, pledges and grants to the Trustee a continuing security interest in (a) the rights, title and interest of the Issuer under the Agreement, (b) all of the Issuer's rights, whether currently existing or hereafter acquired, to enforce any loan or loans of proceeds of Bonds made by the Issuer to the Obligated Group pursuant to the terms of the Agreement and (c) all revenues to be received from the Obligated Group and all funds and investments held from time to time in the Funds established under the Agreement; but not including funds received by the Issuer for its own use, whether as administrative fees, reimbursement or indemnification, and the rights thereto. The Obligated Group joins in the pledge of, and grant of a security interest in, such funds and investments to the extent of its interest therein. The assignment, pledge and security interest described in the Agreement is for the benefit of the Holders of the Obligations and the Trustee and, in the case of the Issuer's interest under the Agreement in the Gross Receipts, for the ratable benefit, until defeased, of the Holders of the Bonds, Parity Bonds and Parity Debt and the Trustee; provided, however, that funds and investments held (i) in the Rebate Fund established under the Agreement shall not be pledged to the Obligations and shall be applied solely as provided in the Agreement, (ii) in the 2007 Bonds Debt Service Reserve Fund shall be held and applied as provided in the Agreement solely for the security and benefit of the Holders of the 2007 Bonds, (iii) in the 2012 Bonds Debt Service Reserve Fund shall be held and applied as provided in the Agreement solely for the security and benefit of the Holders of the 2012 Bonds, and (iv) in the 2017 Bonds Debt Service Reserve Fund shall be held and applied as provided in the Agreement solely for the security and benefit of the Holders of the 2017 Bonds.

Security Interest in Gross Receipts

As additional security for the obligation of the Obligated Group to make payments to the Debt Service Fund and the Rebate Fund and to make all other payments due under the Agreement, and for the benefit and security of all Bonds and Parity Debt issued under the Agreement, the Obligated Group grants to the Trustee a security interest in the Gross Receipts and upon any rights to receive such Gross Receipts, provided that the existence of such security interest shall not prevent the expenditure, deposit or commingling of Gross Receipts by the Obligated Group so long as all required payments under the Agreement are made when due. If any required payment is not made when due, any Gross Receipts shall be transferred or paid over immediately to the Trustee without being commingled with other funds (unless already so commingled) and any Gross Receipts thereafter received shall upon receipt be transferred to the Trustee in the form received (with necessary endorsement if necessary for negotiability or good delivery) to the extent necessary to cure the deficiency. The Obligated Group represents and warranties that the lien granted with respect to its Gross Receipts is and at all times will be a first lien, subject only to Permitted Encumbrances.

The parties acknowledge that under Section 1815(c) of the Social Security Act (42 U.S. C. § 1395(g)), as added by the Medicare-Medicaid Anti-Fraud and Abuse Amendments of 1977 (Publ. L. 95-

142), the Regulations of the Health Care Financing Administration of the United States Department of Health and Human Services thereunder, the provision of 62 P.S. § 1402, 1980, P.L. 493 and the regulations of the Commonwealth of Pennsylvania promulgated thereunder, a provider of health care services, such as the Hospital, Jeanes and the other hospitals included as part of the Obligated Group, may not assign, or grant a power of attorney to collect, payments due under the Medicare or Medicaid programs under any arrangements contemplating that the assignee or attorney-in-fact will receive the payment directly. The parties further acknowledge that such statutes and regulations do not prohibit the Issuer or the Trustee from obtaining from a provider of services, such as the Hospital, Jeanes and the other hospitals included as part of the Obligated Group, a non-possessory security interest in the provider's Medicare or Medicaid accounts receivable. Accordingly, any provision of the Agreement to the contrary notwithstanding, the parties agree that no action shall be taken under the Agreement by the Trustee with respect to any of the accounts receivable of such hospitals which constitute claims for Medicare or Medicaid reimbursement or payments unless and until all applicable requirements of such statutes and regulations have been fully satisfied and there have been obtained such orders or authorizations from such court or other authority, if any, as may be required. It is the intention of the parties to the Agreement that the security interest of the Trustee in such accounts receivable shall in all relevant respects be subject to whether proper orders or authorizations have been obtained.

Deposit of Funds For Payment of Obligations: Defeasance

When the Obligations have been paid or redeemed in full as provided in the Agreement, or after there have been deposited with the Trustee sufficient cash, or cash invested in Permitted Investments rated at the time of purchase in the highest rating category by the Rating Agencies ("Defeasance Investments") in such principal amounts, bearing interest at such rates and with such maturities as will provide, in the determination of the Trustee solely in reliance on an Accountant's verification, sufficient funds to pay the principal of, premium, if any, whether at maturity or upon earlier redemption, and interest on the Obligations as the same shall become due and payable, and when all the rights under the Agreement of the Issuer, the Holders of the Obligations and Trustee have been provided for, and all other obligations secured by the Agreement have been paid in full, upon written notice from the Obligated Group Agent to the Issuer and the Trustee, the Holders of the Obligations shall cease to be entitled to any benefit or security under the Agreement except the right to receive payment of the cash deposited and held for payment and other rights which by their nature cannot be satisfied prior to or simultaneously with termination of the lien of the Agreement, the security interests created by the Agreement (except in such funds and investments) shall terminate, and the Issuer and the Trustee shall execute and deliver such instruments as may be necessary to discharge the lien and security interests created by the Agreement, provided, however, that if any such Obligations are to be redeemed prior to the maturity thereof, the Obligated Group Agent shall have taken all action necessary to redeem such Obligations and notice of such redemption shall have been duly given in accordance with the Agreement or irrevocable instructions shall have been given to the Trustee and provided further that the lien and security interests created under the Agreement for the benefit of Holders of Parity Bonds and Parity Debt remaining Outstanding shall survive such defeasance (but shall terminate with respect to any series of Parity Bonds or Parity Debt on the date on which the same is no longer Outstanding). Upon such defeasance, the cash and Defeasance Investments required to pay or redeem the Obligations in full shall be irrevocably set aside for the purpose and moneys held for defeasance shall be invested only as provided above, provided that other Defeasance Investments (to the extent permitted by the Act) may be substituted for all or any portion of the Defeasance Investments deposited with the Trustee if the Trustee receives (i) verification from an Accountant in a form satisfactory to the Trustee that the principal and interest becoming due on investments held by the Trustee after such transaction and any other moneys available therefor will provide the Trustee with moneys which at all times will be sufficient to pay the principal of, premium, if any, and interest on the Obligations as the same shall become due and payable and all other amounts due under the Agreement, and (ii) in the case of Bonds, an Opinion of Bond Counsel to the effect that such

transaction is in compliance with applicable law and will not adversely affect the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds. Any funds or property held by the Trustee and not required for payment or redemption of the Obligations in full or for payment of rebate obligations pursuant to the Agreement shall, after satisfaction of all the rights of the Issuer, the Holders and the Trustee, be distributed pursuant to the instructions of the Obligated Group Agent upon such notification, if any, as the Trustee (or the Issuer in the case of Bonds) may reasonably require and upon receipt by the Trustee of an Opinion of Bond Counsel that such distribution will not adversely affect the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds.

If the Issuer or an Obligated Group Member deposits with the Trustee money or Defeasance Investments sufficient to pay the principal or redemption price of any particular Obligation or Obligations becoming due, either at maturity or by call for redemption or otherwise, together with all interest accruing thereon to the due date, interest on such Obligation or Obligations shall cease to accrue on the due date and all liability of the Issuer or the Obligated Group, as the case may be, shall cease to accrue on the due date and all liability of the Issuer or the Obligated Group, as the case may be, with respect to such Obligation or Obligations shall likewise cease. Thereafter, such Obligation or Obligations shall be deemed not to be Outstanding under the Agreement and the Holder or Holders of such Obligations shall be restricted exclusively to the cash or Defeasance Investments so deposited for any claim of whatsoever nature with respect to such Obligation or Obligations, and the Trustee shall hold such funds in trust for such Holder or Holders.

2017 Account of the Debt Service Reserve Fund

(a) Pursuant to the Fourteenth Supplemental, a 2017 Debt Service Reserve Fund in the amount of the 2017 Bonds Debt Service Requirement shall be established with the Trustee for the sole benefit and security of the Holders of the 2017 Bonds and moneys or Permitted Investments shall be deposited therein as provided in the Fourteenth Supplemental Agreement. The moneys in the 2017 Debt Service Reserve Fund and any investments (or Credit Facility) held as a part of such Fund shall be held in trust and, except as otherwise provided, shall be applied by the Trustee solely to the payment of the principal (including sinking fund installments) of and interest on the 2017 Bonds.

(b) Earnings on moneys deposited in the 2017 Debt Service Reserve Fund shall be transferred (1) so long as no deficiency then exists in the 2017 Debt Service Reserve Fund, to the Rebate Fund on any date on which a payment is due to the Rebate Fund pursuant to Section 306(b) of the Agreement, in an amount equal to such payment (to the extent available), and (2) thereafter, shall be retained in the 2017 Debt Service Reserve Fund if any deficiency then exists in the amount required to be on deposit therein, and otherwise shall be transferred to the 2017 Account of the Debt Service Fund.

(c) Any moneys from time to time on deposit in the 2017 Debt Service Reserve Fund shall be applied as follows:

(i) on the date of each permitted or required payment from the 2017 Account of the Debt Service Fund to pay principal of or interest on the 2017 Bonds, moneys in the 2017 Debt Service Reserve Fund (including, without limitation, any amounts drawn by the Trustee under any Credit Facility pursuant to subsection (c) below) shall be applied by the Trustee to make up the difference between (A) the amount necessary to pay principal of and/or interest due on the 2017 Bonds, and (B) the amount then on deposit in the 2017 Account of the Debt Service Fund allocable to the payment of principal of and/or interest on the 2017 Bonds; and

(ii) if the 2017 Bonds Debt Service Reserve Fund Requirement is reduced as a result of any purchase, redemption (but not including a mandatory sinking fund redemption) or

prepayment of the 2017 Bonds, any amount in the 2017 Debt Service Reserve Fund in excess of such reduced 2017 Bonds Debt Service Reserve Fund Requirement shall be transferred to the 2017 Account of the Debt Service Fund for application as a credit against the payments next becoming due, or shall be paid to the Obligated Group Agent as the Obligated Group Agent shall direct.

(iii) The amount of any withdrawal from the 2017 Debt Service Reserve Fund for the purpose of subsection (c)(i) above shall be restored in no more than twelve equal, consecutive, monthly installments, each payable on the last Business Day of each month, commencing with the month next following the month in which the withdrawal is made.

(d) Credit Facility

(i) Notwithstanding the foregoing provisions, in lieu of any required deposit into the 2017 Debt Service Reserve Fund, or in substitution for all or any portion of the amounts on deposit therein, the Obligated Group may cause to be deposited in such Fund a Credit Facility or Facilities (collectively, called the "Credit Facility") payable to the Trustee for the benefit of the Holders of the 2017 Bonds in an amount(s) which, when added to any cash deposits therein, will equal the 2017 Bonds Debt Service Reserve Fund Requirement. The Credit Facility shall be payable (upon the giving of notice as required thereunder) on any date on which moneys will be required to be withdrawn from the 2017 Debt Service Reserve Fund and applied to the payment of principal of or interest on any 2017 Bonds, and if such withdrawal cannot be met by amounts on deposit in the 2017 Debt Service Reserve Fund or provided from available amounts in any other Fund hereunder (provided, however, that such Credit Facility need not provide for payment in the case of an optional redemption of 2017 Bonds). The insurer providing any insurance policy shall be an insurer whose policies insuring the payment, when due, of the principal of and interest on long term tax exempt bond issues results in such issues being rated by each Rating Agency then rating the 2017 Bonds in any of the two highest rating categories assigned by such Rating Agency. Any letter of credit issuer shall be a bank, trust company, national banking association or a corporation, whose senior unsubordinated long term debt is rated by each Rating Agency then rating the 2017 Bonds in any of the two highest rating categories. Any such Credit Facility shall have an initial term of at least two years and may be renewed or extended for one or more additional terms of one year or more, at the option of the parties, so long as any such renewal term has been agreed to by the parties no later than six months prior to the stated expiration date of any such Credit Facility.

(ii) If a disbursement is made pursuant to a Credit Facility provided pursuant to the Fourteenth Supplemental Indenture, the Obligated Group shall either (a) cause the maximum limits of such Credit Facility to be reinstated, or (b) deposit into the 2017 Debt Service Reserve Fund an amount equal to the amount of the disbursement made under such Credit Facility, or a combination of such alternatives, as shall provide that the amount of cash, together with any such Credit Facility, in the 2017 Debt Service Reserve Fund equals the 2017 Bonds Debt Service Reserve Fund Requirement within a time period not longer than would be required to restore such Fund by operation of subsection (c) of Section 4.06 of the Fourteenth Supplemental Indenture.

(iii) If by the date (the "Renewal Date") which is six months prior to the stated expiration date of any such Credit Facility, no arrangement has been made to renew or replace any such Credit Facility, the Obligated Group shall pay, in six equal consecutive monthly installments commencing on such Renewal Date, an aggregate amount equal to the maximum amount payable under such Credit Facility and if the Obligated Group fails to make any such payment when due, the Trustee shall, on the date such payment was due, without further authorization or direction, draw upon such Credit Facility in an amount which, together with any amounts previously deposited to the credit of the 2017 Debt Service Reserve Fund pursuant to this sentence, is equal to the full available amount of such Credit Facility and deposit the proceeds of such drawing in the 2017 Debt Service Reserve Fund. In the

event the Obligated Group is notified that the rating of the insurer has fallen below that required hereunder, the Obligated Group shall either (i) arrange for another Credit Facility which meets the rating requirements described above to be substituted in the 2017 Debt Service Reserve Fund within twelve months of such notification, or (ii) pay for deposit in the 2017 Debt Service Reserve Fund amounts equal to the maximum amount payable under such Credit Facility within a time period not longer than would be required to restore such Fund by operation of subsection (c) of Section 4.06 of the Fourteenth Supplemental Indenture (commencing with the month following the month in which such notification was given).

(iv) The Trustee, at the direction of the Obligated Group Agent, shall terminate the Credit Facility deposited in the 2017 Debt Service Reserve Fund by giving the appropriate notice or certification to such effect to the Credit Facility; provided that at or before such termination, the Obligated Group shall cause to be deposited in the 2017 Debt Service Reserve Fund another Credit Facility, or cash, or combination of such alternatives, equal to the face amount of the Credit Facility being terminated.

