

*In the opinion of Co-Bond Counsel, interest on the 2015 Bonds is excludable from gross income for purposes of federal income tax, assuming continuing compliance with the requirements of federal tax laws. Interest on the 2015 Bonds is not a preference item for purposes of either individual or corporate federal alternative minimum tax; however, interest paid to corporate holders of the 2015 Bonds may be indirectly subject to alternative minimum tax under circumstances described under "TAX MATTERS" herein. Co-Bond Counsel are of the further opinion that the 2015 Bonds are exempt from personal property taxes in Pennsylvania and interest on the 2015 Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date of initial delivery of the 2015 Bonds. For a more complete description of federal and state tax matters pertaining to the 2015 Bonds, see "TAX MATTERS" herein.*



**\$357,565,000**  
**Pennsylvania Higher Educational Facilities Authority**  
**University of Pennsylvania Health System**  
**Revenue Bonds, Series of 2015**

**Dated: Date of Delivery**

**Due: See Inside Cover**

The 2015 Bonds will be issued by the Pennsylvania Higher Educational Facilities Authority (the "Authority") under a Trust Indenture dated as of May 1, 1994, as previously amended and supplemented and as further amended and supplemented by a Thirteenth Supplemental Trust Indenture dated as of May 1, 2015 (collectively, and as amended and supplemented from time to time, the "Bond Indenture"), between the Authority and U.S. Bank National Association, Philadelphia, Pennsylvania, as successor bond trustee, paying agent and bond registrar (in such capacities, the "Bond Trustee"). The 2015 Bonds will be payable from and secured by certain funds held by the Bond Trustee under the Bond Indenture and payments to the Bond Trustee, as assignee of the Authority, under the Loan Agreement described herein among the Authority, The Trustees of the University of Pennsylvania (the "University"), Presbyterian Medical Center of the University of Pennsylvania Health System d/b/a Penn Presbyterian Medical Center ("Presbyterian" or "PPMC"), Pennsylvania Hospital of the University of Pennsylvania Health System ("Pennsylvania Hospital") and The Chester County Hospital and Health System ("TCHHS"), as borrowers under the Loan Agreement (collectively referred to herein, as the "Borrowers" and, together with Wissahickon Hospice ("Wissahickon Hospice") and Clinical Care Associates of the University of Pennsylvania Health System ("CCA"), as the "Members of the Obligated Group"). In addition, the 2015 Bonds will be payable from amounts to be paid to the Bond Trustee under the 2015 Master Note described herein and issued by the Members of the Obligated Group under the Master Indenture described herein among the Members of the Obligated Group and U.S. Bank National Association, Philadelphia, Pennsylvania, as successor master trustee (in such capacity, the "Master Trustee"). The obligation of the University, as a Member of the Obligated Group, to make payments under the Loan Agreement and the 2015 Master Note is not a general obligation of the University but is an obligation to make payments solely from certain Property (as defined herein) of HUP and CPUP (as each is described herein) or of any additional Designated Units (as defined herein) established under the Master Indenture. The obligation of each Member of the Obligated Group, other than the University, to make payments under the Loan Agreement and the 2015 Master Note is a general obligation of such Member of the Obligated Group. The payment obligations of the Members of the Obligated Group under the Master Indenture are secured by a pledge and assignment of the Gross Receipts of the Members of the Obligated Group as further described herein.

Interest on the 2015 Bonds will be payable on February 15 and August 15 of each year, commencing August 15, 2015, until maturity or prior redemption. The principal and redemption price of, and interest on, the 2015 Bonds will be paid by the Bond Trustee. So long as DTC or its nominee, Cede & Co., is the Bondholder, such payments will be made directly to Cede & Co. Disbursement of such payments to the Beneficial Owners is the responsibility of the Direct Participants and Indirect Participants, as more fully described herein. The 2015 Bonds are subject to redemption as described herein.

The 2015 Bonds will be issued only 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, New York, New York ("DTC"). DTC will act as securities depository for the 2015 Bonds. Purchases of beneficial interests in the 2015 Bonds will be made in book-entry form, in denominations of \$5,000 or any integral multiple thereof. Purchasers will not receive certificates representing their interest in the 2015 Bonds purchased. So long as Cede & Co. is the registered owner, as nominee of DTC, references herein to the Bondholders or registered owners shall mean Cede & Co., as aforesaid and shall not mean the Beneficial Owners of the 2015 Bonds. See "BOOK-ENTRY SYSTEM" herein.

**The 2015 Bonds are limited obligations of the Authority. Neither the general credit of the Authority nor the credit or the taxing power of the Commonwealth of Pennsylvania or any political subdivision thereof is pledged for the payment of the principal or redemption price of, and interest on, the 2015 Bonds, nor shall the 2015 Bonds be or be deemed to be general obligations of the Authority or obligations of the Commonwealth of Pennsylvania or any political subdivision thereof, nor shall the Commonwealth of Pennsylvania or any political subdivision thereof be liable for the payment of the principal and redemption price of, and interest on, the 2015 Bonds. The Authority has no taxing power.**

**MATURITIES, INTEREST RATES, PRICES AND YIELDS**  
(See Inside Front Cover Page)

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

The 2015 Bonds are offered when, as and if issued by the Authority and received by the Underwriters, subject to the approving legal opinion of Ballard Spahr LLP, Turner Law, P.C., Obermayer Rebmann Maxwell & Hippel LLP and Ahmad Zaffarese LLC, each of Philadelphia, Pennsylvania, Co-Bond Counsel. Certain legal matters will be passed upon for the University by Wendy S. White, Esquire, Senior Vice President and General Counsel of the University; for the Authority by its counsel, Hartman Underhill & Brubaker, LLC, Lancaster, Pennsylvania; and for the Underwriters by their counsel, Drinker Biddle & Reath LLP, Philadelphia, Pennsylvania. It is expected that the 2015 Bonds in definitive form will be available for delivery through the facilities of DTC on or about May 19, 2015.

**BofA Merrill Lynch**

**J.P. Morgan**

**Morgan Stanley**

**Loop Capital Markets**

**PNC Capital Markets LLC**

**Ramirez & Co., Inc.**

**PENNSYLVANIA HIGHER EDUCATIONAL FACILITIES AUTHORITY**

**\$357,565,000**  
**University of Pennsylvania**  
**Health System Revenue Bonds**  
**Series of 2015**

Maturity Date (August 15)	Principal Amount	Interest Rate	Price	Yield	CUSIP <sup>†</sup>
2016	\$32,710,000	3.000%	103.133	0.460%	70917SRM7
2017	24,410,000	5.000	109.370	0.770	70917SRN5
2018	21,470,000	5.000	112.374	1.100	70917SRP0
2019	21,480,000	5.000	114.852	1.380	70917SRQ8
2020	22,440,000	5.000	117.018	1.600	70917SRR6
2021	25,185,000	5.000	118.801	1.800	70917SRS4
2022	15,625,000	5.000	120.046	2.010	70917SRT2
2023	12,045,000	5.000	120.822	2.220	70917SRU9
2024	12,640,000	5.000	121.241	2.420	70917SRV7
2025	13,270,000	5.000	121.649	2.580	70917SRW5
2026	13,920,000	5.000	120.450	2.700 <sup>(C)</sup>	70917SRX3
2027	2,270,000	5.000	119.069	2.840 <sup>(C)</sup>	70917SRY1
2028	2,110,000	3.000	97.852	3.200	70917SRZ8
2029	1,940,000	5.000	117.129	3.040 <sup>(C)</sup>	70917SSA2
2030	1,760,000	3.250	98.224	3.400	70917SSB0
2031	1,690,000	5.000	115.794	3.180 <sup>(C)</sup>	70917SSC8
2032	2,110,000	3.500	98.089	3.650	70917SSD6
2033	5,810,000	5.000	114.945	3.270 <sup>(C)</sup>	70917SSE4
2034	6,100,000	5.000	114.570	3.310 <sup>(C)</sup>	70917SSF1
2035	6,420,000	5.000	114.290	3.340 <sup>(C)</sup>	70917SSG9

**\$37,380,000 5.000% Term Bonds Due August 15, 2040, Price: 113.639%, Yield: 3.410%<sup>(C)</sup>, CUSIP<sup>†</sup>: 70917SSH7**

**\$74,780,000 4.000% Term Bonds Due August 15, 2045, Price: 100.000%, Yield: 4.000%, CUSIP<sup>†</sup>: 70917SSJ3**

<sup>(C)</sup> Callable premium bond; yield to first optional call date of August 15, 2025.

<sup>†</sup> The CUSIP numbers listed on the inside cover page to this Official Statement are being provided solely for the convenience of owners of the 2015 Bonds only, and the Authority does not make any representation with respect to such numbers or undertake any responsibility for their accuracy. The CUSIP numbers are subject to being changed after the issuance of the 2015 Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of the 2015 Bonds.