(e) Any Permitted Investments which may be held from time to time in the 2017 Debt Service Reserve Fund shall be valued by the Trustee pursuant to the provisions of Section 3.14(d) of the Agreement and on the date of any withdrawal therefrom, using the method of valuation prescribed in said Section 3.14(d) of the Agreement for such Fund. If the value of such Permitted Investments on any valuation date exceeds 110% of the 2017 Bonds Debt Service Reserve Fund Requirement, such excess shall be applied in the same manner as provided in Section 3.05(b)(ii) of the Agreement. If the value of such Permitted Investments on any valuation date falls below 90% of the 2017 Bonds Debt Service Reserve Fund Requirement, the Trustee shall promptly transfer to the 2017 Debt Service Reserve Fund any excess funds in the 2017 Account of the Debt Service Fund, and if there remains a deficiency, shall notify the Issuer and the Obligated Group Agent and the Obligated Group shall pay such deficiency in no more than four equal consecutive monthly installments, each payable on the last Business Day of the month, commencing with the month next following the month in which notice of deficiency is received.

2017 Bonds Clearance Fund

A 2017 Bonds Clearance Fund, and any necessary accounts thereof, is established by the Issuer with the Trustee for the payment of project costs related to the 2017 Refunding Project. The net proceeds of the 2017 Bonds shall be deposited into the 2017 Bonds Clearance Fund and disbursed in accordance with the written instructions of the Obligated Group Agent. Any balance remaining in the 2017 Bonds Clearance Fund 90 days after closing shall be transferred to the 2017 Debt Service Fund.

Rebate Fund

A Rebate Fund shall be maintained by the Trustee as a fund separate from any other fund established and maintained under the Agreement. Except as may be otherwise provided in the Agreement, so long as any 2017 Bonds are outstanding, amounts deposited in the Rebate Fund will be applied to the payment of all amounts required to be rebated to the United States Government pursuant to the Code.

Issuance of Parity Bonds and Parity Debt

One or more series of Parity Bonds subject to the Agreement may be issued by the Issuer and one or more series of Parity Debt subject to the Agreement may be issued by the Obligated Group for the purpose of financing or refinancing projects to be owned or used by the Institution or any other Obligated Group Member, for refunding of Obligations previously issued, whether by the Issuer or another entity, or for any other lawful corporate purpose of any Obligated Member insofar as permitted by applicable law.

Parity Bonds and Parity Debt (collectively, "Parity Obligations") shall bear such date or dates, interest rate or rates, maturities, redemption dates, redemption prices and other terms as shall be specified in the resolution authorizing the issuance thereof adopted by the Issuer or the Obligated Group, or as provided in a Supplemental Agreement. Such Parity Obligations shall be authenticated and delivered upon the conditions set forth in said resolution or Supplemental Agreement. Parity Obligations may be issued only if the Debt incurred by the Obligated Group or any Obligated Group Member in connection with such Parity Obligations does not violate the covenants with respect to Long-Term Debt described under the heading "Limitations on Incurrence of Additional Debt" hereof and the Trustee receives certain required items, including, among other things, certificates and certified resolutions and opinions of counsel, the contents of which are fully described in the Agreement.

Except as otherwise provided in any Supplemental Agreement relating to any series of Parity Obligations, each series of Parity Obligations issued in compliance with the preceding paragraph shall be equally and ratably secured with, until defeased, the 2007 Bonds, the 2012 Bonds, and the 2017 Bonds (excluding the 2007 Bonds Debt Service Reserve Fund, the 2012 Bonds Debt Service Reserve Fund, and the 2017 Bonds Debt Service Reserve Fund) all other series of Parity Bonds and all Parity Debt if any, theretofore issued or incurred in compliance with the Agreement, without preference, priority or distinction, of any Bonds or Parity Debt over any other thereof.

The Obligated Group or one or more Obligated Group Members may, but shall not be obligated to, provide a Credit Facility for one or more issues of Parity Obligations or one or more maturities within one or more issues of Parity Obligations. A Credit Facility provided for one or more issues of Parity Obligations may but need not extend to other Obligations or a maturity thereof or to any other issue, or maturity within any other issue of Obligations.

Parity Obligations may, but need not, be issued in a manner that the interest thereon will be excludable from gross income for federal income tax purposes.

Application of Moneys

If available moneys in the Debt Service Fund after any required transfers to the appropriate account in the Debt Service Fund from any debt service reserve fund (with respect to Obligations secured by a debt service reserve fund) are not sufficient on any day to pay the principal of, premium, if any, and interest on the Outstanding Obligations then due or overdue, such moneys (other than any sum irrevocably set aside for the redemption of particular Obligations and amounts required to be paid to the Rebate Fund) shall, after payment of all charges and disbursements of the Issuer and the Trustee in accordance with the Agreement, be applied first to the payment of interest, including interest on overdue principal, in the order in which the same became due (pro rata with respect to interest which became due at the same time) and second to the payment of principal (including sinking fund installments) of and premium, if any, in the order in which the same became due (pro rata with respect to principal which became due at the same time) in each case, pro rata among Holders of Obligations. Whenever moneys are to be applied as described in this paragraph, the Trustee shall fix the date upon which such application is to be made, and upon such date interest on the amounts of principal paid on such date shall cease to accrue. The Trustee shall give or cause to be given notice of such date at least 10 days before such date. The Trustee shall not be required to make payment to the Holder of any Obligations until such Obligations shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

Notwithstanding any other provisions of the Agreement, if at any time the amounts held for the Obligations in the Debt Service Fund and any debt service reserve fund (with respect to Obligations secured by the applicable debt service reserve fund) are sufficient to pay the principal or redemption price of all Outstanding Obligations and the interest accruing to such Obligations to maturity or the next date of

redemption when such Obligations are redeemable pursuant to the Agreement, the Trustee shall so notify the Issuer and the Obligated Group Agent. Upon receipt of such notice, the Obligated Group Agent may request the Trustee to apply such amounts to pay or redeem all such Outstanding Obligations, as the case may be, on the next date when such Obligations are redeemable pursuant to the Agreement. The Trustee shall, upon receipt of such notice, proceed to pay or redeem all such Outstanding Obligations in the manner provided by the Agreement, and shall transfer to the appropriate account in the Debt Service Fund from the applicable debt service reserve fund (with respect to Obligations secured by a debt service reserve fund) such amounts as are needed in connection therewith.

Payments by the Obligated Group

The payments made by the Obligated Group shall be applied in the following order of priority:

(i) The Obligated Group shall pay to the Trustee for deposit in the Rebate Fund the amounts required by the Agreement at the times required thereby;

(ii) The Obligated Group shall pay or cause to be paid in immediately available funds to the Trustee the required sums at the required times in accordance with the Agreement. :

(iii) The Obligated Group shall pay the principal of, premium if any, and interest on all other Obligations in accordance with the terms thereof, including the making of such deposits into the Debt Service Fund at such times and in such amounts as may be specified in the Supplemental Agreement authorizing the issuance of such Obligations.

(iv) The Obligated Group shall pay to the Trustee for deposit in the 2007 Bonds Debt Service Reserve Fund, the 2012 Bonds Debt Service Reserve Fund, and the 2017 Bonds Debt Service Reserve Fund the amounts required by the Agreement at the times required thereby.

(v) At any time when any principal of the Obligations is overdue, the Obligated Group shall also have a continuing obligation to pay to the Trustee for deposit in the Debt Service Fund an amount equal to interest on the overdue principal (including sinking fund installments) at a per annum rate equal to the actual rate or rates of interest payable on the Obligations. Redemption premiums shall not bear interest.

(vi) Payments by the Obligated Group to the Trustee for deposit in the Debt Service Fund, the 2007 Bonds Debt Service Reserve Fund, the 2012 Bonds Debt Service Reserve Fund, the 2017 Bonds Debt Service Reserve Fund or the Rebate Fund shall discharge the obligation of the Obligated Group with respect to such payments to the extent thereof, provided, that if any moneys are invested in accordance with the Agreement and a loss results therefrom so that there are insufficient interest on the Obligations when due, the Obligated Group shall immediately supply the deficiency.

The Obligated Group shall make the following payments:

(i) To the Issuer, payment of its annual administrative fee;

(ii) Upon demand to the Issuer, payment of, or reimbursement for, any and all costs, expenses and liabilities paid or incurred by the Issuer, including reasonable fees of counsel and disbursements thereof, in satisfaction of any obligations of the Obligated Group to the Issuer under the Agreement which are not performed in accordance with the terms of the Agreement by the Obligated Group;

(iii) Upon demand to the Issuer, reimbursement for or prepayment of any and all costs, expenses, and liabilities paid or incurred or to be paid or incurred by the Issuer or any of its directors, officers, employees and agents, including reasonable fees of counsel and disbursements thereof, and requested by the Obligated Group or required by the Agreement or the Act;

(iv) Upon demand to the Trustee and the Paying Agent, the reasonable fees, charges and expenses of the Trustee and Paying Agent under the Agreement, as well as reimbursement for any and all costs, expenses (including, without limitation, reasonable attorneys' fees) and liabilities paid or incurred by the Trustee or Paying Agent in satisfaction of any obligations of the Obligated Group under the Agreement which are not performed in accordance with the terms of the Agreement by the Obligated Group; and

(v) Upon demand to the Trustee and the Paying Agent, all reasonable costs and expenses (including, without limitation, reasonable attorneys' fees) incurred in the preparation, negotiation, execution, interpretation and administration of the Agreement, any amendments to any of the foregoing, as well as all costs and expenses (including, without limitation, reasonable attorneys' fees) related to or in respect of the Trustee's efforts to collect and/or enforce any of the Trustee's rights and remedies (whether or not legal action is instituted in connection with such efforts).

(vi) Upon demand, to the Issuer, the Trustee, bond counsel, their reasonable fees, charges and expenses (including, without limitation, reasonable attorneys' fees) in connection with or related to the 2017 Bonds.

Joint and Several Obligation

To the extent permitted by law, the obligation of the Obligated Group to make payments to the Issuer and the Trustee and Paying Agent under the Agreement shall be absolute and unconditional, shall be binding and enforceable in all circumstances whatsoever as provided in the Act, shall not be subject to setoff, recoupment or counterclaim and shall be a joint and several general obligation of each Obligated Group Member to which the full faith and credit of each Obligated Group Member are pledged.

No Recourse Against Governing Body Members

No recourse under or upon my obligation, covenant or agreement contained in the Agreement, or in any 2017 Bonds secured by the Agreement, or in any indebtedness secured by the Agreement, shall be had against any past, present or future member of the Governing Body of any Obligated Group Member or officer of any Obligated Group Member under any rule of law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceedings or otherwise; it being expressly agreed and understood that the Agreement, and the obligations secured thereby, are solely corporate obligations of the Obligated Group Members, and that no personal liability whatsoever shall attach to, or be incurred by, such members of the Governing Body of any Obligated Group Member or officers of any Obliged Group Member, or any of them, because of the incurring of the indebtedness authorized by the Agreement, or under or by reason of any of the obligations, covenants or agreements contained or implied from the Agreement or any of the 2017 Bonds secured thereby.

Interest on any 2017 Bond on each Interest Payment Date in respect thereof shall be payable by check mailed on the applicable Interest Payment Date to the address of the person entitled thereto as such address shall appear in the Bond Register; provided that, at the written request of the registered owner of at least $1,000,000 in aggregate principal amount, received by the Bond Registrar at least one Business Day prior to any Record Date, interest payable on any 2017Bond, shall be payable to the registered owner on the applicable Interest Payment Date and thereafter in immediately available funds by wire transfer

within the United States or by deposit into a bank account maintained with a Paying Agent, in either case, to the bank account number of such Holder specified and entered by the Bond Registrar on the Bond Register.

Investments

Pending their use under the Agreement, moneys in all Funds held by the Trustee may, subject to applicable federal tax laws, be invested by the Trustee at the direction of the Obligated Group Agent in Permitted Investments maturing or redeemable at the option of the holder at or before the time when such moneys are expected to be needed and shall be so invested pursuant to an Officer's Certificate of the Obligated Group Agent if there is not then an Event of Default known to the Trustee. Moneys in all Funds held by the Trustee shall be held in trust solely for Holders of the Obligations and the Trustee (or the federal government in the case of the Rebate Fund) and may not be attached or subject to lien upon the occurrence of an Event of Bankruptcy. Any investments described under this heading shall be held by the Trustee as a part of the applicable Fund and shall be sold or redeemed to the extent necessary to make payments or transfers or anticipated payments or transfers from such Fund.

Except as set forth below, any interest realized on investments in any Fund and any profit realized upon the sale or other disposition thereof shall be credited to the Fund with respect to which they were earned and any loss shall be charged thereto. Earnings (which for such purposes include net profit and are after deduction of net loss) on moneys deposited in the Debt Service Fund or Project Fund shall be retained in the Debt Service Fund or Project Fund, as the case may be.

The Trustee may hold undivided interests in Permitted Investments for more than one Fund (for which they are eligible) and may make interfund transfers in kind.

Investments in all Funds other than the Rebate Fund shall be valued by the Trustee as of the end of each April and October, as follows: (i) as established by a nationally recognized pricing service; or (ii) (a) as to investments the bid and asked prices of which are published on a regular basis in The Wall Street Journal (or, if not there, then in The New York Times), the average of the bid and asked prices for such investments so published on or most recently prior to such time of determination; (b) as to investments the bid and asked prices of which are not published on a regular basis in The Wall Street Journal or The New York Times, the average bid price at such time of determination for such investments by any two nationally recognized government securities dealers (selected by the Trustee in its absolute discretion) at the time of making a market in such investments or the bid price published by a nationally recognized pricing service; (c) as to certificates of deposit, bankers acceptances and investments described in clause (h) of the definition of Permitted Investments set forth in this appendix under the heading "DEFINITION OF CERTAIN TERMS," the face amount thereof, plus accrued interest; and (d) as to any investment not specified above, the value thereof established by prior agreement among the Issuer. the Institution and the Trustee. Investments it the Rebate Fund shall be valued at amortized cost or market value, whichever is less. Valuations of all Funds shall be made at such other times as shall be requested by the Obligated Group Agent or the Issuer and at the expense of the Obligated Group.

If at any time the Trustee holds any uninvested cash (other than *de minimis* amounts which may be retained uninvested) and the Obligated Group Agent fails to direct the investment thereof, the Trustee is authorized by the Obligated Group Agent, without need of any further directions, to invest such cash in any available Government Obligations having a maturity not in excess of thirty days.

Corporate Reorganization

Any Obligated Group Member may establish separate divisions and may cause such divisions to be separately incorporated or otherwise organized or reorganized, but all such divisions, whether separately incorporated or not, shall remain bound by the Agreement and shall be jointly and severally liable with respect thereto; provided, however, that prior to affecting any such reorganization, such Obligated Group Member shall deliver to the Issuer and the Trustee (i) an Opinion of Counsel to the effect that, after such reorganization all separately incorporated divisions will be jointly and severally liable under the Agreement and (ii) an Opinion of Bond Counsel that such reorganization will not affect the validity of the Bonds or the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds. Each Obligated Group Member shall preserve all its rights and licenses to the extent necessary or desirable in the operation of its business affairs, provided that no Obligated Group Member shall be obligated to retain or preserve any rights or, licenses no longer used or, in the judgment of its Governing Board, useful in the conduct of its business.

Financial Reports and Other Current Information

Within 120 days after the close of each Fiscal Year, the Obligated Group Agent shall furnish to the Trustee and the Issuer, and to each Holder of Obligations who so requests in writing, copies of the Obligated Group's audited financial statements presented on a consolidated basis for all members of the Obligated Group. The Obligated Group Agent shall furnish to the Trustee and the Issuer within 120 days after the close of each Fiscal Year, a certificate signed by its President or Vice President and by an Authorized Officer of each other Obligated Group Member stating that the Obligated Group has caused its operations for the year to be reviewed and that in the course of that review, no default under the Agreement has come to its attention or, if such a default has appeared, a description of the default. Such certificate shall also specifically demonstrate and conclude that the Obligated Group has (or has not) been in compliance with the provisions described below under "Rate Covenant" and shall include a calculation of the Cushion Ratio for such Fiscal Year.

Within 90 days after the close of each fiscal quarter, the Obligated Group Agent shall furnish to the Trustee and the Issuer, and to each Holder of Obligations who so requests in writing, copies of the Obligated Group's unaudited quarterly financial statements or report presented on a consolidated basis for such fiscal quarter.

Rate Covenant

The Obligated Group shall use its best efforts to maintain for each Fiscal Year a ratio of Income Available for Debt Service to Annual Debt Service of at least 1.10 and shall furnish the Trustee with an Officer's Certificate to that effect promptly after the audited financial statements for such Fiscal Year shall have become available. If such ratio, as calculated based on the audited financial statements for such Fiscal Year, is below 1.10, the Obligated Group Agent shall notify the Trustee to that effect and the Obligated Group covenants to retain a Consultant within sixty (60) days of such calculation to make recommendations to increase such ratio for subsequent Fiscal Years of the Obligated Group at least to the level required or, if in the opinion of the Consultant the attainment of such level is impracticable, to the highest practicable level. The Obligated Group agrees that the Obligated Group will, to the extent practicable and not prevented by law or existing contracts, follow the recommendations of the Consultant. The Obligated Group shall promptly notify the Trustee in each case in which a Consultant is retained and of the recommendations of the Consultant. So long as the Obligated Group shall retain a Consultant and shall follow such Consultant's recommendations to the extent not prevented by law or existing contracts, this paragraph shall be deemed to have been complied with even if such ratio for any subsequent Fiscal Year of the Obligated Group is below 1.10, provided that such ratio shall not be below 1.00.

If Government Restrictions exist which prevent compliance with the 1.10 coverage ratio set forth in the immediately preceding paragraph, that requirement shall be deemed satisfied as long as a Consultant's report is received by the Trustee at least once during each year that Government Restrictions exist, which Consultant's report confirms the continued existence of the factual circumstances giving rise to the Government Restrictions.

So long as the 2012 Bonds are outstanding, within thirty (30) days of receipt of the Consultant's report referred to in the immediately preceding paragraph, the Obligated Group will retain a second Consultant acceptable to the Trustee (the "Additional Consultant"), to verify the first Consultant's confirmation of the continued existence of the factual circumstances giving rise to the Government Restrictions. If the Additional Consultant agrees with the findings of the Consultant, the Obligated Group may rely on the provisions of the immediately preceding paragraph. However, if the Additional Consultant finds that the factual circumstances giving rise to the Government Restrictions do not or no longer exist, then the Additional Consultant shall prepare recommendations consistent with Section 515(a) of the Agreement and the Obligated Group shall follow the Additional Consultant's recommendations.

Limitations on Incurrence of Additional Debt

The Obligated Group agrees that no Obligated Group Member will incur any Additional Debt other than Additional Debt meeting the requirements of any one or more of the provisions described below in subsections (a), (b), (c), (d), (e), (f), (g), (h), (i), or (j) as follows:

(a) Long-Term Debt including Parity Bonds, Parity Debt and Guarantees, if:

(i) prior to incurrence of the Long-Term Debt, there is delivered to the Trustee an Officer's Certificate certifying that the Long-Term Debt Service Coverage Ratio for the Historical Test Period of the Obligated Group, taking into account the current aggregate Outstanding principal amount of all Long-Term Debt during such Historical Test Period and the proposed additional Long-Term Debt as if it had been incurred at the beginning of such Historical Test Period, is not less than 1.20 (provided that such certificate shall in all instances be based upon the most recent financial statements of the Obligated Group; or

(ii) prior to incurrence of the Long-Term Debt, there is delivered to the Trustee (1) an Officer's Certificate certifying that the Long-Term Debt Service Coverage Ratio for the Historical Test Period, not taking the proposed additional Long-Term Debt into account, is not less than 1.10 (or 1.00 if a Consultant determines that Government Restrictions prevented the realization of 1.10), and (2) a Consultant's Forecast stating that the forecasted Long-Term Debt Service Coverage Ratio for each of the next two full Fiscal Years following the incurrence of such Long-Term Debt or, in the case of the incurrence of such Long-Term Debt for capital improvements, following the completion of the facilities being financed, taking the proposed additional Long-Term Debt into account, is not less than 1.25 (or an Officer's Forecast that such ratio for such period is forecasted to be at least 1.50). The requirements described in this clause (ii) shall be deemed satisfied if Government Restrictions exist, and if there is delivered to the Trustee a signed Consultant's Forecast to the effect that the forecasted Long-Term Debt Service Coverage Ratio for each of the next two full Fiscal Years following the borrowing in question or, in the case of the incurrence of such Long Term Debt for capital improvements, following the completion of the facilities being financed, taking the proposed Long Term Debt into account, is not less than 1.00; or

(iii) prior to incurrence of the Long-Term Debt there is delivered to the Trustee an Officer's Certificate certifying that all Long-Term Debt incurred pursuant to this clause (iii)

does not exceed 10% of Total Operating Revenues for the Historical Test Period. Any Long-Term Debt or portion thereof incurred under this clause (iii) which is Outstanding at any time shall be deemed to have been incurred under another clause of this paragraph (a) if at any time subsequent to the incurrence thereof there shall be filed with the Trustee an Officer's Certificate to the effect that such outstanding Debt or portion thereof would satisfy such other provision and specifying such other provision, and thereupon the amount deemed to have been incurred and to be Outstanding under this clause (iii) shall be deemed to have been reduced by such amount and to have been incurred under such other provision. If the terms of such other provision require a Consultant's Forecast, such Forecast shall also be obtained and filed with the Trustee; or

(iv) prior to the incurrence of the Long-Term Debt there is delivered to the Trustee an Officer's Certificate certifying that after incurrence of such Long-Term Debt the Capitalization Ratio will be not more than 0.67.

(b) Completion Debt, without limitation, provided that (A) at the time of incurrence of the original Debt relating to the facilities to be completed with the proceeds of such Completion Debt, there had been delivered to the Trustee an Officer's Certificate certifying that the proceeds of such original Debt and other moneys expected to be available were expected to be sufficient to pay the costs of constructing and equipping such facilities, and (B) there is delivered to the Trustee an Officer's Certificate (i) specifying the estimated cost of completing the construction or equipping of the facilities to be completed, (ii) explaining the necessity for the Completion Debt and concluding that such necessity arose out of factors outside the control of the Obligated Group and (iii) demonstrating that the proceeds of such Completion Debt and other available moneys will be sufficient to finance the cost of completion; or

(c) Long-Term Debt incurred for the purpose of refunding or refinancing, including advance refunding or crossover refunding, any Outstanding Long-Term Debt; or

(d) Short-Term Debt, provided that immediately after the incurrence of such Debt the aggregate Outstanding principal amount of all such Short-Term Debt does not exceed the greater of fifteen percent (15%) of the Total Revenues for the Historical Test Period or 50% of the accounts receivable of the Obligated Group for the Historical Test Period. Short-Term Debt may also be incurred if such Short-Term Debt could be incurred under paragraph (a) above assuming it were Long-Term Debt; or

(e) Non-Recourse Debt or Subordinated Debt without limitation, or

(f) Long-Term Debt in the form of installment purchase contracts, capitalized leases, purchase money mortgages, loans, sale agreements or other typical borrowing instruments and Guarantees of such Debt; provided that the aggregate Annual Debt Service on the Debt permitted under this paragraph (f) shall not in any Fiscal Year exceed two percent (2%) of Total Revenues for the most recent completed Fiscal Year, provided further that such Debt may exceed two percent (2%) of Total Revenues for the most recent completed Fiscal Year if it could have been incurred under paragraph (a) above assuming such Debt were Long-Term Debt; or

(g) Any Debt represented by a letter of credit reimbursement agreement or other similar reimbursement agreement entered into by an Obligated Group Member and an institution providing a Credit Facility with respect to any other Debt incurred in accordance with any other provision described under this heading; or

(h) Debt incurred or deemed incurred by virtue of any recourse obligation associated with any sale or assignment of accounts receivable or any securitization of accounts receivable; or

(i) Advances to the Hospital from the University, which advances shall be effected as liabilities on the financial statements of the Hospital and shall be evidenced by a written obligation to repay such advances; or

(j) Interest rate swaps, caps, floors, futures contracts and similar financial products (collectively, "Swaps"). No financial tests shall be required solely by reason of the incurrence of a Swap, but in the case of a Swap which is being incurred for the purpose of limiting interest rate risk with respect to specific Debt which is proposed td be incurred, or which is then outstanding, the Long-Term Debt Service Requirements of the Obligated Group shall be adjusted for the related Debt to give effect to the Swap in such manner, and to such extent, if any, as may be required by generally accepted accounting principles or, in the absence of any such requirements under generally accepted accounting principles, as may be stated in a certificate of an Authorized Officer (which certificate shall be delivered concurrently with any Forecast or Authorized Officer's certificate required in connection with the incurrence of the related Debt) as necessary to present fairly the reasonably expected Debt Service Requirements of the Obligated Group after the incurrence of the Swap.

Sale, Lease or Other Disposition of Property or Current Assets

The Obligated Group agrees that the Obligated Group Members will not, in the aggregate, in any Fiscal Year sell, lease or otherwise dispose of Property the Value of which would cause the aggregate Value of Property so transferred in such Fiscal Year to exceed 5% of the net property, plant and equipment of the Obligated Group as shown on the financial statements for the Historical Test Period, except for the following transfers, sales or leases of Property, provided that transfers, sales or leases described under this heading shall not be permitted in any period during which an Event of Default has occurred and is continuing:

(i) to any person if, in the judgment of the Obligated Group Agent, such Property is, or within the next succeeding twenty-four (24) calendar months, reasonably expected to become, inadequate, obsolete, worn out, or not suitable, profitable, desirable or necessary to the proper and efficient operation of the Property of the Obligated Group and the sale, lease, removal or other disposition thereof will not impair the structural soundness, efficiency or economic value of the remaining Property; or

(ii) to another Obligated Group Member, with or without consideration; or

(iii) in the ordinary course of business; or

(iv) if the Obligated Group receives fair market value therefor or if the Obligated Group is the sole shareholder or sole member of the transferee; or

(v) to a person which is not an Obligated Group Member provided that either (A) for the two most recent Fiscal Years of the Obligated Group for which audited financial statements of the Obligated Group are available prior to the sale, lease or other disposition, an Officer's Certificate shall demonstrate that the Long-Term Debt Service Coverage Ratio, taking into consideration such sale, lease, or other disposition, was at least 1.15 for each of such Fiscal Years; or (B) (1) for the most recent Fiscal Year of the Obligated Group for which audited financial statements of the Obligated Group are available prior to the sale, lease or other disposition, an Officer's Certificate shall demonstrate that the Long-Term Debt Service Coverage Ratio was at least 1.10 for such Fiscal Year and (2) for the two full Fiscal Years immediately following such sale, lease or disposition, (a) a Consultant's Forecast shall demonstrate that the Long-Term Debt Service Coverage Ratio, taking into consideration the proposed sale, lease or disposition, will be at least 1.25 for each of such Fiscal Years or (b) an Officer's Forecast shall

demonstrate that the Long-Term Debt Service Coverage Ratio, taking into consideration the proposed sale, lease or disposition will be at least 1.50 for each of such Fiscal Years; provided that any transfers of Property made to an Affiliate at any time during the Fiscal Year in which it becomes an Obligated Group Member during such Fiscal Year (other than transfers of Property which have been, or are intended to be transferred by such Affiliate to a third party) shall be disregarded for the purposes of any calculation pursuant to this paragraph (v) after the date such Affiliate becomes an Obligated Group Member.

The Obligated Group agrees that the Obligated Group Members will not sell, lease or otherwise dispose of Current Assets in any manner which would result in the removal of such Current Assets from the balance sheet of the Obligated Group, except for the following transfers, sales or leases of Current Assets, provided that transfers, sales or leases described under this heading shall not be permitted in any period during which an Event of Default has occurred and is continuing:

(i) to any person if such transfer, sale or lease is for consideration (including for purchase of real property, tangible or intangible personal property or services) made in an arm s length transaction; or

(ii) to any person if made as an investment in marketable securities or in the Temple University Investment Liquidity Pool, the Temple University Investment Intermediate Pool or the Temple University Investment Endowment Pool or any similar pooled investment funds hereafter established by the University, or

(iii) to the University by the Hospital as advances reflected as an asset on the financial statements of the Hospital, which advances shall be evidenced by a written obligation to repay such advances and shall bear interest at a rate at least equal to the 90-day United States Treasury Bill rate, or

(iv) to another Obligated Group Member, with or without consideration; or

(v) with respect to donor-restricted gifts and bequests and the income therefrom (but only to the extent excluded from the definition of Gross Revenues), to any person if the purpose of such transfer, as stated in a resolution adopted by the Governing Body of the transferor, is to support, sponsor or develop health care related activities; or

(vi) to any person, if an Officer's Certificate is delivered to the Trustee at the time such transfer is made demonstrating that the Long-Term Debt Service Coverage Ratio for the Historical Test Period, calculated after deducting the amount of such transfer from Income Available for Debt Service, would have been at least 1.10 or would not have been reduced by more than 10% as a result of such transfer and if the purpose of such transfer, as stated in a resolution adopted by the Governing Body of the transferor, is to support, sponsor or develop health care related activities.