**PENNSYLVANIA HIGHER EDUCATIONAL FACILITIES AUTHORITY**  
**1035 Mumma Road**  
**Wormleysburg, PA 17043**

**BOARD MEMBERS**

Honorable Thomas W. Wolf  
Governor of the Commonwealth of Pennsylvania.....President

Honorable Lloyd K. Smucker  
Designated by the President Pro Tempore of the Senate..... Vice President

Honorable Andrew E. Dinniman  
Designated by the Minority Leader of the Senate ..... Vice President

Honorable Michael C. Turzai  
Speaker of the House of Representatives ..... Vice President

Honorable Christopher B. Craig  
Executive Deputy State Treasurer ..... Treasurer

Honorable Curtis M. Topper  
Acting Secretary of General Services.....Secretary

Honorable Anthony M. DeLuca  
Designated by the Minority Leader of the House of Representatives .....Board Member

Honorable Eugene A. DePasquale  
Auditor General .....Board Member

Honorable Pedro A. Rivera  
Acting Secretary of Education .....Board Member

**EXECUTIVE DIRECTOR**

Robert Baccon

**AUTHORITY COUNSEL**

(Appointed by the Office of General Counsel)  
Hartman Underhill & Brubaker, LLC  
Lancaster, Pennsylvania

**BOND TRUSTEE AND MASTER TRUSTEE**

U.S. Bank National Association  
Philadelphia, Pennsylvania

**CO-BOND COUNSEL**

(Appointed by the Office of General Counsel)

Ballard Spahr LLP Philadelphia, Pennsylvania	Turner Law, P.C. Philadelphia, Pennsylvania
Obermayer Rebmann Maxwell & Hippel LLP Philadelphia, Pennsylvania	Ahmad Zaffarese LLC Philadelphia, Pennsylvania

**UNIVERSITY COUNSEL**

Wendy S. White, Esquire  
Senior Vice President and General Counsel of the University

**COUNSEL TO UNDERWRITERS**

Drinker Biddle & Reath LLP  
Philadelphia, Pennsylvania

IN CONNECTION WITH THIS OFFERING THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2015 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THE 2015 BONDS MAY BE OFFERED AND SOLD TO CERTAIN DEALERS (INCLUDING DEALERS DEPOSITING THE 2015 BONDS INTO INVESTMENT ACCOUNTS) AND TO OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS WITHOUT PRIOR NOTICE TO THE PUBLIC, BUT WITH PRIOR NOTICE TO THE AUTHORITY AND THE HEALTH SYSTEM.

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 2015 BONDS IS MADE ONLY BY MEANS OF THIS ENTIRE OFFICIAL STATEMENT.

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The information set forth herein has been obtained from the Pennsylvania Higher Educational Facilities Authority (the "Authority"), The Trustees of the University of Pennsylvania, Presbyterian Medical Center of the University of Pennsylvania Health System d/b/a Penn Presbyterian Medical Center, Pennsylvania Hospital of the University of Pennsylvania Health System, The Chester County Hospital and Health System, Wissahickon Hospice, and Clinical Care Associates of the University of Pennsylvania Health System, as the Members of the Obligated Group described herein, and from other sources which are believed to be reliable, but the information provided by sources other than the Authority is not guaranteed as to accuracy or completeness by the Authority. The information and expressions of opinions herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in any of the information set forth herein since the date hereof.

The Underwriters have provided the following sentence for inclusion in the 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 law as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

No dealer, broker, salesperson or other person has been authorized by the Authority, the Underwriters or the Members of the Obligated Group to give any information or to make any representations with respect to the 2015 Bonds, other than those contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy any of the 2015 Bonds in any jurisdiction in which it is unlawful to make such an offer, solicitation, or sale.

The 2015 Bonds are not and will not be registered under the Securities Act of 1933, as amended, or under any state securities laws, and the Bond Indenture has not been and will not be qualified under the Trust Indenture Act of 1939, as amended, because of available exemptions therefrom. Neither the Securities and Exchange Commission, nor any federal, state, municipal, or other governmental agency, will pass upon the accuracy, completeness, or adequacy of this Official Statement.

This Official Statement speaks only as of the date printed on the cover page hereof. The information contained herein is subject to change. The Official Statement will be made available through the Electronic Municipal Market Access system.

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#### CAUTION REGARDING FORWARD-LOOKING STATEMENTS

Certain statements included or incorporated by reference in this Official Statement constitute projections or estimates of future events, generally known as forward-looking statements. These statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget" or other similar words. These forward-looking statements include, among others, the information under the caption "CERTAIN FINANCIAL INFORMATION" in APPENDIX A to this Official Statement, and the statements under the caption, "CERTAIN BONDHOLDER RISKS" in the forepart of this Official Statement.

The achievement of certain results or other expectations in these forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Neither the Authority nor the Members of the Obligated Group plan to issue any updates or revisions to those forward-looking statements if or when changes in their expectations, or events, conditions or circumstances on which these statements are based occur.

## TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
INTRODUCTION.....	1	Certain Matters Relating to Enforceability of	
Purpose of the Official Statement.....	1	Obligations.....	46
The Authority .....	1	Bankruptcy.....	47
University of Pennsylvania Health System.....	1	Secondary Market.....	48
The 2015 Bonds.....	2	Bond Ratings .....	48
Plan of Financing.....	3	Other Factors .....	48
Security and Sources of Payment for the 2015 Bonds.....	3	TAX MATTERS.....	49
Independent Accountants.....	4	Federal Tax Exemption.....	49
Definitions and Summaries of Documents .....	4	Pennsylvania Tax Exemption .....	50
THE AUTHORITY .....	5	Changes in Federal and State Tax Law.....	50
PLAN OF FINANCING .....	6	BOND TRUSTEE AND MASTER TRUSTEE.....	50
General .....	6	LEGAL MATTERS .....	51
Refunding Program.....	7	INDEPENDENT ACCOUNTANTS.....	51
Capital Projects.....	7	RATINGS .....	51
Estimated Sources and Uses of Funds .....	7	UNDERWRITING.....	51
THE 2015 BONDS.....	8	LEGALITY OF THE 2015 BONDS FOR INVESTMENT	
Description of the 2015 Bonds .....	8	AND DEPOSIT.....	53
Transfer.....	9	NEGOTIABILITY .....	53
Redemption Provisions.....	9	LITIGATION.....	53
Notice of Redemption.....	10	The Authority .....	53
Defeasance.....	10	The Health System.....	53
Purchase In Lieu of Optional Redemption.....	11	CONTINUING DISCLOSURE .....	54
Book-Entry Only System.....	11	CERTAIN RELATIONSHIPS.....	56
SOURCE OF PAYMENT AND SECURITY FOR THE		MISCELLANEOUS .....	56
2015 BONDS .....	14		
Limited Obligations .....	14	<u>APPENDIX A:</u> INFORMATION CONCERNING	
Bond Indenture .....	14	UNIVERSITY OF PENNSYLVANIA HEALTH	
Loan Agreement and Master Indenture .....	14	SYSTEM	
Additional Bonds and Indebtedness.....	16	<u>APPENDIX B:</u> COMBINED FINANCIAL STATEMENTS OF	
No Recourse Against Members of the Authority.....	16	THE HEALTH SYSTEM FOR THE FISCAL	
HEALTH SYSTEM <i>PRO FORMA</i> DEBT SERVICE		YEARS ENDED JUNE 30, 2014 AND JUNE	
REQUIREMENTS.....	17	30, 2013	
CERTAIN BONDHOLDER RISKS AND REGULATORY		<u>APPENDIX C:</u> CERTAIN INFORMATION REGARDING	
CONSIDERATIONS AFFECTING THE HEALTH		THE TRUSTEES OF THE UNIVERSITY OF	
SYSTEM.....	18	PENNSYLVANIA	
General .....	18	<u>APPENDIX D:</u> DEFINITIONS OF CERTAIN TERMS AND	
Risks in the Collection of Net Patient Service		SUMMARY OF CERTAIN PROVISIONS OF	
Revenues.....	20	THE BOND INDENTURE AND THE LOAN	
Federal Budget Cuts .....	28	AGREEMENT	
Health Care Reform.....	29	<u>APPENDIX E:</u> SUMMARY OF CERTAIN PROVISIONS OF	
Healthcare Legislative and Regulatory Environment .....	31	THE MASTER INDENTURE	
Risks in Healthcare Delivery .....	39	<u>APPENDIX F:</u> PROPOSED FORM OF OPINION OF CO-	
Tax Matters.....	42	BOND COUNSEL	
Nonprofit Healthcare Environment.....	45		

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## **Official Statement**

**\$357,565,000**

### **PENNSYLVANIA HIGHER EDUCATIONAL FACILITIES AUTHORITY**

**University of Pennsylvania Health System**

**Revenue Bonds, Series of 2015**

## **INTRODUCTION**

The following introductory statement is subject in all respects to more complete information contained elsewhere in this Official Statement. Capitalized terms used in this Official Statement that are not otherwise defined herein have the meanings given to them in APPENDIX D hereto.

### **Purpose of the Official Statement**

The purpose of this Official Statement, including the cover pages and the Appendices, is to furnish certain information relating to (1) the Pennsylvania Higher Educational Facilities Authority (the “Authority”), (2) the Authority’s University of Pennsylvania Health System Revenue Bonds, Series of 2015, in the aggregate principal amount of \$357,565,000 (the “2015 Bonds”) and (3) the University of Pennsylvania Health System (the “Health System”).

### **The Authority**

The Authority is a body corporate and politic, constituting a public corporation and a governmental instrumentality of the Commonwealth of Pennsylvania (the “Commonwealth”), created by the Pennsylvania Higher Educational Facilities Authority Act of 1967 (Act. No. 318 of the General Assembly of the Commonwealth, approved December 6, 1967, as amended) (the “Act”). The Authority’s address is 1035 Mumma Road, Wormleysburg, Pennsylvania 17043. The Authority has no taxing power. For additional information concerning the Authority, see “THE AUTHORITY” herein.