(vii) to the University, grant funds or similar payments received by an Obligated Group Member from, and designated by, the Commonwealth or other payors or grantors for purposes related to medical academics.

Consolidation, Merger, Sale or Conveyance

Each Obligated Group Member may merge or consolidate with any other Obligated Group Member and may sell or convey all or substantially all of its assets to any Obligated Group Member, provided that any merger or consolidation pursuant to which the Institution would cease to exist as a separate corporate entity, or any sale or conveyance of all or substantially all of the assets of the

Institution shall be subject to an Opinion of Bond Counsel that such merger, consolidation, sale or conveyance will not adversely affect the validity of the Bonds or the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds. The Obligated Group covenants that no Obligated Group Member will merge or consolidate with any other corporation which is not an Obligated Group Member or sell or convey all or substantially all of its assets to any person not an Obligated Group Member unless the following conditions shall have been satisfied:

(a) either it will be the continuing corporation, or the successor corporation (if other than an Obligated Group Member) shall be a corporation organized and existing under the laws of the United States of America or a state thereof and such corporation shall become an Obligated Group Member or shall otherwise expressly assume in writing the due and punctual payment of the principal of and premium, if any, and interest on all Outstanding Obligations issued under the Agreement according to their tenor, and the due and punctual performance and observance of all of the covenants and conditions of the Agreement, which document shall be executed and delivered to the Trustee by such corporation; and

(b) there shall have been delivered to the Trustee and the Issuer an Opinion of Bond Counsel to the effect that under then existing law the consummation of such merger, consolidation, sale or conveyance would not adversely affect the validity of the Obligations or the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds; and

(c) there is delivered to the Trustee either (A) an Officer's Certificate showing that if the proposed transaction had been completed on the first day of the two most recent Historical Test Periods, the Long-Term Debt Service Coverage Ratio for each of such Historical Test Periods would have been at least 1.20, or (B) an Officer's Forecast showing that the Long-Term Debt Service Coverage Ratio for the two Fiscal Years following the proposed transaction would be at least 1.50, or (C) a Consultant's Forecast showing that the Long-Term Debt Service overage Ratio for the two Fiscal Years following the proposed transaction would be at least 1.25, or (D) an Officer's Certificate showing that if the proposed transaction had been completed on the first day of the two most recent Historical Test Periods, the Long-Term Debt Service Coverage Ratio for each of such Historical Test Periods would have been at least equal to the actual Long-Term Debt Service Coverage Ratio for each of such Historical Test Periods; provided that the required Debt Service Coverage Ratio shall be 1.0 if Governmental Restrictions are in effect; and

(d) there is delivered to the Trustee copies of all required governmental approvals.

Restrictions on Guarantees

The Obligated Group agrees that no Obligated Group Member will enter into, or become liable after the date of the Agreement in respect of, any Guaranty unless (i) such Guaranty is of Debt of another Obligated Group Member, or (ii) such Guaranty is of obligations of a person which is not an Obligated Group Member, and such Guaranty could then be incurred as Debt under the Agreement. For purposes of any covenants or computations, provided for in the Agreement, including determination of the ability of any Obligated Group Member to enter into or become liable under a Guaranty pursuant to the Agreement, the aggregate annual principal and interest payments on, and the principal amount of, any indebtedness of a person which is not an Obligated Group Member which is the subject of a Guaranty under the Agreement and which would, if such obligation were incurred by an Obligated Group Member, constitute Long-Term Debt, shall be deemed equivalent to twenty percent (20%) of the actual Annual Debt Service on, and principal amount of, such indebtedness, for so long as such Guaranty constitutes a contingent liability under generally accepted accounting principles, provided, however, that (A) the Annual Debt Service on the indebtedness which is subject to the Guaranty shall be disregarded if the Long-Term Debt

Service Coverage Ratio of the obligor on such Debt, calculated in the same manner as for the Obligated Group, was at least 1.50 for the Historical Test Period or is forecasted in an Officer's Forecast to be at least 1.50 for the next two fiscal years following the incurrence of the Guaranty and (B) the Annual Debt Service on, and principal amount of, any Long-Term Debt represented by a Guaranty shall be deemed equivalent to all of the actual Annual Debt Service on, and principal amount of, such indebtedness, for so long as payments have been and continue to be required to be made by any Obligated Group Member on such Guaranty (or for so on as the obligor on the guaranteed Debt has insufficient funds for the payment of debt service and receiving transfers of operating funds from the Obligated Group) and for a period of twelve months thereafter.

Limitations on Creation of Liens

The Obligated Group agrees that no Obligated Group Member will create or suffer to be created or exist any Lien upon Property, Gross Receipts or Current Assets now owned or hereafter acquired by the Obligated Group or any Obligated Group Member other than Permitted Encumbrances. Permitted Encumbrances shall consist of the following:

(i) Liens arising by reason of good faith deposits with any Obligated Group Member in connection with leases of real estate, bids or contracts (other than contracts for the payment of money), deposits by an Obligated Group Member to secure public or statutory obligations or to secure, or in lieu of, surety, stay or appeal bonds, and deposits as security for the payment of taxes or assessments or other similar charges;

(ii) Any Lien arising by reason of deposits with, or the giving of any form of security to, any governmental agency or any body created or approved by law or governmental regulation for any purpose at any time as required by law or governmental regulation as a condition to the transaction of any business or the exercise of any privilege or license, or to enable any Obligated Group Member to maintain self-insurance or to participate in any funds established to cover any insurance risks or in connection with workmen's compensation, unemployment insurance, pension or profit sharing plans or other social security, or to share in the privileges or benefits required for companies participating in such arrangements;

(iii) Any judgment lien against any Obligated Group Member so long as such judgment is being contested and execution thereon is stayed or, in the absence of such contest and stay, such judgment lien will not materially impair the Property, Current Assets or Gross Receipts or subject the Property, Current Assets or Gross Receipts to material loss or forfeiture;

(iv) (A) Rights reserved to or vested in any municipality or public authority by the terms of any right, power, franchise, grant, license, permit or provision of law, affecting any Property, Gross Receipts or Current Assets, to (1) terminate such right, power, franchise, grant, license or permit, provided that, the exercise of such right would not materially alter the use of such Property, Gross Receipts or Current Assets or materially and adversely affect the value thereof, or (2) purchase, condemn, appropriate or recapture, or designate a purchaser of, such Property, Gross Receipts or Current Assets; (B) any liens on any Property, Gross Receipts or Current Assets for taxes, assessments, levies, fees, water and sewer rents, and other governmental and similar charges and any liens of mechanics, materialmen, laborers, suppliers or vendors for work or services performed or materials furnished in connection with such Property, Gross Receipts of Current Assets, which are not due and payable or which are not delinquent or the amount or validity of which are being contested and execution thereon is stayed or the existence of which will not subject the Property, Current Assets or Gross Receipts to material loss or forfeiture; (C) easements, rights-of-way, servitudes, restrictions and other minor defects, encumbrances, and irregularities in the title to any Property, Gross Receipts or Current Assets which do not materially

impair the use of such Property, Gross Receipts or Current Assets or materially and adversely affect the value thereof; (D) rights reserved to or vested in any municipality or public authority to control or regulate any Property, Gross Receipts or Current Assets or to use such Property, Gross Receipts or Current Assets in any manner, which rights do not materially impair the use of such Property, Gross Receipts or Current Assets materially and adversely affect the value thereof, and (E) to the extent that it affects title to any Gross Receipts, the Agreement;

(v) Any Lien on Property, Gross Receipts or Current Assets which was existing on the date of authentication and delivery of the 1993 Bonds, including renewals thereof, provided that no such Lien may be extended or modified to apply to any Property, Gross Receipts or Current Assets of any Obligated Group Member not subject to such Lien on such date, unless such Lien as so extended or modified otherwise qualifies as a Permitted Encumbrance;

(vi) Any lease of Property which, in the judgment of the Obligated Group Member, the Property of which is subject thereto, is reasonably necessary or appropriate for or incidental to the use of such Property or, in the case of the Hospital, to the operation of the Hospital, taking into account the nature and terms of the lease and the nature and purposes of the Property;

(vii) Any Lien on Property, Gross Receipts or Current Assets of a person that becomes an Obligated Group Member pursuant to a consolidation, merger, sale or conveyance in accordance with the Agreement and that is not incurred in contemplation of such consolidation, merger, sale or conveyance; provided that no such Lien may be extended or modified to apply to any Property, Gross Receipts or Current Assets of any Obligated Group Member not subject to such Lien on such date, unless such Lien if so extended or modified otherwise, qualifies as a Permitted Encumbrance;

(viii) Any Lien on Property which Lien secures Debt incurred in compliance with the provisions of the Agreement, if, after giving effect to the Lien, the Value of the Property which is encumbered in accordance with this clause (viii) will not exceed fifteen percent (15%) of the Value of the Property of the Obligated Group as of the end of the Historical Test Period;

(ix) Any parity Lien on all or a portion of Gross Receipts to secure any Long-Term Debt or Short-Term Debt incurred pursuant to the Agreement. Any Supplemental Agreement or other agreement for the repayment of such Additional Debt and instruments evidencing or securing the same may provide, among other things, for notices from or to the Trustee regarding defaults by the Obligated Group, the duties and limitations of the Trustee to pursue remedies upon the receipt of such notice, and the sharing of the rights of the Holders of the Obligations to control the exercise of remedies with the holders of such Additional Debt and/or with the issuer of any Credit Facility with respect to such Additional Debt;

(x) Any Lien subordinated to the Lien securing the Obligations on all or a portion of Gross Receipts to secure any Long-Term Debt or Short-Term Debt incurred pursuant to the Agreement;

(xi) Any Lien on accounts receivable securing or deemed to secure any Debt incurred or deemed incurred by virtue of any recourse obligation associated with any assignment, sale or pledge of accounts receivable;

(xii) Any Lien on Property securing Debt incurred to provide such Property, including Liens incurred as described under the heading "Limitations on Incurrence of Additional Debt" hereof;

(xiii) Any Lien to the issuer of a Credit Facility as described under the heading "Debt Service Reserve Fund" hereof, and

(xiv) Rights of set-off or banker's lien with respect to funds on deposit with a financial institution in the ordinary course of business; and

(xv) Any pledge or lien of assets for purposes of meeting collateral posting requirements for derivative transactions.

Notwithstanding the provisions described under this heading, each Obligated Group Member may create or suffer to be created or exist a Lien upon Property or Current Assets, in favor of the holder of any Debt, with prior notice to the Trustee but without the consent of the Trustee or of the Holders of any Obligations, so long as such Lien, or a Lien at least on a parity therewith, is effectively granted in favor of the Holders of all Obligations then Outstanding.

Debt Service on Variable Rate Debt

For purposes of the computation of the interest component of any (but not historical) Long-Term Debt Service Requirement, Annual Debt Service or Maximum Annual Debt Service, Variable Rate Debt shall, at the election of the Obligated Group Agent, be deemed Debt which bears interest at a rate equal to that derived from the Bond Index, as determined by an Officer's Certificate.

Credit for Accrued and Capitalized Interest

For purposes of the computation of the Long-Term Debt Service Requirement, Annual Debt Service or Maximum Annual Debt Service, whether historic or projected, the Obligated Group may, at the election of the Obligated Group Agent, subtract from interest due on Debt any accrued interest and Capitalized Interest which is available and is to be applied to make such interest payment in the year such interest comes due.

Insurance

The Obligated Group agrees that each Obligated Group Member will maintain, or cause to be maintained, the following insurance: (i) insurance against loss and/or damage to the Property under a policy or policies in form and amount covering such risks as are ordinarily insured against by similar institutions, including without limiting the generality of the foregoing, fire and uniform standard extended coverage endorsements, limited only as may be provided in the standard form of extended coverage endorsements at the time in use in the Commonwealth of Pennsylvania; (ii) public liability insurance, landlord's liability insurance and comprehensive automobile liability insurance protecting the Issuer and such Obligated Group Member, as their interests may appear, against liability for injuries to persons and/or property, in the minimum amount of $1,000,000 liability to any one person for personal injury, $1,000,000 liability for personal injury for each occurrence and in the aggregate, and $1,000,000 liability for property damage for each occurrence and in an aggregate of not less than $1,000,000; (iii) fidelity bonds (or equivalent coverage) on all officers and employees of such Obligated Group Member who collect or have custody of or access to revenues, receipts or income from the Property, or any funds of such Obligated Group Member, such bonds to be in such amounts as are customarily carried by like organizations engaged in like activities of comparable size and having comparable income; (iv) worker's compensation and employer's liability insurance meeting such Obligated Group Member's statutory obligations, or equivalent self-insurance; (v) boiler and machinery coverage (direct damage and use and occupancy), on a replacement-cost basis when required by ordinance or law; (vi) excess liability coverage, either straight excess or umbrella excess, covering excess of clauses (ii) and (iv) above, if any,

to be maintained in force so that the total coverage available under the aforementioned clauses is equal to that carried by comparable institutions of like size; and (vii) hospital professional liability insurance meeting such Obligated Group Member's statutory obligations, or equivalent self-insurance.

All policies of insurance and fidelity bonds shall be issued by responsible insurance or fidelity bonding companies qualified to do business in the Commonwealth of Pennsylvania and, qualified under the laws of the Commonwealth of Pennsylvania to assume risks covered by such policy or policies or bond or bonds and shall be non-assessable. All policies of insurance may contain loss deductible clauses specifying such sum or sums as such Obligated Group Member may determine as the sum or sums to be deducted from the amount of loss resulting from the particular perils insured against.

Any Obligated Group Member may make modifications to the insurance coverage hereinabove described, including self-insurance or use of a captive insurance company in whole or in part for any such coverage, but only upon the following terms and conditions. In making its decision whether to make such modifications such Obligated Group Member shall consider the availability of commercial insurance, the terms upon which such insurance is available, the cost of such available insurance and the effect of such terms and such costs upon such Obligated Group Member's costs and charges for its services. No such modification shall be made unless (i) such Obligated Group Member has received a written recommendation with respect to such modification from an Insurance Consultant, (ii) the Insurance Consultant shall report that insurance is not available at a comparable cost to satisfy the applicable insurance requirements stated above and that such modification shall not disqualify such Obligated Group Member for reimbursement under Medicare or Medicaid programs or any governmental programs providing similar benefits, and (iii) adequate reserves for any self-insurance program or use of a captive insurance company are deposited and maintained with an independent corporate trustee, unless the Insurance Consultant shall report that such deposits are not necessary. Such Obligated Group Member shall give written notice to the Issuer and the Trustee of any such modifications, indicating in such notice the effective date of such modification.

Not later than February 1 of each year, the Obligated Group Agent shall file with the Issuer and the Trustee a certificate of an Authorized Officer to the effect that each Obligated Group Member is in compliance with the provisions described under this heading. Such certificate shall be accompanied biennially by a certificate of an Insurance Consultant verifying that each Obligated Group Member is in compliance with the provisions described under this heading; provided, however, that such certificate of an Insurance Consultant shall be filed annually with respect to any self-insurance programs permitted as described under this heading.

Recovery of Insurance Proceeds

In the event of damage to or destruction of all or any part of the Property of the Obligated Group with a value in excess of two percent (2%) of the full insurable value of all Property of the Obligated Group, the Obligated Group shall exercise its best efforts to recover any applicable insurance proceeds. Such proceeds shall be paid to the Obligated Group Agent. From such proceeds the Obligated Group Agent shall provide for the payment or reimbursement of reasonable expenses of obtaining the recovery. The Obligated Group Agent shall then give notice to the Trustee of such expenses and of the amount of the remaining proceeds (the "Net Proceeds").

Subject to the provisions of any financing document pertaining to a Permitted Encumbrance and to the requirements of the Code, the Obligated Group shall apply the Net Proceeds for any lawful corporate purpose as the Obligated Group Agent determines, if the Obligated Group Agent shall first have delivered to the Issuer and to the Trustee an Officer's Forecast stating that the forecasted Long Term Debt Coverage Ratio for each of the next two full succeeding Fiscal Years immediately following the date of

such certificate(s), taking into account such damage or destruction and the proposed use of the Net Proceeds, would not be less than 1.10. If the Obligated Group Agent is unable to deliver the foregoing officer's Forecast, the Obligated Group Agent shall apply the Net Proceeds or so much thereof as may be needed for the repair, replacement, restoration or reconstruction of the affected Property or, at the option of the Obligated Group Agent, for any other capital project of equivalent value and utility, provided that any use of the Net Proceeds of damage or destruction to the Project or any other Property financed with tax-exempt Obligations shall be conditioned on the delivery to the Trustee of an Opinion of Bond Counsel that such use will not adversely affect the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds or any other tax exempt obligations issued to finance or refinance the Property. The obligation created as described in this paragraph shall not be limited by the amount of Net Proceeds available.

Any Net Proceeds remaining after compliance by the Obligated Group, with the preceding paragraph shall be transferred by the Obligated Group Agent to the Trustee and deposited in the Debt Service Fund to redeem Obligations.

Eminent Domain

In the event of a taking by eminent domain of all or any part of Property of the Obligated Group with a value in excess of two percent (2%) of the full insurable value of all Property, the Obligated Group shall exercise their best efforts to recover any applicable proceeds. Such proceeds shall be paid to the Obligated Group Agent. The Obligated Group Agent shall make appropriate deductions from such proceeds as in the case of insurance proceeds and shall give notice to the Trustee of such deductions and of the amount of the Net Proceeds. The Net Proceeds shall be dealt with and described under the heading "Recovery of Insurance Proceeds" hereof. In the event of an election to repair, replace, restore or reconstruct, the foregoing provisions as to insurance proceeds shall apply, and the Obligated Group shall be obligated to repair, replace, restore or reconstruct the remaining property to the extent necessary to restore the operational utility lost by the taking, and this obligation shall not be limited by the amount of Net Proceeds available.

Option to Redeem Obligations

The Obligated Group may be relieved of its obligation as described under the headings "Recovery of Insurance Proceeds" and "Eminent Domain" hereof with respect to any casualty to the extent that Net Proceeds of insurance or condemnation awards exceed twenty-five percent (25%) of the then full insurable value of the Property, as determined by an Officer's Certificate, by electing to use such Net Proceeds (or a portion thereof exceeding twenty-five percent (25%) of such insurable value) to redeem Obligations.

Additional Obligated Group Members

If at any time the Obligated Group Agent and any Affiliate shall determine that such Affiliate should become an Obligated Group Member, the Obligated Group Agent and the person may execute and deliver to the Trustee an instrument containing the agreement of such person (A) to become an Obligated Group Member under the Agreement and thereby become subject to compliance with all provisions of the Agreement pertaining to an Obligated Group Member, including the performance and observance of all covenants and obligations of an Obligated Group Member thereunder, and (B) confirming to the Trustee and each other Obligated Group Member that all Obligations issued and then Outstanding under the Agreement will be paid in accordance with the terms thereof and the Agreement, when due. Each instrument executed and delivered to the Trustee in accordance with this paragraph shall be accompanied by an Opinion of Counsel, addressed to the Trustee, to the effect that such instrument has been duly

authorized, executed and delivered by the Obligated Group Agent and such person and constitutes a valid and binding obligation enforceable in accordance with its terms, except that such Opinion of Counsel may state that enforceability may be limited by bankruptcy laws, insolvency laws and other laws affecting creditor's rights generally, and may contain such other qualifications as shall be satisfactory to the Trustee.

It shall be a condition precedent to the consummation of any transaction involving an instrument to be executed and delivered to the Trustee in accordance with the preceding paragraph that the Trustee shall also have received (i) Officer's Certificate which demonstrates that, as a result of any person becoming an Obligated Group Member as part of such transaction, the Obligated Group would not be in default in the performance or observance of any covenant or condition to be performed or observed by it under the Agreement, the Obligated Group would meet the conditions described under the heading "Limitations on Incurrence of Additional Debt" for the incurrence of one dollar of additional Long-Term Debt or under clause (iii) under the heading "Withdrawal From the Obligated Group" hereof for the withdrawal of a member of the Obligated Group and (ii) an Opinion of Bond Counsel to the effect that under then existing law the consummation of such transaction would not adversely affect the validity of the Bonds or the exclusion from gross income under Section 103 of the Code of interest paid on the Bonds.

Upon any person becoming an Obligated Group Member, all of the provisions, terms, applicable covenants and representations set forth in the Agreement shall apply to such person from the time that such person become an Obligated Group Member.

Obligated Group Covenants and Warranties.

Certain covenants and warranties made by the Institution are made by each Obligated Group Member and the provisions of each such covenant and warranty thereof shall apply respectively to each Obligated Group Member.

Withdrawal From the Obligated Group

No Obligated Group Member may withdraw from the Obligated Group unless:

(i) the Obligated Group Agent consents to such withdrawal;

(ii) the Trustee shall have received an Opinion of Bond Counsel to the effect that under then existing law such Obligated Group Member's withdrawal from the Obligated Group would not adversely affect the validity of the Obligations or the tax-exempt status of interest payable on the Bonds;

(iii) either (A) for the two most recent Historical Test Periods prior to such withdrawal, an Officer's Certificate shall demonstrate that the Long-Term Debt Service Coverage Ratio, taking into consideration the proposed withdrawal, (1) would have been equal to at least 1.20 for each such Historical Test Period or (2) would have been equal to the actual Long-Term Debt Service Ratio for each such Historical Test Period; or (B) for the two Fiscal Years following such withdrawal, (1) an Officer's Forecast shall demonstrate that the Long-Term Debt Service Coverage Ratio would be at least 1.50 or (2) a Consultant's Forecast shall demonstrate that the Long-Term Debt Service Coverage Ratio would be at least 1.25; provided, however, that the requirements of this clause (iii) shall be deemed satisfied if Government Restrictions exist, and if there is delivered to the Trustee a signed Consultant's opinion to the effect that the projected Long-Term Debt Service Coverage Ratio for each of the next two full Fiscal Years following the transaction in question will not be less than 1.00; and

(iv) the Trustee shall have received an Officer's Certificate to the effect that, as a result of the withdrawal of such Obligated Group Member, the Obligated Group will not be in default in the performance or observance of any covenant or condition to be performed under the Agreement.

Notwithstanding the foregoing, the Hospital may not withdraw from the Obligated Group while any of the Obligations are Outstanding.

Default by the Obligated Group

"Event of Default" means any one of the events set forth below and "Default" means any Event of Default without regard to any lapse of time or notice:

(i) Any principal (including sinking fund installments) of, premium, if any, or interest on any Obligation shall not be paid when due, whether at maturity, by acceleration, upon mandatory sinking fund redemption or otherwise.

(ii) The Obligated Group shall fail to make any payment required of it with respect to the principal and interest coming due with respect to the 2007 Bonds, the 2012 Bonds, or the 2017 Bonds within five (5) days following any applicable date upon which the same becomes due and payable.

(iii) Any rebate amounts owed to the United States pursuant to the Agreement shall not be paid when due.

(iv) The Obligated Group shall fail to make any other required payment to the Trustee or the Issuer under the Agreement, and such failure is not remedied within thirty (30) days after written notice thereof is given by the Issuer or the Trustee to the Obligated Group Agent; or the Obligated Group shall fail to observe or perform any of its other agreements, covenants or obligations under the Agreement or any related bond document and such failure is not remedied within sixty (60) days after written notice thereof is given by the Issuer or the Trustee to the Obligated Group Agent, provided, however, that if such observance or performance requires work to be done, actions to be taken or conditions to be remedied, which by their nature cannot reasonably be done, taken or remedied as the case may be, within such sixty (60) day period, no Event of Default shall be deemed to have occurred or to exist if and so long as the Obligated Group shall commence such observance or performance within such sixty (60) day period and shall diligently and continuously prosecute the same to completion.

(v) There shall be a material breach of warranty made in the Agreement by the Obligated Group as of the date it was intended to be effective and the breach is not cured within sixty (60) days after written notice thereof is given by the Issuer or the Trustee to the Obligated Group Agent unless the breach is not curable within sixty (60) days and the Obligated Group Agent notifies the Issuer and the Trustee within such sixty (60) days that it is proceeding diligently in its efforts to cure said breach, in which event it shall be an Event of Default if said breach is not cured within one hundred twenty (120) days after such notice is given by the Obligated Group Agent to the Issuer and the Trustee.

(vi) An Event of Bankruptcy shall occur, provided that, in the event of a filing of an involuntary case in bankruptcy under the United States Bankruptcy Code or the commencement of a proceeding under any other applicable law concerning bankruptcy, insolvency or reorganization against any Obligated Group Member, such event shall not be an Event of Default unless such petition or proceeding remains undismissed for a period of ninety (90) days.

(vii) An event of default shall occur with respect to any agreement securing Parity Bonds or Parity Debt.

(viii) A breach shall occur (and continue beyond any applicable grace period) with respect to the performance of an agreement securing Additional Debt or other Debt of the Obligated Group for borrowed money in an amount at least equal to $5,000,000 or pursuant to which the same was issued or incurred, or an event shall occur with respect to provisions of any such agreement, as a result of which a holder or holders of such Debt or a trustee or trustees under any such agreement accelerates such Debt; but an Event of Default shall not be deemed to be in existence or to be continuing under this clause (viii) if (A) the Obligated Group is in good faith contesting the existence of such breach or event and if such acceleration is being stayed by judicial proceedings or by agreement of the parties or (B) such breach or event is remedied and the acceleration, if any, is wholly annulled. The Obligated Group shall notify the Issuer and the Trustee of any such breach or event immediately upon the Obligated Group becoming aware of its occurrence and shall from time to time furnish such information as the Issuer or the Trustee may reasonably request for the purpose of determining whether a breach or event described in this clause (viii) has occurred and whether such power of acceleration has been exercised or continues to be in effect.

If the Trustee determines that a Default, other than a Default in the payment principal (including sinking fund installments) of, premium, if any, or interest on the Obligations, has been cured before the entry of any final judgment or decree with respect to it, the Trustee may waive the Default and its consequences by written notice to the Obligated Group Agent and shall do so upon written instruction of the Holders of at least a majority in principal amount of the Outstanding Obligations, provided, however, that if the Obligations have been declared immediately due and payable as a result of such Default, the Trustee may waive such acceleration only upon receipt of written instructions of the Holders of at least a majority in principal amount of the Outstanding Obligations.

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Remedies Upon Events of Default

If an Event of Default occurs and is continuing, the Trustee may, upon receipt of written direction from the Holders of the percentage in principal amount of the Obligations specified in the Agreement, by written notice to the Obligated Group Agent, the Issuer and the Holders of the Obligations, declare immediately due and payable the principal amount of the Outstanding Obligations and the payments to be made by the Obligated Group therefor, and accrued interest on the foregoing, whereupon the same shall become immediately due and payable without any further action or notice.

If an Event of Default occurs and is continuing, the Trustee may exercise all of the rights and remedies of a secured party under the Uniform Commercial Code or otherwise with respect to the lien on Gross Receipts created by the Agreement. Without limiting the generality of the foregoing, to the extent permitted by law, the Trustee may realize upon such lien by any one or more of the following actions: (i) enter the Property and take possession of the financial books and records of the Obligated Group relating to the Gross Receipts and all checks or other orders for payment of money and cash in the possession of the Obligated Group representing Gross Receipts or proceeds thereof; (ii) notify account debtors obligated on any Gross Receipts to make payment directly to the order of the Trustee (except to the extent prohibited by the laws and provisions referenced in the Agreement); (iii) collect, compromise, settle, compound or extend Gross Receipts which are in the form of accounts receivable or contract rights from the Obligated Group's account debtors by suit or other means and give a full acquittance therefor and receipt therefor in the name of the Obligated Group, whether or not the full amount of any such account receivable or contract right owing shall be paid to the Trustee; (iv) require the Obligated Group to deposit all cash, money and checks or other orders for the payment of money which represents Gross Receipts within five (5) Business Days after receipt of written notice of such requirement, and thereafter as received, into a fund or account to be established for such purpose by the Trustee, provided, however, that the requirement to make such deposits shall cease, and the balance of such fund or account shall be paid to the Obligated Group, when all Events of Default have been cured; (v) forbid the Obligated Group to extend, compromise, compound or settle any accounts receivable or contract rights which represent Gross Receipts, or release, wholly or partly, any person liable for the payment thereof (except upon receipt of the full amount due) or allow any credit or discount thereon; and (vi) endorse in the name of the Obligated Group any checks or other orders for the payment of money representing Gross Receipts or the proceeds thereof.

The Trustee may enforce the provisions of the Agreement by legal proceedings for the specific performance of any covenant, obligation or agreement contained herein, whether or not an Event of Default exists, or for the enforcement of any other appropriate legal or equitable remedy, and may recover damages caused by any breach by the Obligated Group or the Issuer of the provisions of the Agreement, including (to the extent the Agreement may lawfully provide) court costs, reasonable attorneys' fees and other costs and expenses incurred in enforcing the obligations of the Issuer and the Obligated Group hereunder.