### **University of Pennsylvania Health System**

The Health System consists of certain operating divisions of The Trustees of the University of Pennsylvania (the “University”) and affiliated entities, including:

- The Hospital of the University of Pennsylvania (“HUP”), a 821 licensed bed (including 32 bassinets) quaternary care hospital and academic medical center located on the campus of the University in the West Philadelphia area of Philadelphia, Pennsylvania;
- Presbyterian Medical Center of the University of Pennsylvania Health System (“Presbyterian” or “PPMC”), d/b/a Penn Presbyterian Medical Center, a 331 licensed bed acute care hospital located adjacent to the campus of the University in the West Philadelphia area of Philadelphia, Pennsylvania;
- Pennsylvania Hospital of the University of Pennsylvania Health System (“Pennsylvania Hospital”), a 546 licensed bed (including 50 bassinets) acute care hospital located in the Center City area of Philadelphia, Pennsylvania;

- The Chester County Hospital and Health System (“TCCHHS”), which includes The Chester County Hospital, a 289 licensed bed (including 32 bassinets) acute care hospital located in West Chester, Pennsylvania, together with various ancillary facilities;
- The Clinical Practices of the University of Pennsylvania (“CPUP”), the approved faculty practice plan for the clinical practices of 1,588 members of the medical faculty of the University’s Perelman School of Medicine;
- Clinical Care Associates of the University of Pennsylvania Health System (“CCA”), a community based physician network currently employing approximately 259 physicians at 55 office locations in Southeastern Pennsylvania and through its New Jersey affiliate in Southern New Jersey; and
- Wissahickon Hospice (“Wissahickon Hospice”), a hospice care facility serving the terminally ill, with facilities in Bala Cynwyd and Center City Philadelphia, Pennsylvania.

HUP and CPUP are operating divisions of the University. PPMC, Pennsylvania Hospital, TCCHHS, Wissahickon Hospice and CCA are separate nonprofit corporations affiliated with and controlled by the University. The University (as to HUP and CPUP), PPMC, Pennsylvania Hospital and TCCHHS, as the borrowers under the Loan Agreement (as defined below), are sometimes referred to herein as the “Borrowers,” and, together with Wissahickon Hospice and CCA, as members of the obligated group established under the Master Indenture (defined below) are sometimes referred to herein as the “Members of the Obligated Group.”

The University is an independent non-sectarian research institution of higher education chartered under the laws of the Commonwealth. One of only nine colleges and universities established during the colonial period, the University is the third oldest Ivy League school. It is a privately endowed, gift-supported non-profit institution.

APPENDIX A contains certain information on the history, organization, operations, and financial condition of the Health System. APPENDIX B contains certain audited financial statements of the Health System. APPENDIX C contains certain general information regarding the University.

*The obligation of the University to make payments under the Loan Agreement and the 2015 Master Note (as defined below) is a limited obligation of the University to make payments solely from the Property of HUP and CPUP (or any additional Designated Units established under the Master Indenture).*

## **The 2015 Bonds**

The 2015 Bonds are authorized by a resolution of the Authority adopted on March 10, 2015, and will be issued under a Trust Indenture dated as of May 1, 1994, as previously amended and supplemented and as further amended and supplemented by a Thirteenth Supplemental Trust Indenture dated as of May 1, 2015 (collectively, the “Bond Indenture”), between the Authority and U.S. Bank National Association, as successor trustee (in such capacity, the “Bond Trustee”). The 2015 Bonds initially will be issued in the form of one registered bond in the aggregate principal amount of each maturity and will be registered in the name of Cede & Co., as nominee for The Depository Trust Company, New York, New York (“DTC”). DTC will maintain a book-entry system for recording ownership interests in the 2015 Bonds. See “BOOK-ENTRY SYSTEM” herein.



## **Plan of Financing**

The 2015 Bonds are being issued by the Authority for the purpose of financing a project consisting of: (a) the undertaking of a program (collectively, the “Refunding Program”) on behalf of the Health System to (i) currently refund all or a portion of the Authority’s University of Pennsylvania Health System Revenue Bonds, Series A of 2005 (the “Series 2005A Bonds”), currently outstanding in the aggregate principal amount of \$133,855,000, and University of Pennsylvania Health System Revenue Bonds, Series B of 2005 (the “Series 2005B Bonds”), currently outstanding in the aggregate principal amount of \$25,185,000, and (ii) advance refund a portion of the Authority’s University of Pennsylvania Health System Revenue Bonds, Series B of 2008 (the “Series 2008B Bonds”), currently outstanding in the aggregate principal amount of \$149,230,000; (b) the reimbursement to the Health System for the costs of various Health System capital projects, including costs incurred in connection with the relocation and expansion of the Health System’s trauma center at HUP to a new PPMC Advanced Care Hospital Pavilion, the extension of the Perelman Center for Advanced Medicine South Pavilion, and the demolition of Penn Tower; and (c) the payment of certain costs of issuance in respect of the 2015 Bonds.

The proceeds of the 2015 Bonds will be loaned to the Borrowers for the purposes described above pursuant to a Loan Agreement dated as of May 1, 1994, as previously amended and supplemented and as further amended and supplemented by a Twelfth Supplemental Loan Agreement dated as of May 1, 2015 (collectively, the “Loan Agreement”), between the Authority and the Borrowers. Under the Loan Agreement, the Borrowers will be obligated to make loan payments to the Bond Trustee, as assignee of the Authority, in amounts and at times sufficient, among other things, to pay the principal or redemption price of, and interest on, the 2015 Bonds when due.

See “PLAN OF FINANCING” herein.

## **Security and Sources of Payment for the 2015 Bonds**

The 2015 Bonds are limited obligations of the Authority, payable solely from (1) the loan payments to be made by the Borrowers under the Loan Agreement and (2) certain funds held by the Bond Trustee under the Bond Indenture, and not from any other fund or source of the Authority.

To evidence and secure the payment obligations of the Borrowers with respect to the 2015 Bonds under the Loan Agreement, the Members of the Obligated Group jointly will deliver to the Bond Trustee, as assignee of the Authority, a promissory note (the “2015 Master Note”), in a principal amount equal to the aggregate principal amount of the 2015 Bonds. The 2015 Master Note will be issued under a Master Trust Indenture dated as of May 1, 1994, as previously amended and supplemented and as further amended and supplemented by a Sixteenth Supplemental Master Trust Indenture dated as of May 1, 2015 (collectively, and as amended and supplemented from time to time, the “Master Indenture”), among the Members of the Obligated Group and U.S. Bank National Association, Philadelphia, Pennsylvania, as successor master trustee (in such capacity, the “Master Trustee”).

*The obligation of the University to make payments under the Loan Agreement and the 2015 Master Note is a limited obligation of the University to make payments solely from the Property of HUP and CPUP (or any additional Designated Units established as provided in the Master Indenture). The obligation of each other Member of the Obligated Group to make payments under the Loan Agreement and the 2015 Master Note is a general obligation of such Member of the Obligated Group.*

The payment obligations of the Members of the Obligated Group under the Master Indenture are secured by a pledge and assignment under the Master Indenture of (i) the Gross Receipts (as defined herein) of the Members of the Obligated Group and (ii) the right, title and interest of each Member of the

Obligated Group in all deposit accounts to which Gross Receipts are deposited. No mortgage or security interest with respect to any other property of the Members of the Obligated Group will secure payment of the 2015 Bonds.

The Health System is indebted with respect to the revenue bonds of the Authority (collectively referred to as the “Prior Parity Bonds”) under the Bond Indenture in amounts (as of December 31, 2014) as follows:

<u>Revenue Bonds</u>	<u>Principal Amount Outstanding</u>
University of Pennsylvania Health System Revenue Bonds, Series A of 2005†	\$ 133,855,000
University of Pennsylvania Health System Revenue Bonds, Series B of 2005†	25,185,000
University of Pennsylvania Health System Variable Rate Revenue Bonds, Series A of 2008	81,210,000
University of Pennsylvania Health System Revenue Bonds, Series B of 2008†	149,230,000
University of Pennsylvania Health System Revenue Bonds, Series A of 2009	74,370,000
University of Pennsylvania Health System Revenue Bonds, Series A of 2011	150,000,000
University of Pennsylvania Health System Revenue Bonds, Series A of 2012	136,950,000
University of Pennsylvania Health System Revenue Bonds, Series A of 2014	<u>100,000,000</u>
Total	\$ <u>850,800,000</u>

† To be refunded with the proceeds of the 2015 Bond as described under “PLAN OF FINANCING” herein.

The payment obligations of the Health System with respect to the Prior Parity Bonds are equally and ratably secured with each other and will be equally and ratably secured with the 2015 Bonds by Master Notes issued under the Master Indenture. As of December 31, 2014, the Health System also was indebted with respect to \$63,742,000 principal amount of other long-term debt which is not secured under the Master Indenture and which constitutes a general unsecured obligation of one or more Members of the Obligated Group.

The University is currently designated by the Members of the Obligated Group as the “Obligated Group Agent” under the Master Indenture, and is authorized under the Master Indenture, as Obligated Group Agent, to take certain actions on behalf of the Members of the Obligated Group.

See “SECURITY AND SOURCES OF PAYMENT FOR THE 2015 BONDS” herein.

### **Independent Accountants**

The combined financial statements of the Health System as of June 30, 2014 and June 30, 2013 and for the fiscal years then ended included in APPENDIX B to this Official Statement have been audited by PricewaterhouseCoopers LLP, independent accountants, as stated in their report appearing in APPENDIX B.

### **Definitions and Summaries of Documents**

Definitions of certain words and terms used in the Official Statement and summaries of the Bond Indenture, the Loan Agreement and the Master Indenture are included in APPENDIX D and APPENDIX E. Such definitions and summaries do not purport to be comprehensive or definitive. All references herein to such documents are qualified in their entirety by reference to the definitive forms of such documents, copies of which may be viewed at the office of the Bond Trustee in Philadelphia, Pennsylvania, and will be provided to any prospective purchaser requesting the same upon payment by such prospective purchaser of the cost of complying with such request.

## THE AUTHORITY

The Authority is a body corporate and politic, constituting a public corporation and a governmental instrumentality of the Commonwealth, created by the Act. The Authority's address is 1035 Mumma Road, Wormleysburg, Pennsylvania 17043.

Under the Act, the Authority consists of the Governor of the Commonwealth, the State Treasurer, the Auditor General, the Secretary of Education, the Secretary of the Department of General Services, the President Pro Tempore of the Senate, the Speaker of the House of Representatives, the Minority Leader of the Senate and the Minority Leader of the House of Representatives. The President Pro Tempore of the Senate, the Speaker of the House of Representatives, the Minority Leader of the Senate and the Minority Leader of the House of Representatives may designate a member of their respective legislative bodies to act as a member of the Authority in his or her stead. The members of the Authority serve without compensation, but are entitled to reimbursement for all necessary expenses incurred in connection with the performance of their duties as members. The powers of the Authority are exercised by a governing body consisting of the members of the Authority acting as a board.

The Authority is authorized under the Act to, among other things, acquire, construct, finance, improve, maintain and operate any educational facility (as therein defined), with the rights and powers, *inter alia*: (1) to finance projects for colleges (including universities) by making loans to such colleges which may be evidenced by, and secured as provided in, loan agreements, security agreements or other contracts, leases or agreements; (2) to borrow money for the purpose of paying all or any part of the cost of construction, acquisition, financing, alteration, reconstruction and rehabilitation of any educational facility which the Authority is authorized to acquire, construct, finance, improve, install, maintain or operate under the provisions of the Act and to pay the expenses incident to the provision of such loans; and (3) to issue bonds and other obligations for the purpose of paying the cost of projects, and to enter into trust indentures providing for the issuance of such obligations and for their payment and security.

As of March 31, 2015, revenue bonds and notes of the Authority issued to finance various projects in the Commonwealth were outstanding in the amount of \$6,738,805,536. None of the revenues of the Authority with respect to its revenue bonds and notes issued for the benefit of other institutions will be pledged as security for any bonds or notes issued for the benefit of the Members of the Obligated Group. Further, no revenue bonds and notes issued for the benefit of other institutions will be payable from or secured by the revenues of the Authority or other moneys securing any bonds or notes issued for the benefit of the Members of the Obligated Group.

The Authority has issued, and may continue to issue, other series of bonds for the purpose of financing other projects, including other educational facilities. Each such series of bonds to the extent issued to benefit educational institutions other than the University is or will be secured by instruments separate and apart from the Bond Indenture securing the 2015 Bonds.

The Act provides that the Authority is to obtain from the Pennsylvania State Public School Building Authority, for a fee, those executive, fiscal and administrative services which are not available from the colleges and universities, as may be required to carry out the functions of the Authority under the Act. Accordingly, the Authority and the State Public School Building Authority share an executive, fiscal and administrative staff, which currently numbers ten people, and operate under a joint administrative budget.

The following are key staff members of the Authority who are involved in the administration of the financings and projects:

**Robert Baccon**  
**Executive Director**

Mr. Baccon has served as an executive of both the Authority and the State Public School Building Authority since 1984. He is a graduate of St. John's University with a bachelor's degree in management and holds a master's degree in international business from the Columbia University Graduate School of Business. Prior to his present post, Mr. Baccon held financial management positions with multinational U.S. corporations and was Vice President - Finance for a major highway construction contractor.

**David Player**  
**Comptroller & Director of Financial Management**

Mr. Player serves as the Comptroller & Director of Financial Management of both the Authority and the State Public School Building Authority. He has been with the Authority and the State Public School Building Authority since 1999. Prior to his present post, he served as Senior Accountant for both authorities and as an auditor with the Pennsylvania Department of the Auditor General. Mr. Player is a graduate of The Pennsylvania State University with a bachelor's degree in accounting. He is a Certified Public Accountant and Certified Internal Auditor.

**Beverly M. Nawa**  
**Administrative Officer**

Mrs. Nawa has served as the Administrative Officer of both the Authority and the State Public School Building Authority since August 2004. She is a graduate of Alvernia College with a bachelor's degree in business administration. Prior to her present employment, Mrs. Nawa served as an Audit Senior and an Accounting Systems Analyst with the Pennsylvania Department of the Auditor General.

THE AUTHORITY HAS NOT PREPARED OR ASSISTED IN THE PREPARATION OF THIS OFFICIAL STATEMENT, EXCEPT THE STATEMENTS UNDER THIS SECTION AND UNDER THE HEADING "LITIGATION – THE AUTHORITY," AND, EXCEPT AS AFORESAID, THE AUTHORITY DISCLAIMS RESPONSIBILITY FOR THE DISCLOSURES SET FORTH HEREIN MADE IN CONNECTION WITH THE OFFER, SALE, AND DISTRIBUTION OF THE 2015 BONDS.

**PLAN OF FINANCING**

**General**

The 2015 Bonds are being issued by the Authority for the purpose of financing a project consisting of: (a) the undertaking of a program (collectively, the "Refunding Program") on behalf of the Health System to (i) currently refund the Authority's outstanding Series 2005A Bonds and Series 2005B Bonds maturing on and after August 15, 2016 (the "Refunded 2005 Bonds"), and (ii) advance refund \$97,230,000 principal amount of the Authority's outstanding Series 2008B Bonds (the portion of the Series 2008B Bonds being refunded is sometimes referred to herein as the "Refunded 2008B Bonds;" and the Refunded Series 2005 Bonds and the Refunded 2008B Bonds being sometimes referred to herein as the "Refunded Bonds"); (b) the financing of certain projects in the Health System's capital budget (the "Capital Projects"); and (c) the payment of certain costs of issuance in respect of the 2015 Bonds.

## **Refunding Program**

Concurrently with the issuance of the 2015 Bonds, the Borrowers, the Authority and U.S. Bank National Association, as escrow agent (in such capacity, the “Escrow Agent”) will enter into one or more escrow deposit agreements providing for the application of a portion of the proceeds of the 2015 Bonds to the refunding of the Refunded Bonds. Moneys deposited with the Escrow Agent for the refunding of the Refunded Bonds will be irrevocably deposited with the Escrow Agent and held in one or more escrow accounts (together, the “Escrow Account”) established with the Escrow Agent and will be applied by the Escrow Agent to the purchase of Defeasance Investments (as defined in APPENDIX D), the principal of and interest on which, together with any cash on deposit in the Escrow Account, will be sufficient to (i) redeem all of the outstanding Refunded Series 2005 Bonds on August 15, 2015, at a redemption price equal to 100% of the principal amount thereof, and (ii) pay when due the principal and interest on the Refunded 2008B Bonds until August 15, 2018, and to redeem all of the Refunded 2008B Bonds then outstanding on August 15, 2018, at a redemption price equal to 100% of the principal amount thereof. Upon the deposit of the cash and Defeasance Investments into the Escrow Account, all of the Refunded Bonds will no longer be deemed Outstanding for purposes of the Bond Indenture, and will be secured solely by the applicable cash and Defeasance Investments on deposit in the Escrow Account.

Causey Demgen & Moore PC (the “Verification Agent”) will provide at the time of delivery of the 2015 Bonds a report to the effect that such firm has verified the arithmetic accuracy of certain schedules provided to it with respect to the adequacy of the cash and the maturing principal of and interest on the Defeasance Investments to pay when due the maturing principal or redemption price of, and the interest on, the Refunded Bonds as required under the Escrow Agreement. The Verification Agent will express no opinion as to any assumptions provided to it.

## **Capital Projects**

A portion of the proceeds of the sale of the 2015 Bonds will be applied to reimburse the Health System for the costs of various capital projects, including costs incurred in connection with the relocation and expansion of the Health System’s trauma center at HUP to a new PPMC Advanced Care Hospital Pavilion, the extension of the Perelman Center for Advanced Medicine South Pavilion, and the demolition of Penn Tower.

## **Estimated Sources and Uses of Funds**

The following table sets forth the estimated sources and uses of funds in connection with the Refunding Program and Capital Projects:

*[Remainder of Page Left Intentionally Blank]*

**Estimated Sources of Funds:**

Principal Amount of the 2015 Bonds.....	\$357,565,000.00
Net Original Issue Premium.....	40,445,257.55
Other Health System Funds <sup>(1)</sup> .....	<u>3,213,638.06</u>
Total Sources of Funds .....	<u>\$401,223,895.61</u>

**Estimated Applications of Funds:**

Project Fund Deposit.....	\$ 150,000,000.00
Deposit to Escrow Account – Refunded 2005 Bonds.....	134,411,875.00
Deposit to Escrow Account – Refunded 2008B Bonds .....	114,536,533.25
Costs of Issuance <sup>(2)</sup> .....	<u>2,275,487.36</u>
Total Applications of Funds .....	<u>\$ 401,223,895.61</u>

<sup>(1)</sup> Represents funds to be provided by the Health System to be applied to pay accrued interest on the Refunded 2005 Bonds and Refunded 2008B Bonds due on August 15, 2015.