Application of Gross Receipts after Default

Proceeds from the exercise of the rights and remedies of the Trustee as described in the second paragraph under the heading "Remedies Upon Events of Default" hereof with respect to the lien on Gross Receipts, after payment or reimbursement of the reasonable expenses and fees of the Trustee and the Issuer due and unpaid in connection therewith, shall be allocated pro rata to make payments due but unpaid on or with respect to the Obligations. The portion allocable to the Obligations shall be applied to the remaining obligations of the Obligated Group under the Agreement as described under the heading

"Application of Moneys" hereof. Any surplus thereof shall be paid to the Obligated Group as directed by an Officer's Certificate.

Proceedings by Holders of Obligations

No Holder of Obligations shall have any right to institute any legal proceedings for the enforcement of the obligations of the obligated Group under the Agreement or any applicable remedy thereunder, unless the Holders of Obligations have directed the Issuer and the Trustee to act and furnished the Issuer and the Trustee indemnity as provided in the Agreement and have afforded the Issuer and the Trustee reasonable opportunity to proceed, and the Issuer and the Trustee shall thereafter fail or refuse to take such action. Subject to the foregoing, any Holder of Obligations may by any available legal proceedings enforce and protect its rights under the Agreement and under the laws of the Commonwealth of Pennsylvania.

Amendment

The Agreement may be amended by the parties without Holder consent for any of the following purposes: (a) to add to the covenants and agreements of the Obligated Group or to surrender or limit any right or power of the Obligated Group; (b) to cure any ambiguity or defect, or to amend or supplement the Agreement in a manner which does not materially impair the security for the Obligations; (c) to provide for the issuance and establish the terms and provisions of Obligations and provide for all other matters in connection with the issuance of Obligations, including, without limitation, provisions relating to, or required by the issuer of, any Credit Facility applicable to Obligations, provided that no such amendment shall have a material adverse effect upon the security for the Obligations other than that implicit in the authorization of Obligations; (d) to provide for the sharing of control of, or notices with respect to, the exercise of remedies, with the Holders of Obligations and other provisions incident to securing of Obligations described in clause (ix) under the heading "Limitations on Creation of Liens" hereof; or (e) to amend the provisions of the Agreement relating to payment of rebatable amounts. The Issuer shall not be required to be a party to an amendment entered into pursuant to clause (c) above in connection with the issuance of Parity Debt not constituting Bonds.

Except as provided in the foregoing paragraph, the Agreement may be amended only with the written consent of the Holders of a majority in principal amount of the Outstanding Obligations delivered to the Trustee subsequent to the receipt by such Holders of notice of the principal terms of any such amendment; provided, however, that no amendment of the Agreement may be made without the unanimous written consent of the Holders of affected Obligations for any of the following purposes: (1) to extend the maturity of any Obligation; (2) to reduce the principal amount or interest rate of any Obligation, (3) to make any Obligation redeemable other than in accordance with its terms; (4) to create a preference or priority of any Obligation or Obligations over any other Obligation or Obligations; or (5) to reduce the percentage of the Obligations required to be represented by the Holders of Obligations giving their consent to any amendment. Written consent of a holder of 2017 Bonds or other Obligations hereafter issued shall be satisfied either by a written instrument signed by such holder or by a deemed consent by such holder upon purchase or receipt of such Bonds or other Obligations for which deemed consent written notice has been furnished to such holder by disclosure in an official statement or other disclosure document.

When the Trustee determines that the requisite number of consents has been obtained for an amendment which requires Holder consent, it shall, within ninety (90) days, file a certificate to that effect in its records and mail or cause to be mailed notice to the Holders of Obligations stating that the Agreement has been amended as of the date that the requisite number of consents have been received and setting forth a summary of the principal terms of such amendment. No action or proceeding to invalidate

the amendment shall be instituted or maintained unless it is commenced within sixty (60) days after such mailing. The Trustee will promptly certify to the Issuer that it has mailed or caused to be mailed such notice in the manner required by the Agreement. A consent to an amendment may be revoked by a notice given by the Holder and received by the Trustee prior to the Trustee's certification that the requisite consents have been obtained.

AGREEMENT AMENDMENTS

Effective upon the closing on the issuance of the 2017 Bonds, the following additional terms shall have the meanings set forth below:

"Electronic Notice" means notice transmitted electronically ("E-mail") or in writing, by facsimile transmission or by telephone (promptly confirmed in writing or by facsimile transmission).

"Favorable Opinion of Bond Counsel" means an opinion of nationally recognized bond counsel acceptable to the Issuer and the Obligated Group Agent, addressed to the Issuer, the Obligated Group Agent and the Trustee, as appropriate, to the effect that the action proposed to be taken is authorized or permitted by the Loan and Trust Agreement and will not adversely affect the exclusion of interest on the 2017 Bonds from gross income for purposes of federal income taxation under Section 103 of the Code.

The Holders of the 2017 Bonds, by their acceptance of a 2017 Bond, consent to the amendments to the Agreement contained in Section 5.02 of the Fourteenth Supplemental Agreement (collectively, the "Amendments"). The Amendments will take effect upon delivery to the Trustee of evidence that a majority in principal amount of Outstanding Obligations (including Holders of the 2017 Bonds, who are deemed to have consented) have consented to the Amendments. The Amendments are as follows:

Amended Definition

The definition of "Debt" in Section 101 of the Original Agreement is amended and restated in its entirety as follows:

> ""Debt" means all obligations for payments of principal and interest with respect to money borrowed, incurred or assumed by one or more Obligated Group Members, including without limitation, all Obligations issued under the Agreement, guarantees, purchase money mortgages, finance lease obligations, installment purchase contracts or other similar instruments in the nature of a borrowing by which the Obligated Group Member will be unconditionally obligated to pay, except obligations of one Obligated Group Member to another Obligated Group Member. Debt shall not include operating leases. Nothing in this definition or otherwise shall be construed to count Debt more than once, and Debt incurred as described in clause (g) under the heading "Limitations on Incurrence of Additional Debt" hereof shall be counted only to the extent the reimbursement obligation on amounts drawn or, in the reasonable judgment of the Obligated Group Agent, likely to be drawn on, the Credit Facility exceeds the obligation on the Debt for which such Credit Facility is provided."

Substitution of Security

(a) In connection with any merger, consolidation, member substitution or similar transaction involving an affiliation of the Obligated Group with an entity or entities subject to an existing master trust indenture or similar financing document, the pledge of Gross Receipts securing the Obligations shall be terminated upon presentation to the Trustee of the following:

> (i) a direction by the Obligated Group Agent that a substitution of security as contemplated by Section 5.02(a) of the Fourteenth Supplemental Agreement will take effect and setting forth the effective date of such change;
>
> (ii) master indenture notes or similar obligations (the "Substitute Security") issued by the Obligated Group or a surviving, resulting or transferee entity meeting the requirements of

Section 525 of the Agreement (the "Substitute Obligated Group") under and pursuant to and secured by a master trust indenture or similar financing document (the "Substitute Security Document") executed by the Obligated Group or any Substitute Obligated Group, and any other parties named therein (collectively, the "New Group") and an independent corporate trustee (the "New Trustee") (which may be the Trustee) meeting the eligibility requirements of the Trustee as set forth in Section 704 of the Agreement, which Substitute Security has been duly authenticated by the New Trustee;

(iii) the Substitute Security Document, which shall contain the agreement of each member of the New Group (i) to become a member of the New Group and thereby to become subject to compliance with all provisions of the Substitute Security Document and the Agreement, and (ii) unconditionally and irrevocably (subject to the right of such Person to cease its status as a member of the New Group pursuant to the terms and conditions of the Substitute Security Document and the Agreement) to jointly and severally make payments upon each Obligation, including the Substitute Security, issued under the Substitute Security Document at the times and in the amount provided in each such obligation;

(iv) evidence that the ratings, if any, on Obligations following the substitution of the Substitute Security for the pledge of Gross Receipts will be the same as or better than the ratings on such Obligations prior to the substitution of the Substitute Security;

(v) an Opinion of Bond Counsel that the replacement of the pledge of Gross Receipts with the pledge of the Substitute Security to secure the Obligations will not, in and of itself, adversely affect the validity of any Obligations or any exemption for the purposes of federal income taxation to which interest on such Obligations would otherwise be entitled;

(vi) an Opinion of Counsel to the Obligated Group that the conditions in this Section 5.02 for the termination of the pledge of Gross Receipts and the substitution of the Substitute Security to secure the Obligations have been met and that, as of the date of such termination and substitution, no Event of Default shall have occurred and be continuing under the Agreement or the Substitute Security Document;

(vii) so long as the Bonds are Outstanding, an Officer's Certificate stating that, upon delivery of the Substitute Security and the Substitute Security Document, either:

(A) each rating agency then maintaining a rating on the 2017 Bonds provides written confirmation to the effect that the most recent or next long-term rating assigned to the 2017 Bonds by each such rating agency is or will be no less than "BBB+" or its equivalent; or

(B) the Substitute Security Document contains a pledge of Gross Receipts of the current Members of the Obligated Group substantially similar in scope to the pledge of Gross Receipts established under the Agreement; and

(viii) such other opinions and certificates as the Trustee may reasonably require, together with such reasonable indemnities as the Trustee may request.

(b) In connection with any merger, consolidation, member substitution or similar transaction involving an affiliation of the Obligated Group with an entity or entities subject to an existing master trust indenture or similar financing document as described in Section 5.02(a) of the Fourteenth

Supplemental Agreement, the provisions of Section 525 of the Agreement regarding requirements for the addition of an Obligated Group Member shall be deemed inapplicable.

(c) Upon the effectiveness of the Substitute Security Document, the definition of Parity Debt in Section 102 is hereby deleted in its entirety and replaced with the following:

> "Parity Debt" means any Debt of the Obligated Group or any Obligated Group Member issued pursuant to Section 3.08 secured by a pledge of the Substitute Security and one or more of the funds established under this Agreement (excluding the Rebate Fund and the 1993 Bonds Debt Service Reserve Fund) on a parity basis with the 1993 Bonds and any issue of Parity Bonds.

(d) Upon the effectiveness of the Substitute Security Document, Section 202 of the Agreement is deleted in its entirety and replaced with the following:

> Section 202. Security Interest.
>
> As additional security for the obligation of the Obligated Group to make payments to the Debt Service Fund, the Project Fund, the 1993 Bonds Debt Service Reserve Fund and the Rebate Fund and to make all other payments due under this Agreement, and for the benefit and security of all Bonds and Parity Debt issued hereunder, a security interest is granted in the Substitute Security and all other master indenture notes or similar obligations issued under the Substitute Security Document to secure the Obligations.

(e) Upon the effectiveness of the Substitute Security Document, Section 515 – Rate Covenant, Section 516 – Limitations on Incurrence of Additional Debt, Section 517 – Sale, Lease or other Disposition of Property or Current Assets, Section 518(c) relating to requirements in the case of Consolidation, Merger, Sale or Conveyance, Section 519 – Restrictions on Guarantees, Section 520 – Limitations on Creation of Liens, Section 521 – Debt Service on Balloon Debt, Section 522 – Debt Service on Variable Rate Debt, Section 523 – Credit for Accrued and Capitalized Interest, and Section 527 – Obligated Group Covenants and Warranties are deleted from the Agreement.

(f) In connection with the delivery of a Substitute Security Document, the Obligated Group Agent may, at its option, deliver to the Trustee a termination of one or more of the Mortgages.

Days-Cash-On-Hand Covenant

The Obligated had previously covenanted to maintain a certain number of Days-Cash-On-Hand, as set forth below, for as long as the 2012 Bonds remain outstanding. The Fourteenth Supplemental Agreement amended this covenant so that it will remain in effect so long as either the 2012 Bonds or the 2017 Bonds remain outstanding.

The Obligated Group covenants that it shall maintain Days-Cash-On-Hand of at least forty-five (45) days. Compliance shall be tested annually, commencing with the Fiscal Year ending June 30, 2013, on the basis of the annual audited financial statements required pursuant to Section 504 of the Original Agreement for the preceding Fiscal Year.

The Obligated Group Agent shall furnish to the Trustee and the Issuer within one hundred twenty (120) days after the close of each Fiscal Year, a certificate signed by its President or Vice President demonstrating and concluding that the Obligated Group has (or has not) been in compliance with the

provisions of Section 527(a) of the Agreement. Such certificate may, at the option of the Obligated Group Agent, be combined with the certificate delivered pursuant to Section 504 of the Agreement.

In the event the certificate delivered pursuant to Section 527(b) of the Agreement indicates that Days-Cash-On-Hand of the Obligated Group is less than sixty (60) days as of any annual testing period, then the Obligated Group shall, within fifteen (15) days of the delivery of annual audited financial statements for such Fiscal Year, retain a Consultant. Such Consultant shall, within ninety (90) days of such appointment, deliver to the Obligated Group and the Trustee a report setting forth in detail the reason that the Obligated Group has less than sixty (60) Days-Cash-On-Hand and making recommendations with respect to the operation and management of the Obligated Group which in such Consultant's judgment will enable the Obligated Group to achieve sixty (60) Days-Cash-On-Hand (unless such Consultant reasonably concludes that the reason the Obligated Group has less than sixty (60) Days-Cash-On-Hand is principally due to factors wholly outside the control of the Obligated Group). Notwithstanding anything to the contrary in Section 527 of the Agreement, the failure to comply with Section 527(a) of the Agreement shall constitute an Event of Default under the Agreement.