<sup>(2)</sup> Includes Underwriters' discount, counsel fees (including Co-Bond Counsel, Underwriters' counsel, and Authority's counsel), rating agency fees, Bond Trustee and Master Trustee fees, accounting fees, printing costs, fees and expenses of the Authority and other expenses related to issuance of the 2015 Bonds.

**THE 2015 BONDS****Description of the 2015 Bonds**

The 2015 Bonds are dated as indicated on the cover page hereof and will bear interest from such date at the rates set forth on the inside front cover page hereof, payable semiannually on February 15 and August 15 of each year (each a "Scheduled Interest Payment Date"), commencing August 15, 2015, until maturity or prior redemption, and will mature on the dates and in the amounts set forth on the inside front cover page of this Official Statement.

Interest on the 2015 Bonds will be paid on each Scheduled Interest Payment Date by check or draft mailed to the persons in whose name the 2015 Bonds are registered on the registration books of the Authority (the "Bond Register") maintained by the Bond Trustee at the address appearing thereon at the close of business on the first day (whether or not a Business Day) of the calendar month immediately preceding each Scheduled Interest Payment Date (the "Regular Record Date"). Any such interest not so paid or duly provided for shall cease to be payable to the persons who are registered owners of the 2015 Bonds as of the Regular Record Date and will be payable to the persons who are registered owners of the 2015 Bonds at the close of business on the fifteenth day (the "Special Record Date") preceding the special payment date (the "Special Payment Date"), which will be the date fixed by the Bond Trustee for the payment of defaulted interest whenever moneys become available for such payment. The principal and redemption price of, and interest on, the 2015 Bonds are payable in any legal tender which at the time of payment constitutes lawful money of the United States of America.

DTC will act as securities depository under a book-entry system for the 2015 Bonds. Unless such system is discontinued, the provisions described below under "BOOK-ENTRY SYSTEM" (including provisions regarding payments to and transfers by the owners of beneficial interests in the 2015 Bonds) will be applicable to the 2015 Bonds. See "BOOK-ENTRY SYSTEM" below.

The Bond Indenture and the Loan Agreement and all provisions thereof are incorporated by reference in the text of the 2015 Bonds, and the 2015 Bonds provide that each registered owner, beneficial owner and Direct or Indirect Participant (as hereinafter defined) in DTC, by acceptance of a 2015 Bonds (including receipt of a book-entry credit evidencing an interest therein), assents to all of the provisions of the Bond Indenture and the Loan Agreement as an explicit and material part of the consideration running to the Authority to induce it to issue the 2015 Bonds. Copies of the Bond Indenture and the Loan Agreement, including the full text of the form of the 2015 Bonds, are on file at the corporate trust office of the Bond Trustee in Philadelphia, Pennsylvania.

## **Transfer**

Subject to the provisions described under “BOOK-ENTRY SYSTEM” below, a 2015 Bond may be transferred only upon presentation thereof to the Bond Trustee. Such 2015 Bond must be accompanied by an endorsement duly executed by the registered owner. No charge will be imposed in connection with any transfer or exchange, except for taxes or governmental charges related thereto. The Bond Trustee is not required to transfer or exchange any 2015 Bond for a period of 15 days immediately preceding the date of mailing of any notice of redemption or at any time following the mailing of any such notice if the 2015 Bond or any portion thereof to be transferred or exchanged has been called for redemption.

## **Redemption Provisions**

### ***Optional Redemption***

The 2015 Bonds maturing on and after August 15, 2026, are subject to optional redemption prior to maturity by the Authority, at the direction of the Obligated Group Agent, on or after August 15, 2025, in whole or in part at any time, at a redemption price equal to 100% of the principal amount thereof, plus interest accrued to the redemption date. Any partial redemption may be in any order of maturity and in any principal amount (in authorized denominations) within a maturity as designated by the Obligated Group Agent. If less than all of the 2015 Bonds of a particular maturity are to be called for redemption, the 2015 Bonds to be redeemed may be selected for redemption in such manner as the Obligated Group Agent may specify.

### ***Extraordinary Redemption***

The 2015 Bonds are subject to extraordinary redemption prior to maturity by the Authority, at the direction of the Obligated Group Agent, out of insurance proceeds, condemnation awards and the proceeds of conveyances in lieu of condemnation deposited with or held by the Bond Trustee for such purpose, in whole or in part at any time, in any order of maturity or portion of each maturity to be redeemed as may be designated by the Obligated Group Agent, and by lot within a maturity, upon payment of a redemption price equal to the principal amount thereof plus accrued interest to the redemption date.

### ***Mandatory Sinking Fund Redemption***

The 2015 Bonds maturing on August 15, 2040, and August 15, 2045 will be subject to mandatory sinking fund redemption, in direct order of maturity, at a redemption price equal to 100% of the principal amount thereof on August 15 of the years and in the amounts set forth below.

<b>2015 Bonds Due August 15, 2040</b>		<b>2015 Bonds Due August 15, 2045</b>	
Year	Principal Amount	Year	Principal Amount
2036	\$ 6,750,000	2041	\$ 8,620,000
2037	7,090,000	2042	8,970,000
2038	7,460,000	2043	9,335,000
2039	7,840,000	2044	9,720,000
2040*	8,240,000	2045*	38,135,000

\* Final maturity date

The principal amount of the 2015 Bonds otherwise required to be redeemed as described above may be reduced by the principal amount of such 2015 Bonds previously called for optional redemption or theretofore delivered to the Bond Trustee by the Obligated Group Agent in lieu of cash payments under the Loan Agreement or purchased by the Bond Trustee out of moneys in the Debt Service Fund established under the Bond Indenture and which have not theretofore been applied as a credit against any sinking fund installment, in either case in such order of sinking fund installments as the Obligated Group Agent may direct.

### **Notice of Redemption**

Not more than 60 nor less than 30 days before the redemption date of any 2015 Bonds, the Bond Trustee will send notice by first class mail, postage prepaid, return receipt requested to all registered owners of the 2015 Bonds to be redeemed as a whole or in part. Such redemption notice will set forth the details with respect to the redemption in accordance with the provisions of the Bond Indenture and shall state that from the date fixed for redemption interest will cease to accrue on the 2015 Bonds so called for redemption. Failure to give such notice by mail to any holder of 2015 Bonds, or any defect therein, will not affect the validity of any proceedings for the redemption of any other 2015 Bonds. If at the time of mailing of any notice of redemption, the Authority shall not have deposited with the Bond Trustee moneys sufficient to redeem all the 2015 Bonds called for redemption, such notice shall state that it is subject to the deposit of sufficient moneys with the Bond Trustee not later than the opening of business on the redemption date and shall be of no effect unless such moneys are so deposited.

So long as DTC or its nominee is the registered owner of the 2015 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 Participant or otherwise) to notify the Beneficial Owner affected by any redemption of such redemption shall not affect the validity of the redemption. So long as DTC or its nominee is the registered owner of the 2015 Bonds, if less than all of the 2015 Bonds of any one maturity shall be called for redemption, the particular 2015 Bonds or portions of 2015 Bonds of such maturity to be redeemed shall be selected by lot by DTC, the Participants and Indirect Participants in such manner as they may determine. See “Book-Entry System” below.

### **Defeasance**

If the Authority deposits with the Bond Trustee funds, evidenced by moneys or Government Obligations (as defined in APPENDIX D) the principal of and interest on which, when due, will be sufficient to pay the principal or redemption price of any 2015 Bonds, by call for redemption or otherwise, together with interest accrued to the due date or the redemption date, as appropriate, in accordance with the terms of the Bond Indenture, such 2015 Bonds shall no longer be deemed to be Outstanding under the Bond Indenture. Interest on such 2015 Bonds, as appropriate, will cease to accrue on the due date or the redemption date, as appropriate, and from and after the date of such deposit of



funds with the Bond Trustee the holders of the 2015 Bonds will be restricted to the funds so deposited as provided in the Bond Indenture.

### **Purchase In Lieu of Optional Redemption**

Each holder, by purchase and acceptance of any 2015 Bond, irrevocably grants to the Borrowers the option to purchase such 2015 Bond, at any time such 2015 Bond is subject to optional redemption as provided in the Bond Indenture, at a purchase price equal to the redemption price then applicable to such 2015 Bond, plus accrued interest. In order to exercise such option, the Borrowers shall deliver to the Bond Trustee a favorable opinion of Bond Counsel to the effect that such purchase will not, in and of itself, cause the interest on the 2015 Bonds to be included in gross income, and the Borrowers shall direct the Bond Trustee to provide notice of mandatory purchase, such notice to be provided, as and to the extent applicable, in accordance with the provisions of the Bond Indenture described above under the caption “Notice of Redemption.” On the date fixed for purchase of any 2015 Bond in lieu of redemption, the Borrowers shall pay the purchase price of such 2015 Bond to the Bond Trustee in immediately available funds and the Bond Trustee shall pay the same to the holders of 2015 Bonds being purchased against delivery thereof. No purchase of any 2015 Bond in lieu of redemption shall operate to extinguish the indebtedness of the Authority evidenced by such 2015 Bond. No holder may elect to retain a 2015 Bond subject to mandatory purchase in lieu of redemption.

### **Book-Entry Only System**

#### ***General***

Ownership interests in the 2015 Bonds will be available to purchasers only through a book-entry system (the “Book-Entry System”) maintained by DTC, which will act as securities depository for the 2015 Bonds. The 2015 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. Initially, one fully registered bond certificate will be issued for the 2015 Bonds of each maturity, in the aggregate principal amount of the 2015 Bonds of each maturity, and will be deposited with DTC. The following discussion will not apply to any 2015 Bonds issued in certificated form following the discontinuance of the DTC Book-Entry System, as described below.

*So long as Cede & Co., as nominee of DTC, is the registered owner of the 2015 Bonds, the Beneficial Owners of the 2015 Bonds will not receive or have the right to receive physical delivery of the 2015 Bonds, and references herein to the Bondholders or Owners or registered owners of the 2015 Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the 2015 Bonds.*

#### ***DTC and its Participants***

DTC, the world’s largest 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 issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s 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](http://www.dtcc.com).

### ***Purchase of Ownership Interests***

Purchases of the 2015 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2015 Bonds on DTC’s records. The ownership interest of each actual purchaser of a 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 2015 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 the 2015 Bonds, except in the event that use of the book-entry system for the 2015 Bonds is discontinued.

### ***Transfers***

To facilitate subsequent transfers, all 2015 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 2015 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 2015 Bonds; DTC’s records reflect only the identity of the Direct Participants to which accounts such 2015 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.

### ***Notices***

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 2015 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2015 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the 2015 Bond documents. For example, Beneficial Owners of 2015 Bonds may wish to ascertain that the nominee holding the 2015 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 Bond Trustee and request that copies of the notices be provided directly to them.

### ***Redemption***

Redemption notices shall be sent to DTC. If less than all of the 2015 Bonds of a particular maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the 2015 Bonds to be redeemed.

### ***Voting***

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to 2015 Bonds unless authorized by a Direct Participant in accordance with DTC's 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. consenting or voting right to those Direct Participants to whose accounts 2015 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

### ***Payments of Principal and Interest***

Principal, premium and interest payments on the 2015 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 Authority or the Bond 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 Participants and not of DTC, the Bond Trustee, the Members of the Obligated Group or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority, the Members of the Obligated Group or the Bond 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.

### ***Discontinuation of Book-Entry System***

The Book-Entry System for registration of the ownership of the 2015 Bonds through DTC may be discontinued at any time that: (1) DTC discontinues its services as securities depository with respect to the 2015 Bonds at any time by giving reasonable notice thereof to the Authority and the Bond Trustee or (2) the Authority determines that continuation of the system of book-entry transfers through DTC is not in the best interests of the Authority or the holders of the 2015 Bonds and gives notice of such determination to the Bond Trustee and DTC. In either of such events the Authority may appoint a successor securities depository. If, however, no successor securities depository is appointed and the Book-Entry System for the 2015 Bonds is terminated, the 2015 Bonds are required to be printed and delivered in fully certificated form to the Participants shown on the records of DTC provided to the Bond Trustee or, if requested by a Participant, to the Beneficial Owners of the 2015 Bonds shown on the records of such Participant provided to the Bond Trustee.

*The information in this section concerning DTC and DTC's Book-Entry System has been obtained from DTC. The Members of the Obligated Group, the Authority and the Underwriters take no responsibility for the accuracy thereof, and neither the DTC Participants nor the Beneficial Owners should rely on the foregoing information with respect to such matters but should instead confirm the same with DTC or the DTC Participants, as the case may be.*

*None of the Authority, the Underwriters, the Bond Trustee, or the Members of the Obligated Group will have any responsibility or obligations to any Direct Participants or Indirect Participants or the persons for whom they act with respect to (i) the accuracy of any records maintained by DTC or any such Direct Participant or Indirect Participant; (ii) the payment by any Participant of any amount due to any Beneficial Owner in respect of the principal and redemption price of, and interest on, the 2015 Bonds; (iii) the delivery by any such Direct Participant or Indirect Participants of any notice to any Beneficial Owner that is required or permitted under the terms of the Bond Indenture to be given to Bondholders; (iv) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the 2015 Bonds; or (v) any consent given or other action taken by DTC as Bondholder.*

## **SOURCE OF PAYMENT AND SECURITY FOR THE 2015 BONDS**

### **Limited Obligations**

The 2015 Bonds are limited obligations of the Authority. Neither the general credit of the Authority nor the credit or the taxing power of the Commonwealth or any political subdivision thereof is pledged for the payment of the principal and redemption price of, and interest on, the 2015 Bonds, nor shall the 2015 Bonds be or be deemed to be general obligations of the Authority or obligations of the Commonwealth or any political subdivision thereof, nor shall the Commonwealth or any political subdivision thereof be liable for the payment of the principal and redemption price of, and interest on, the 2015 Bonds. The Authority has no taxing power.

### **Bond Indenture**

The 2015 Bonds will be issued under, and equally and ratably secured by, the Bond Indenture by a pledge and assignment by the Authority of payments due from the Borrowers under the Loan Agreement and the moneys and investments held by the Bond Trustee in the funds and accounts established under the Bond Indenture. The covenants and agreements in the Bond Indenture will be for the equal and ratable benefit of the present and future holders of the 2015 Bonds, the holders of the Prior Parity Bonds and the holders of any Additional Bonds which may from time to time be issued by the Authority in the future in accordance with the provisions of the Bond Indenture.

### **Loan Agreement and Master Indenture**

Under the Loan Agreement, the Authority will loan the proceeds of the 2015 Bonds to the Borrowers for the purpose of undertaking the Project. The Borrowers agree in the Loan Agreement to make loan payments to the Bond Trustee, as assignee of the Authority, in amounts and at times sufficient, among other things, to pay the principal and redemption price of, and interest on, the 2015 Bonds and all other Bonds issued and Outstanding under the Bond Indenture.

To evidence and secure the payment obligations of the Borrowers with respect to the 2015 Bonds under the Loan Agreement, the Members of the Obligated Group jointly will deliver to the Bond Trustee, as assignee of the Authority, the 2015 Master Note, in a principal amount equal to the aggregate principal amount of the 2015 Bonds, issued under the Master Indenture.

*The obligation of the University to make payments under the Loan Agreement and the 2015 Master Note is a limited obligation of the University to make payments solely from the Property of HUP and CPUP (or any additional Designated Units established as provided in the Master Indenture). The obligation of each other Member of the Obligated Group to make payments under the Loan Agreement and the 2015 Master Note is a general obligation of such Member of the Obligated Group.*

As security for their payment obligations to make payments under the Master Indenture in respect of all Master Notes and other Obligations issued thereunder, including the 2015 Master Note, each Member of the Obligated Group has granted to the Master Trustee, for the benefit of the holders of all such Obligations (including the Bond Trustee as the holder of the 2015 Master Note), a lien on and security interest in its Gross Receipts, subject in each case to Permitted Liens and other limitations described below, and its right, title and interest in all deposit accounts to which Gross Receipts are deposited. As used herein, "Gross Receipts" means (a) with respect to the University, all revenues, income, receipts and money (other than proceeds of borrowing and income thereon) received in any period by or on behalf of the Designated Units, and (b) with respect to any Member of the Obligated Group other than the University, all revenues, income, receipts and money (other than proceeds of borrowing and income thereon) received in any period by or on behalf of such Member of the Obligated Group. Gross Receipts includes, without limiting the generality of the foregoing, (a) revenues derived from operations, (b) gifts, grants, bequests, donations and contributions and the income therefrom, excluding gifts, grants, bequests, donations and contributions to the extent specifically restricted by the donor to a particular purpose inconsistent with their use for the payment of Obligations, (d) rentals received from the leasing of real or tangible personal property, and (e) proceeds derived from (i) insurance, (ii) Accounts, (iii) securities and other investments, (iv) inventory and other tangible and intangible property, (v) medical or hospital insurance, indemnity or reimbursement programs or agreements and (vi) contract rights and other rights and assets now or hereafter owned, held or possessed.

The security interests in the Gross Receipts of the Members of the Obligated Group described above may be limited by a number of factors, including, but not limited to: (i) statutory liens; (ii) rights arising in favor of the United States of America or an agency thereof; (iii) present or future prohibitions against the assignment of amounts due under the Medicare or Medicaid programs contained in statutes or regulations of the United States or the Commonwealth; (iv) constructive trusts, equitable liens or other rights conferred or impressed by any state or federal court in the exercise of its equitable jurisdiction; (v) federal or state laws respecting bankruptcy, insolvency and creditors' rights generally; (vi) rights of third parties in Gross Receipts converted to cash and not in the possession of the Master Trustee; and (vii) claims that might arise if appropriate financing or continuation statements are not filed in accordance with the Uniform Commercial Code of the Commonwealth as from time to time in effect.

Pursuant to the Master Indenture, the Members of the Obligated Group are subject to certain operational and financial covenants and restrictions as set forth therein. These include primarily covenants and restrictions with respect to debt service coverage, the incurrence of additional indebtedness, the ability of Members of the Obligated Group to grant liens or security interests in certain of their facilities and assets, the ability of Members of the Obligated Group to transfer certain of their assets to any person or entity, the ability of any unit of the University to become a Designated Unit, the ability of other entities to become Members of the Obligated Group, the ability of any Designated Unit to cease being a Designated Unit, and the ability of any Member of the Obligated Group to cease being such a Member.

Under the Master Indenture, the Members of the Obligated Group may under certain circumstances grant additional liens on the Property comprising assets of the Health System.