APPENDIX D

FORM OF OPINION OF CO-BOND COUNSEL

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November 2, 2017

The Hospitals and Higher Education Facilities Authority of Philadelphia
Philadelphia, Pennsylvania

Temple University Health System, Inc., on behalf of itself and the rest of the Obligated Group
Philadelphia, Pennsylvania

U.S. Bank National Association, as Trustee
Philadelphia, Pennsylvania

Morgan Stanley & Co. LLC, as the Underwriters' Representative
New York, New York

Re: The Hospitals and Higher Education Facilities Authority of Philadelphia Hospital Revenue Bonds (Temple University Health System Obligated Group), Series of 2017

Ladies and Gentlemen:

We have acted as co-Bond Counsel to The Hospitals and Higher Education Facilities Authority of Philadelphia (the "Authority") in connection with the issuance of its $235,240,000 Hospital Revenue Bonds (Temple University Health System Obligated Group), Series of 2017 (the "Bonds"). The Bonds are issued under and pursuant to the laws of the Commonwealth of Pennsylvania (the "Commonwealth"), including particularly the Municipality Authorities Act, 53 Pa. Cons. Stat. §5601 *et seq.* and a Fourteenth Supplemental Loan and Trust Agreement dated as of October 1, 2017 (the "Fourteenth Supplement") by and among Temple University Hospital, Inc., Temple University Health System, Inc., Jeanes Hospital, Temple Physicians, Inc., Temple Health System Transport Team, Inc., The American Oncologic Hospital, the Institute for Cancer Research, the Fox Chase Network, Inc., and Fox Chase Cancer Center Medical Group, Inc. (collectively, the "Obligated Group" and each an "Obligated Group Member") and U.S. Bank National Association (as successor to First Union National Bank), as Trustee (the "Trustee"), which amends and supplements a Loan and Trust Agreement dated as of January 15, 1993 (the "Original Loan and Trust Agreement" and, as previously amended and supplemented, and as further amended and supplemented by the Fourteenth Supplement, the "Agreement"). Pursuant to a Bond Purchase Agreement (the "Bond Purchase Agreement") between the Authority and Morgan Stanley & Co. LLC (the "Underwriters' Representative"), as the representative of itself and the other underwriters for the Bonds as set forth in the Bond Purchase Agreement, and approved by the Obligated Group, the Underwriters will purchase the Bonds from the Authority for a public offering price as more fully set forth therein.

The Bonds are being issued at the request of the Obligated Group to provide funds for the benefit of the Obligated Group pursuant to the Fourteenth Supplement to provide financing for a project consisting of: (i) the current refunding of all or a portion of (a) the Authority's outstanding Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series A of 2007 (the "2007A Bonds"); (b) the Authority's outstanding Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series B of 2007 (the "2007B Bonds"); and (c) the Authority's outstanding Hospital Revenue Refunding Bonds (Temple University Health System Obligated Group) Series B of 2012 (the "2012B Bonds"); (ii) funding a deposit to the debt service reserve fund for the Bonds; and (iii) paying the costs of issuance of the Bonds (collectively, the "Project").

The Bonds will be limited obligations of the Authority, payable solely from certain payments to be made by the Obligated Group to the Authority under the Agreement and funds and accounts consisting of monies and securities held by the Trustee under the Agreement. The Bonds are secured by the Fourteenth Supplement on a parity with other Parity Bonds and Obligations (each as defined in the Agreement) previously issued and to be issued under the Agreement. The Obligated Group, together with any future members of the Obligated Group, is required by the Agreement to make payments to the Trustee in amounts sufficient to pay, among other things, the principal or redemption price of and interest on the Bonds and other Parity Bonds and Obligations.

Each of the Obligated Group Members has represented that it is an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"), is exempt from federal income tax under Section 501(a) of the Code, except for unrelated business income subject to taxation under Section 511 of the Code, and is not a "private foundation" within the meaning of Section 509(a) of the Code.

The Obligated Group Members have covenanted in the Tax Compliance Agreement dated as of this date, with respect to the Bonds (the "Tax Compliance Agreement") to comply with the requirements of Section 148(f) of the Code which provides for the rebate of certain arbitrage profits to the United States, and have further covenanted that the Obligated Group shall not use proceeds of the Bonds or use or own the facilities financed or refinanced by the proceeds of the Bonds if such use would adversely affect the exclusion from gross income of interest on the Bonds. For the purposes of the opinions set forth below, we have assumed that the Authority and the Obligated Group will comply with the covenants set forth in the Agreement and the Tax Compliance Agreement relating to the tax exempt status of interest on the Bonds, and that the proceeds of the Bonds will be expended as required by and described in the Agreement, the Tax Compliance Agreement and the other relevant documents, agreements, instruments and certificates executed and delivered in connection with the issuance of the Bonds (collectively, the "Bond Documents").

In rendering this opinion, we have examined (a) such constitutional provisions and statutes of the Commonwealth, (b) the proceedings authorizing the issuance of the Bonds, and (c) such certificates, opinions, receipts and other documents, including original counterparts or certified copies of the Agreement, the Tax Compliance Agreement and such other documents as we have deemed necessary. In making the aforesaid examinations, we have assumed and relied upon the truth, completeness, authenticity and due authorization of all documents and certificates examined and of the authenticity of all the signatures thereon and we have not undertaken to verify the factual matters set forth in any certificates or other documents by independent investigation. In addition, we have assumed that all documents submitted to us as copies conform to the originals thereof. We have also assumed that the documents referred to herein have been duly authorized by all parties thereto other than the Authority and are, where appropriate, legally binding obligations of, and enforceable in accordance with their terms against all parties, except the Authority, and that the actions required to be taken with consent required to be obtained by such parties, have or will be taken or obtained.

In rendering this opinion, we have also assumed that the parties to the documents referred to herein, other than the Authority, have acted in full compliance with the terms of applicable laws, regulations and orders. We have relied upon the opinion of Austin McGreal, Esq., Philadelphia, Pennsylvania, Special Counsel to the Authority, dated the date hereof, to the effect that the Authority is a public instrumentality and a body corporate and politic duly organized and existing under the Constitution and laws of the Commonwealth.

We have also relied upon the opinion of Beth C. Koob, Esquire, Chief Counsel to the Obligated Group, dated the date hereof to the effect that, among other matters, (a) each of the Obligated Group Members is an organization described in Section 501(c)(3) of the Code and is exempt from federal income tax under Section 501(a) of the Code, except for unrelated business income subject to taxation under Section 511 of the Code, and (b) none of the Obligated Group Members are "private foundations" within the meaning of Section 509(a) of the Code.

We have assumed that each party to the Bond Documents will carry out all obligations imposed on such party by the Bond Documents in accordance with the terms thereof and that all representations and certifications contained in the Bond Documents are accurate, true and complete.

On the basis of the foregoing and subject to the qualifications stated herein, we are of the opinion that, under existing law, as presently enacted and construed:

1. The Authority is a body corporate and politic validly existing under the laws of the Commonwealth, and has the power and authority to execute and deliver the Fourteenth Supplement and to issue and deliver the Bonds.

2. The Fourteenth Supplement has been duly authorized, executed and delivered by the Authority and the obligations of the Authority under the Fourteenth Supplement constitute binding obligations of the Authority, enforceable against the Authority in accordance with its terms.

3. The Bonds have been duly authorized, executed, issued and delivered by the Authority and are the binding limited obligations of the Authority and are enforceable against the Authority in accordance with their terms.

4. Under the laws of the Commonwealth, as presently enacted and construed on the date hereof, the Bonds are exempt from personal property taxes in the Commonwealth and interest on the Bonds is exempt from Commonwealth personal income and corporate net income tax.

5. Interest on the Bonds is excluded from the gross income of the owners of the Bonds for federal income tax purposes under existing law, as currently enacted and construed. Interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed upon individuals and corporations by the Code. Interest on the Bonds held by a corporation (other than an S corporation, regulated investment company, real estate investment trust or real estate mortgage investment conduit) may be indirectly subject to alternative minimum tax because of its inclusion in the adjusted current earnings of the corporate holder. Interest on the Bonds held by a foreign corporation may be subject to the branch profits tax imposed by the Code.

In providing this opinion, we advise you that it may be determined in the future that interest on the Bonds, retroactive to the date of issuance thereof or prospectively, will not be excluded from the gross income of the owners of the Bonds for federal income tax purposes if certain requirements of the Code are not met. The Authority and the Obligated Group Members have covenanted in the Agreement and the Tax Compliance Agreement to comply with such requirements.

The purchasers of the Bonds should consult their own tax advisor as to collateral state or federal income tax consequences. We express no opinion regarding state or federal tax consequences arising with respect to the Bonds other than as expressly set forth in numbered paragraphs 4 and 5 hereof.

We express no opinion herein with respect to the perfection or priority of any lien or security interest or any other matter not set forth herein. We call your attention to the fact that the Bonds are

special, limited obligations of the Authority, payable only out of certain revenues of the Authority and certain other monies available therefor as provided in the Bonds, and that the Bonds do not pledge the credit or taxing power of the Authority, the City of Philadelphia, the Commonwealth or any political subdivision, agency or instrumentality thereof. The Authority has no taxing power.

Our opinions as to the validity, binding effect and enforceability of the Agreement, the Fourteenth Supplement and the Bonds are subject to the effect of any applicable bankruptcy, fraudulent conveyance or transfer, insolvency, reorganization, moratorium or similar law affecting creditors' rights generally and the effect of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity, at law, or in bankruptcy).

These opinions are rendered on the basis of the laws of the Commonwealth and, as to numbered paragraph 5 hereof only, federal law, in both instances as enacted and construed on the date hereof. We express no opinion as to, and we assume no responsibility for, any matter or information not set forth in the numbered paragraphs above.

We undertake no obligation to supplement this opinion at any time to reflect events, occurrences and changes of law following the date of delivery of the Bonds. We express no opinion on, and do not undertake to render an opinion in the future on, any event which requires, as a condition precedent to such event, that bond counsel render an opinion to the effect that such event will not cause interest on the Bonds to be included in gross income for federal income tax purposes. Furthermore, no assurance can be given that any such opinion can, or could in the future, be rendered.

Very truly yours,

APPENDIX E

FORM OF CONTINUING DISCLOSURE AGREEMENT

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CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the "Disclosure Agreement") made as of the 1st day of October, 2017, by and among the Obligated Group (the "Obligated Group") consisting of Temple University Hospital, Inc., Temple University Health System, Inc. (the "Parent"), Jeanes Hospital, Temple Physicians, Inc., Temple Health System Transport Team, Inc., The American Oncologic Hospital, The Institute for Cancer Research, Fox Chase Network, Inc. and Fox Chase Cancer Center Medical Group, Inc. (each a "Member" and collectively, the "Members") and Digital Assurance Certification, L.L.C., as dissemination agent (the "Dissemination Agent").

WITNESSETH

WHEREAS, pursuant to a Bond Purchase Agreement between The Hospitals and Higher Education Facilities Authority of Philadelphia (the "Authority") and Morgan Stanley & Co. LLC, acting for itself and as representative of the underwriters listed therein (the "Underwriters"), the Authority is selling $235,240,000 aggregate principal amount of its Hospital Revenue Bonds (Temple University Health System Obligated Group), Series of 2017 (the "2017 Bonds") to the Underwriters; and

WHEREAS, Rule 15c2-12(b)(5) promulgated under the Securities Exchange Act of 1934, as amended (the "Rule"), provides that a Participating Underwriter (as defined in the Rule) shall not purchase or sell municipal securities in connection with an Offering (as defined in the Rule) unless the Participating Underwriter has reasonably determined that an issuer of the municipal securities, or an obligated person for whom financial or operating data is presented in the final official statement has undertaken, either individually or in connection with other issuers of such municipal securities or obligated persons, in a written agreement or contract for the benefit of holders of such securities, to provide, either directly or indirectly through an indenture trustee or a designated agent, certain specified financial information and operating data and notices of material events; and

WHEREAS, the Parent, at the request of the Underwriters, has agreed to make publicly available certain financial information with respect to its affiliates that are not obligated persons and has determined to memorialize its agreement to do so in this Disclosure Agreement; and

WHEREAS, the Members are the only obligated persons with respect to the 2017 Bonds for purposes of the Rule; and

WHEREAS, in order to enable the Underwriters to comply with the requirements of the Rule, the Members, as the obligated persons, agree to undertake to provide the information and notices required by the Rule.

NOW, THEREFORE, in consideration of the premises, the parties hereto, intending to be legally bound hereby, agree as follows:

Section 1. Definitions. In addition to the terms defined in the above recitals, the following terms shall have the meanings specified below:

"Agreement" means the Loan and Trust Agreement dated as of January 15, 1993, as heretofore and hereafter amended and supplemented.

"EMMA" means the Electronic Municipal Market Access system with a portal at http://emma/msrb.org.

"MSRB" shall mean the Municipal Securities Rulemaking Board.

"National Repository" means any nationally recognized municipal securities information repository now or hereafter designated as such by the Securities and Exchange Commission for purposes of the Rule. Pursuant to an amendment to the Rule, effective July 1, 2009, EMMA is the sole National Repository.

"Official Statement" shall mean the Official Statement dated October 25, 2017 with respect to the 2017 Bonds.

"Rating Agencies" shall mean Moody's Investor Service, Inc., S&P Global Ratings, a division of S&P Global Inc., and Fitch Ratings, and their successors and assigns.

"SID" shall mean the state information depository, if any, established for Pennsylvania for purposes of the Rule. As of the date hereof, there is no SID.

Terms not otherwise defined herein shall have the same meanings as set forth in the Agreement.

Section 2. Covenants of the Obligated Group.

The Obligated Group covenants as follows:

(a) The Obligated Group shall file with the Dissemination Agent or with EMMA and the SID, if any, within 120 days after the end of each fiscal year commencing with the fiscal year ending June 30, 2018 the information listed below. The Dissemination Agent shall file promptly upon receipt thereof, with EMMA and the SID, if any, the following information:

(1) a copy of the Health System (as defined in the Official Statement) consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States and audited by a certified public accountant;

(2) An update of the financial information and operating data relating to the Hospitals (as defined in the Official Statement) in the Official Statement contained in Appendix "A", under the following captions:

(i) In the first paragraph under each subheading under the heading "MEDICAL STAFF AND PHYSICIAN RELATIONS" for each of the Hospitals,

(ii) The tabular information under the heading "PERSONNEL" for each of the Hospitals,

(iii) The tabular utilization information for the Health System and each Hospital under the general heading "HEALTH SYSTEM UTILIZATION" including the subsections thereunder. In the event that the reporting of utilization information for the Health System is amended, then this Section 2(a)(2)(iii) shall apply to such amended information; and

(iv) The tabular information set forth in Table A-23: "Liquidity of the Obligated Group," Table A-24: "Debt Service Coverage" (excluding, however, the pro forma calculations set forth in Table A-24) and Table A-25: "Debt to Capitalization."

(b) The Obligated Group shall file with the Dissemination Agent or with EMMA and the SID, if any, within 90 days after the end of each fiscal year commencing with the fiscal year ending June 30, 2018 the information listed below. The Dissemination Agent shall file promptly upon receipt thereof, with EMMA and the SID, if any, the following information:

(1) Unaudited consolidating balance sheet and consolidating statement of operations and changes in net assets for the Health System.