In a default situation, except for any pledged funds held under the Bond Indenture and in certain circumstances under the Master Indenture, the owners of the 2015 Bonds would be unsecured creditors of the Members of the Obligated Group, provided that claims against the University would be limited to the Property of HUP and CPUP, and the University would not be obligated to make payments on the 2015 Bonds from any other assets or revenues of the University. The Property of HUP and CPUP (or of any additional Designated Units) would likely be available in the first instance to any secured creditors of the University having liens on such Property (which would not include the registered owners of the 2015

Bonds) and secondarily to all unsecured creditors of the University (which would include the registered owners of the 2015 Bonds).

The University is permitted, without the consent of the Bond Trustee, the Master Trustee or the holders of any of the 2015 Bonds, to convert all outstanding Obligations under the Master Indenture to general obligations of the University if, and only if, each Rating Agency then currently rating Obligations confirms that such action will not cause its rating of the Obligations to be lowered. Upon conversion of the Obligations to general obligations of the University, the operational and financial covenants and restrictions in the Master Indenture will be removed, including the covenants described in the following headings in APPENDIX E: “Rate Covenant,” “Limitations on Creation of Liens,” “Limitations on Issuance of Additional Indebtedness,” and “Sale, Lease or Other Disposition of Property.” In addition, all references to Designated Units in the Master Indenture would be amended to refer to the University as a whole.

For a more complete description of the terms and provisions of the Bond Indenture and the Loan Agreement, see APPENDIX D, and for a more complete description of the Master Indenture, see APPENDIX E.

### **Additional Bonds and Indebtedness**

Upon compliance with certain procedures set forth in the Bond Indenture, the Authority may issue Additional Bonds under the Bond Indenture for the benefit of the Health System, which Additional Bonds would be equally and ratably secured, together with the 2015 Bonds, by the Bond Indenture (except with respect to any special fund which might be established under the Bond Indenture for any series of Additional Bonds, as, for example, any separate debt service reserve fund which might be established in the future solely for the benefit of the registered owners of a particular series of Additional Bonds). See APPENDIX D: “The Bond Indenture – Additional Bonds.”

The Members of the Obligated Group are also permitted to issue additional Master Notes under the Master Indenture or to issue other Obligations upon compliance with the terms and conditions of the Master Indenture. Obligations which may be issued in the future under the Master Indenture, to the extent permitted thereby, would be secured thereunder equally and ratably with the 2015 Master Note provided that all Obligations shall, as to the University, be limited as to payment to the Property of Designated Units. See APPENDIX E: “Limitations on Issuance of Additional Indebtedness.”

The Master Indenture sets forth requirements for the issuance of additional Indebtedness. With respect to the University, “Indebtedness” refers only to debt to the extent payable solely from revenues of Designated Units or secured by revenues of or any tangible property of Designated Units. See the definition of “Indebtedness,” in APPENDIX D. The Master Indenture does not restrict in any way the incurrence of general obligation indebtedness of the University, nor does it restrict the incurrence of any other indebtedness of the University except to the extent payable solely from revenues of Designated Units or secured by revenues of or any tangible property of Designated Units.

### **No Recourse Against Members of the Authority**

No recourse shall be had for payment of the principal or redemption price of, and interest on, the 2015 Bonds, or for any claims based on the 2015 Bonds or on the Bond Indenture or any indenture supplemental thereto, against any member, officer or employee, past, present or future, of the Authority, or of any successor corporation, as such, either directly or through the Authority or any such successor corporation, whether by virtue of any constitutional provision, statute or rule of law, or by the enforcement of any assessment or penalty, or otherwise, and the release of all such liability of such

members, officers or employees is a condition of and consideration for the execution by the Authority of the Bond Indenture and the issuance of the 2015 Bonds.

### **HEALTH SYSTEM *PRO FORMA* DEBT SERVICE REQUIREMENTS**

The following table sets forth, for each Fiscal Year of the Health System, the approximate annual debt service requirements on the 2015 Bonds, and other existing long-term debt of the Health System, taking into account the issuance of 2015 Bonds and the refunding of all of the Refunded Bonds. Separately shown in the table below is the calculation of the approximate annual debt service requirements of the Health System in each Fiscal Year. See “SUMMARY OF CERTAIN PROVISIONS OF THE MASTER INDENTURE” in APPENDIX E hereto.

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Fiscal Year Ended (June 30)	2015 Bonds		Other Long- Term Debt <sup>(1)</sup>	Total Debt Service	Annual Debt Service Requirements under the Master Indenture
	Principal	Interest			
2016	--	\$ 12,096,793	\$ 68,930,827	\$ 81,027,620	\$ 80,247,620
2017	\$ 32,710,000	15,880,950	34,230,188	82,821,138	82,937,838
2018	24,410,000	14,780,050	43,815,509	83,005,559	83,119,959
2019	21,470,000	13,633,050	94,818,079	129,921,129	79,466,729
2020	21,480,000	12,559,300	42,640,347	76,679,647	79,654,847
2021	22,440,000	11,461,300	42,370,786	76,272,086	79,250,186
2022	25,185,000	10,270,675	41,016,539	76,472,214	79,446,514
2023	15,625,000	9,250,425	51,796,506	76,671,931	79,645,731
2024	12,045,000	8,558,675	58,162,070	78,765,745	81,742,145
2025	12,640,000	7,941,550	58,402,303	78,983,853	81,960,853
2026	13,270,000	7,293,800	58,647,341	79,211,141	82,186,741
2027	13,920,000	6,614,050	58,901,781	79,435,831	82,412,931
2028	2,270,000	6,209,300	30,422,749	38,902,049	41,878,449
2029	2,110,000	6,120,900	30,667,157	38,898,057	41,876,457
2030	1,940,000	6,040,750	30,918,792	38,899,542	41,877,542
2031	1,760,000	5,963,650	31,180,844	38,904,494	41,879,694
2032	1,690,000	5,892,800	31,320,662	38,903,462	41,878,362
2033	2,110,000	5,813,625	30,975,506	38,899,131	41,876,031
2034	5,810,000	5,631,450	27,461,695	38,903,145	41,879,245
2035	6,100,000	5,333,700	27,463,810	38,897,510	41,874,910
2036	6,420,000	5,020,700	27,459,288	38,899,988	41,875,688
2037	6,750,000	4,691,450	27,459,850	38,901,300	41,877,200
2038	7,090,000	4,345,450	27,460,875	38,896,325	41,874,125
2039	7,460,000	3,981,700	27,460,797	38,902,497	41,878,797
2040	7,840,000	3,599,200	27,460,566	38,899,766	41,876,066
2041	8,240,000	3,197,200	27,459,375	38,896,575	41,874,175
2042	8,620,000	2,818,800	27,463,456	38,902,256	41,877,356
2043	8,970,000	2,467,000	27,459,875	38,896,875	41,875,475
2044	9,335,000	2,100,900	27,463,688	38,899,588	41,877,488
2045	9,720,000	1,719,800	27,459,000	38,898,800	41,876,700
2046	38,135,000	762,700	--	38,897,700	41,876,100
	<u>\$ 357,565,000</u>	<u>\$ 212,051,693</u>	<u>\$1,168,750,264</u>	<u>\$1,738,366,954</u>	<u>\$1,767,731,958</u>

<sup>(1)</sup> "Other Long Term Debt" does not include amounts due on the Refunded 2005 Bonds or the Refunded 2008B Bonds, which are being refunded with the proceeds of the 2015 Bonds as described under "PLAN OF FINANCING" herein. Interest on the Series 2008A Bonds, which bear interest at a variable rate, is calculated at an assumed interest rate of 2.50%. Debt service requirements with respect to the non-refunded Series 2008B Bonds is calculated on the assumption that such Series 2008B Bonds, which are fixed rate bonds maturing on August 15, 2018, will amortize over a 30-year term with level debt service payments at an assumed interest rate equal to 4.00%.

## CERTAIN BONDHOLDER RISKS AND REGULATORY CONSIDERATIONS AFFECTING THE HEALTH SYSTEM

### General

The purchase and ownership of the 2015 Bonds involve certain investment risks that are discussed throughout this Official Statement. Each prospective purchaser of the 2015 Bonds (or a beneficial ownership interest therein) should make an independent evaluation of the information presented in this Official Statement.

Any of the risk factors described herein may affect the Health System's revenues and impair the ability of the Members of the Obligated Group to make required payments under the Loan Agreement or



the 2015 Master Note in respect of the 2015 Bonds when due. Any such impairment may adversely affect the Bond Trustee's ability to pay the principal of and interest on the 2015 Bonds when those payments are due. There can be no assurance that the financial condition of the Health System and/or the utilization of the facilities of the Health System will not be adversely affected by any of these factors.

The Health System is subject to a wide variety of federal and state regulatory actions, and legislative and policy changes by those governmental and private agencies that administer Medicare, Medicaid and other governmental payor programs and is subject to actions by, among others, the Joint Commission, the Centers for Medicare and Medicaid Services ("CMS") of the U.S. Department of Health and Human Services ("DHHS") and other federal, state and local government agencies. The future financial condition of the Health System could be adversely affected by, among other things, changes in the method and amount of payments to the Members of the Obligated Group by governmental and nongovernmental payors, the financial viability of those payors, increased competition from other healthcare entities, demand for health care, alternative forms of care and treatment, changes in the methods by which employers purchase health care for employees, capability of management, changes in the structure of how health care is delivered and paid for (e.g., a single payor system or accountable care organizations), future changes in the economy, demographic changes, availability of physicians, nurses and other healthcare professionals, and malpractice claims and other litigation.

Certain of the factors that could affect the 2015 Bonds and the future financial condition of the Health System include, but are not limited to, the following categories as more particularly described herein:

Risks in the Collection of Patient Service Revenues. A substantial portion of the Health System's patient service revenues are derived from third-party payors, including the federal Medicare program, the state Medicaid program and third-party payors. Many of these programs make payments to the hospitals within the Health System that do not meet the direct and indirect costs of providing patient care.