(c) Commencing with the fiscal quarter ending September 30, 2017, and each fiscal quarter thereafter, the Obligated Group, not later than 60 days after the end of each of the first, second and third fiscal quarters (i.e. the fiscal quarters ending September 30, December 31, and March 31) and not later than 90 days after the end of the fourth fiscal quarter (i.e. June 30), shall file, or cause the Dissemination Agent to file with EMMA and the SID, if any (i) unaudited combined financial statements of the Health System for such fiscal quarter consisting of balance sheets, statements of operations and statements of cash flow, (ii) unaudited consolidating balance sheet and statement of operations and changes in net assets for such fiscal quarter for the Health System, and (iii) an update of the financial information and operating data relating to the Hospitals for such fiscal quarter and for the year to date of the type included in the Official Statement contained in Appendix A, under the following caption:

(1) The tabular utilization information for the Health System and each Hospital under the general heading "HEALTH SYSTEM UTILIZATION" including subheadings thereunder.

(d) The Obligated Group agrees that it shall file or cause the Dissemination Agent to file with EMMA, and with the SID, if any, notice of the occurrence of any of the following events with respect to the 2017 Bonds (each a "Notice Event"):

(1) principal and interest payment delinquencies;

(2) non-payment related defaults, if material;

(3) unscheduled draws on debt service reserves reflecting financial difficulties;

(4) unscheduled draws on credit enhancements, if any, reflecting financial difficulties;

(5) substitution of credit or liquidity providers, if any, or their failure to perform;

(6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the security, or other material events affecting the tax status of the security;

(7) modifications to the rights of the holders of the 2017 Bonds, if material;

(8) bond calls (other than mandatory sinking fund redemptions), if material, and tender offers;

(9) defeasances;

(10) rating changes;

(11) release, substitution, or sale of property securing repayment of any 2017 Bonds, if material;

(12) bankruptcy, insolvency, receivership or similar event of the Obligated Group (for the purposes of the event identified in subsection 2(d)(12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an Obligated Group Member in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Obligated Group, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Obligated Group);

(13) the consummation of a merger, consolidation, or acquisition involving the Obligated Group or the sale of all or substantially all of the assets of the Obligated Group, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

(14) appointment of a successor or additional trustee or the change of name of a trustee, if material; and

(15) failure to provide annual financial information as required.

Upon the occurrence of a Notice Event, the Obligated Group shall file, or cause the Dissemination Agent to file, a notice of such occurrence with the MSRB via EMMA and the SID, if any, in a timely manner not in excess of ten (10) Business Days after the occurrence of the Notice Event.

(e) The Dissemination Agent shall prepare an affidavit of mailing for each notice delivered pursuant to clause (d) of this Section 2 and shall deliver such affidavit to the Obligated Group no later than three Business Days following the date of delivery of such notice.

(f) The Obligated Group shall send to the Authority:

(1) Copies of any information delivered to EMMA and the SID, if any, pursuant to subsections (a), (b), (c) or (d) above; and

(2) Concurrently with the delivery of any information required pursuant to subsection (a), (b), (c) or (d) above, a certificate signed by an authorized officer of the Hospital or the Parent, as the case may be, that such information has been filed with EMMA and the SID, if any.

(g) The Obligated Group agrees to provide the information required in subsections (a), (b), (c) and (d) above for all persons who are determined by the Obligated Group to be obligated persons under the Rule.

(h) The Obligated Group agrees that as long as the 2017 Bonds are rated below "Baal/BBB+" or their equivalent, by any two or more Rating Agencies then rating the 2017 Bonds, the Obligated Group will hold telephonic conference calls each calendar quarter in order to provide certain information on the Health System. In the event that any two Rating Agencies then rating the 2017 Bonds upgrade their respective rating of the 2017 Bonds to "Baal/BBB+" or their equivalent, then the telephonic conference calls will be held on a semiannual basis. In the event that any two Rating Agencies then rating the 2017 Bonds upgrade their respective rating of the 2017 Bonds to "A3/A-" or their equivalent, then the telephonic conference calls will be held on an annual basis. The Obligated Group agrees that at least ten (10) days prior to a telephonic conference call, it shall file or cause the Dissemination Agent to file with EMMA, and the SID if any, notice of the telephonic conference calls, including a dial-in telephone number.

(i) The Obligated Group agrees that the provisions of this Section 2 shall be for the benefit of the holders and beneficial holders of the 2017 Bonds, and shall be enforceable by any holders or beneficial holders of the 2017 Bonds in accordance with the provisions of Section 7 hereof.

(j) Any beneficial owner or prospective owner of the 2017 Bonds, including the holder of a book entry credit evidencing an interest in the 2017 Bonds from time to time, may request that copies of any of the above listed information be provided directly to them after it becomes available, by contacting the Obligated Group at the addresses provided in Section 8(b) hereof.

(k) Notwithstanding anything in this Disclosure Agreement to the contrary, the Obligated Group reserves the right to forward any of the information described in this Section 2 which would otherwise go to EMMA or SID, if any, to such electronic filing systems and entities as are approved by the SEC by interpretative letter or "no action" letter for receipt of this type of information in order for "participating underwriters" (as defined in the Rule) to be in compliance with the continuing disclosure requirements of the Rule.

Section 3. Duties of Dissemination Agent.

(a) The Dissemination Agent accepts and agrees to perform the duties imposed on it by this Disclosure Agreement, but only upon the terms and conditions set forth herein. The Dissemination Agent shall have only such duties in its capacity as are specifically set forth in this Disclosure Agreement. The Dissemination Agent may execute any powers hereunder and perform any duties required of it through attorneys, agents, and other experts, officers, or employees selected by it, and the written advice of such counsel or other experts shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon. The Dissemination Agent shall not be answerable for the default or misconduct of any attorney, agent, expert or employee selected by it with reasonable care. The Dissemination Agent shall not be answerable for the exercise of any discretion or power under this Disclosure Agreement or liable to the Obligated Group or any other person for actions taken hereunder, except only its own willful misconduct or negligence.

(b) The Obligated Group shall pay the Dissemination Agent reasonable compensation for its services hereunder, and also all its reasonable expenses and disbursements, including reasonable fees and expenses of its counsel or other experts, as shall be agreed upon by the Dissemination Agent and the Obligated Group. The provisions of this Section 3(b) shall survive termination of this Disclosure Agreement.

(c) The Dissemination Agent may act on any resolution, notice, telegram, request, consent, waiver, certificate, statement, affidavit, or other paper or document which it in good faith believes to be genuine and to have been passed or signed by the proper persons or to have been prepared and furnished pursuant to any of the provisions of this Disclosure Agreement; and the Dissemination Agent shall be under no duty to make any investigation as to any statement contained in any such instrument, but may accept the same as conclusive evidence of the accuracy of such statement in the absence of actual notice to the contrary. The Dissemination Agent shall be under no obligation to institute any suit, or to take any action under this Disclosure Agreement, or to enter any appearance or in any way defend in any suit in which it may be made a defendant, or to take any steps in the execution of the duties hereby created or in the enforcement of any rights and powers hereunder, until it shall be indemnified to its satisfaction against any and all costs and expenses, outlays and counsel fees and expenses and other reasonable disbursements, and against all liability; the Dissemination Agent may, nevertheless, begin suit, or appear in and defend suit, or do anything else in its judgment proper to be done by it as such Dissemination Agent, without indemnity.

(d) The Dissemination Agent shall have no duty or obligation to review or verify any of the information required to be provided herein or any other information, disclosures

or notices provided to it by the Obligated Group and shall not be deemed to be acting in any fiduciary capacity for the Obligated Group, the holders of the 2017 Bonds or any other party.

Section 4. Health System Information.

(a) The Parent agrees to make available at the Health System's finance department website the information described in Section 2(a), 2(b) and 2(c) hereof.

(b) To the extent not already provided as required by Section 2 hereof, the Parent shall file copies of the information set forth in Section 4(a) hereof with the Dissemination Agent, and any registered or beneficial owner of a 2017 Bond, including the holder of a book entry credit evidencing an interest in the 2017 Bonds from time to time, may request that copies of such information be provided directly to such owner after the information is available, by contacting the Parent at the address provided in Section 8(b) hereof.

(c) By purchasing a 2017 Bond, each registered owner and each beneficial owner of the 2017 Bonds from time to time, including the holder of a book entry credit evidencing an interest in the 2017 Bonds from time to time, acknowledge and agree, as explicit and material consideration running to the Obligated Group to induce it to execute and deliver the Agreement and cause the issuance of the 2017 Bonds, that (i) the affiliates comprising the Health System, other than the Members of the Obligated Group, are not obligated persons within the meaning of the Rule and the delivery of the information described herein shall not be or be deemed to create any agreement or admission, express or implied, that any such affiliates other than the Members of the Obligated Group, are obligated persons; and (ii) the sole and exclusive sources of payment and security for the 2017 Bonds are the interests and property pledged under the Agreement and no recourse shall be had for any such payment or security against any affiliates of the Health System or their respective assets, revenues or income, except for the Members of the Obligated Group.

Section 5. Termination of Reporting Obligations.

The Obligated Group's obligations under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2017 Bonds. If the Obligated Group's obligations with respect to the payment of the 2017 Bonds are assumed in full by some other entity, such other entity shall be responsible for compliance with this Disclosure Agreement in the same manner as if it were the Obligated Group, and the Obligated Group shall have no further responsibility hereunder. In addition, the Obligated Group's obligation to provide information and notices as specified in Section 2 hereof shall terminate (i) at such other times as such information and notices as specified in Section 2 hereof are no longer required to be provided by the Rule as it applies to the 2017 Bonds, (ii) in the event of a repeal or rescission of the Rule or (iii) upon a determination that the Rule is invalid or unenforceable. The Parent's obligations under Section 4 hereof shall terminate at the time the Obligated Group's obligations terminate hereunder.

Section 6. Amendment.

This Disclosure Agreement may be amended by written agreement of the Dissemination Agent and the Obligated Group. The Dissemination Agent shall agree to any amendment

requested by the Obligated Group (i) that is made in connection with a change in legal requirements, change in law or change in the identity, nature or status of the Obligated Group; (ii) that results in this Disclosure Agreement, as amended, complying with the requirements of the Rule, taking into account any amendments or interpretations of the Rule; and (iii) which does not impose any obligations upon Dissemination Agent which would materially differ from the obligations assumed by the Dissemination Agent under this Disclosure Agreement as originally executed. Prior to executing any requested amendment, the Dissemination Agent may request the Obligated Group to provide an opinion of counsel knowledgeable in federal securities laws and not unacceptable to the Dissemination Agent to the effect that the proposed amendment satisfies the requirements described above, which opinion the Dissemination Agent may exclusively rely upon. In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Obligated Group shall describe such amendment in its next annual report delivered pursuant to Section 2(a) hereof, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the financial information or operating data being presented by the Obligated Group. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements (i.e., changes other than those prescribed by generally accepted accounting principles), (i) notice of such change shall be given pursuant to the Notice Event requirements as set forth in this Disclosure Agreement; and (ii) the annual report for the year in which the change is made will present a comparison between the financial statements as prepared on the basis of the former accounting principles. To the extent that the Rule requires or permits an approving vote of beneficial owners of 2017 Bonds, then 50% of the aggregate principal amount of the then outstanding 2017 Bonds shall constitute such approval. The Dissemination Agent shall provide notice of any amendment to this Disclosure Agreement to EMMA and the SID, if any, and to the registered holders of the 2017 Bonds.

Section 7. Remedies for Default.

In the event of a breach or default by the Dissemination Agent or the Obligated Group of its covenants hereunder, any beneficial owner of the 2017 Bonds shall have as their sole and exclusive remedy, the right to bring an action in a court of competent jurisdiction to compel specific performance by the Dissemination Agent or the Obligated Group. A breach or default under this Disclosure Agreement shall not constitute a breach or default or an event of default under the Agreement, the 2017 Bonds or any other agreement.

Section 8. Miscellaneous.

(a) This Disclosure Agreement shall be binding upon and inure the benefit of the parties hereto and their respective successors and assigns. In addition, registered owners of the 2017 Bonds, which for the purposes of this section 8 includes the holders of a book-entry credit evidencing an interest in the 2017 Bonds from time to time, shall be third party beneficiaries hereof and shall be entitled to enforce the provisions hereof as if they were parties hereto; but no consent of beneficial owners of the 2017 Bonds shall be required in connection with any amendment of this Disclosure Agreement, except as required by the Rule. Holders of book-entry credits evidencing an interest in the 2017 Bonds may file their names and addresses with the Dissemination Agent for the purposes of receiving notices or giving direction under this Disclosure Agreement.

(b) All notices and other communications required or permitted under this Disclosure Agreement shall be in writing and shall be deemed to have been duly given, made and received only when delivered (personally, by recognized national or regional courier service, or by other messenger, for delivery to the intended addressee) or when deposited in the United States mails, registered or certified mail, postage prepaid, return receipt requested, addressed as set forth below:

(1) If to the Dissemination Agent:

Digital Assurance Certification, L.L.C.
315 East Robinson Street, Suite 300
Orlando, Florida 32801
Attention: Client Service Manager
Fax: (407) 515-6513

(2) If to the Obligated Group:

Temple University Health System
3509 N. Broad Street - 9th Floor
Philadelphia, Pennsylvania 19140
Attention: Vice President and Chief Financial Officer

(3) If to the Authority:

The Hospitals and Higher Education Facilities
Authority of Philadelphia
1880 J.F.K. Boulevard - Suite 1102
Philadelphia, Pennsylvania 19103
Attention: President

(4) If to MSRB:

Municipal Securities Rulemaking Board
1300 I Street NW, Suite 1000
Washington, DC 20005
Fax: (202) 898-1500

(5) Any filing under this Disclosure Agreement must be submitted to the EMMA website with a portal at http://emma/msrb.org as a word-searchable portable document.

Any party may alter the address to which communications are to be sent by giving notice of such change of address in conformity with the provisions of this Section 8(b).

(c) This Disclosure Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any parties whose signature appear thereon, and all of which shall together constitute one and the same instrument.

This Disclosure Agreement shall become binding when one or more counterparts hereof, individually or taken together, shall be executed by all of the parties hereto.

(d) This Disclosure Agreement and all questions relating to its validity, interpretation, performance and enforcement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have executed this Disclosure Agreement as of the date first written above.

TEMPLE UNIVERSITY HOSPITAL, INC.	TEMPLE UNIVERSITY HEALTH SYSTEM, INC.
By:_____	By:_____
TEMPLE PHYSICIANS, INC.	JEANES HOSPITAL
By:_____	By:_____
TEMPLE HEALTH SYSTEM TRANSPORT TEAM, INC.	FOX CHASE NETWORK, INC.
By:_____	By:_____
THE AMERICAN ONCOLOGIC HOSPITAL	FOX CHASE CANCER CENTER MEDICAL GROUP, INC.
By:_____	By:_____
THE INSTITUTE FOR CANCER RESEARCH	DIGITAL ASSURANCE CERTIFICATION, L.L.C., as Dissemination Agent
By:_____	By:_____

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