Health Reform. In March 2010, the United States Congress ("Congress") enacted, and the President signed, the federal Patient Protection and Affordable Care Act (the "ACA"), with the goal of reforming the U.S. health care system. There is tremendous uncertainty regarding the implementation of the ACA which could affect demand for hospital and other healthcare services, governmental and third-party payment methodologies, additional regulatory enforcement and other matters, all of which could have a material and adverse financial impact on the Health System.

Healthcare Legislative and Regulatory Environment. The federal government and/or the state government regulate nearly every aspect of typical hospital operations. Significant regulations include, but are not limited to, the following: licensing and certification; compliance with federal and state fraud and abuse laws; patient privacy and confidentiality requirements; treatment of emergency medical conditions and patient transfer requirements, and environmental laws.

Risks in Healthcare Delivery. In addition to necessary compliance with extensive regulation, hospitals and healthcare providers face unique challenges in business operations. Nonprofit hospitals are facing increased competition from a variety of sources, including freestanding imaging centers, ambulatory surgery clinics specialty hospitals, and retail clinics. Hospitals are particularly dependent on qualified personnel, such as physicians, registered nurses and other qualified healthcare providers, thus any difficulty in attracting and retaining these individuals could adversely affect operations. Finally, medical malpractice and professional

liability claims are frequently filed against hospitals and the claims associated with such liabilities may be significant.

**Tax Matters.** The Members of the Obligated Group have federal tax-exempt status under Section 501(c)(3) of the Internal Revenue Code (the “Code”). In order to maintain the tax-exempt designation, such entities must comply with certain general rules and regulations regarding their operations as tax-exempt entities. In addition, most of the properties owned by the Health System are exempt from real property tax. There have been increasing efforts by both the Internal Revenue Service and various state entities to scrutinize hospital operations to determine whether hospitals are complying with requirements related to maintaining their tax-exempt status.

**Economic Conditions.** Future economic conditions, which may include an inability to control expenses in periods of inflation, and other conditions, including demand for health care services, the availability and affordability of insurance, including without limitation, malpractice and casualty insurance, availability of nursing and other professional personnel, the capability of the management of each Member of the Obligated Group, the receipt of grants and contributions, referring physicians’ and self-referred patients’ confidence in the Members of the Obligated Group, economic and demographic developments in the United States, the Commonwealth, and the service areas of the Members of the Obligated Group, and competition from other health care institutions in the service area, together with changes in rates, costs, third-party payments and governmental laws, regulations and policies, may adversely affect revenues and expenses and, consequently, the ability of the Members of the Obligated Group to make payments under the Loan Agreement and the 2015 Master Note.

This description of various risks is not, and is not intended to be, exhaustive. The information set forth in this section should be read carefully in conjunction with the information describing the businesses, operations and financial condition of the Health System set forth in APPENDIX A and APPENDIX B hereto.

## **Risks in the Collection of Net Patient Service Revenues**

### ***General***

A substantial portion of the net patient service revenues of the Health System is derived from third-party payors which pay for the services provided to patients covered by such third parties for such services. These third-party payors include the federal Medicare program, the Pennsylvania Medicaid program and private health plans and insurers, including health maintenance organizations and preferred provider organizations. Many of those programs make payments to the Health System in amounts that may not fully reflect the direct and indirect costs of the Health System of providing services to patients.

The financial performance of the Health System has been and in the future could be adversely affected by the financial position or the insolvency or bankruptcy of or other delay in receipt of payments from third-party payors that provide coverage for services to their patients.

### ***The Medicare Program***

Medicare is the federal health insurance system under which hospitals are paid for services provided to eligible elderly and disabled persons. Medicare is administered by CMS, which delegates to the states the process for certifying hospitals to which CMS will make payment. In order to achieve and maintain Medicare certification, hospitals must meet CMS’s “Conditions of Participation” on an ongoing

basis, as determined by the State and The Joint Commission. The requirements for Medicare certification are subject to change, and, therefore, it may be necessary for hospitals to effect changes from time to time in their facilities, equipment, personnel, billing, policies and services.

As the U.S. population ages, more people will become eligible for the Medicare program. Current projections indicate that demographic changes and continuation of current cost trends will exert significant and negative forces on the overall federal budget. The Medicare program reimburses hospitals based on a fixed schedule of rates based on categories of treatments or conditions. These rates change over time and there is no assurance that these rates will cover the actual costs of providing services to Medicare patients. Further, it is anticipated there will be reductions in rates paid to Medicare managed care plans that may ultimately be passed on to providers.

The ACA instituted multiple mechanisms for reducing the costs of the Medicare program, including the following:

*Value-Based Purchasing Program.* Medicare inpatient payments to hospitals are determined, in part, based on a program under which value-based incentive payments are made in a fiscal year to hospitals that meet certain performance standards during that fiscal year. The program is funded through the reduction of hospital inpatient care payment by 1%, which will increase to a 2% reduction by federal fiscal year 2017. This reduction may be offset by incentive payments for hospitals that meet or exceed quality standards. The fiscal year 2015 federal budget proposes to implement an expanded value-based purchasing program, which would include providers beyond those currently participating in value-based purchasing initiatives, and would tie at least 2% of payments to quality and efficiency of care requirements for hospital outpatient departments.

*Market Basket Reductions.* Generally, Medicare payment rates to hospitals are adjusted annually based on a “market basket” of estimated cost increases. In recent years, market basket adjustments for inpatient hospital care have averaged approximately 2-4% annually. The ACA imposed automatic reductions in the annual “market basket” update amount ranging from 0.10% to 0.75 % each year through federal fiscal year 2019.

*Market Productivity Adjustments.* The ACA further provides for “market basket” adjustments based on overall national economic productivity statistics calculated by the Bureau of Labor Statistics. This adjustment is currently anticipated to result in an approximately 1% additional reduction to the “annual market basket” update.

*Hospital Acquired Conditions.* 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” identified by CMS will be 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 hospitals with excessive readmission rates compared to the national average for three patient conditions (acute myocardial infarction, pneumonia and heart failure) are reduced based on the dollar value of that hospital’s percentage of excess preventable Medicare readmissions within 30 days of discharge, for certain medical conditions. The maximum penalty is 3% beginning in fiscal year 2015. In fiscal year 2015, CMS is expanding the patient conditions assessed for this penalty to include acute exacerbation of chronic obstructive pulmonary disease, elective total hip arthroplasty, and total knee arthroplasty.

*Medicare and Medicaid DSH Payments.* Beginning in federal fiscal year 2014, hospitals receiving supplemental “DSH” payments from Medicare (i.e., those hospitals that care for a

disproportionate share of low-income Medicare beneficiaries) were slated to have their DSH payments reduced by 75%. This reduction potentially would be offset by new, additional payments based on the volume of uninsured and uncompensated care provided by each such hospital, and by an increased proportion of patients covered by Medicaid and private insurance as other provisions of the ACA became effective. Under a final rule issued in 2013, the federal share of Medicaid DSH payments was to be reduced by \$500 million in fiscal year 2014 and \$600 million in fiscal year 2015. However, the Bipartisan Budget Act of 2013 delayed the fiscal year 2014 cuts until fiscal year 2016, but increased the overall level of reductions and extended cuts through fiscal year 2023. See also “Disproportionate Share Payments” below.

Hospitals also receive payments from health plans under the Medicare Advantage program. The ACA includes significant changes to federal payments to Medicare Advantage plans. Payments to plans were frozen for fiscal year 2011 and thereafter have transitioned 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.

Components of the 2008 federal stimulus package, the American Recovery and Reinvestment Act (“ARRA”) established programs under Medicare and Medicaid to provide incentive payments for the “meaningful use” of certified electronic health record (“EHR”) technology. Beginning in 2011, the Medicare and Medicaid EHR incentive programs began providing incentive payments to eligible professionals and eligible hospitals for demonstrating meaningful use of certified EHR technology. Health care providers demonstrate their meaningful use of EHR technology by meeting objectives specified by CMS for using health information technology and by reporting on specified clinical quality measures. Beginning in 2015, hospitals and physicians who have not satisfied the performance and reporting criteria for demonstrating meaningful use will have their Medicare payments significantly reduced. Additionally, in 2014, the federal government began auditing hospitals’ and providers’ records related to their attestation of being “meaningful users” in order to obtain the incentive payments. A hospital or provider that fails the audit will have an opportunity to appeal. Ultimately, hospitals or providers that fail on appeal will have to repay any incentive payments they received through these programs. Management of the Obligated Group does not anticipate that compliance with the 2009 Health Information Technology for Economic and Clinical Health Act (the “HITECH Act”) will have a material adverse effect on the operations of the Health System.

In addition to components of the ACA described above, the legislation enacted in the early days of 2013 to avert the “fiscal cliff,” the American Taxpayer Relief Act of 2012 (“ATRA”), also has negatively affected hospital Medicare reimbursement. Specifically, ATRA reduced Medicare reimbursement for hospitals by \$10.5 billion to help offset the \$30 billion cost of deferring a 27% reduction in Medicare physician payments that would otherwise have gone into effect as well as the cost of extending for one year several CMS payment policies that would otherwise have expired.

The hospitals within the Health System are Medicare certified. For the fiscal year ended June 30, 2014, 19% of the net patient service revenues of the Health System was derived from Medicare (excluding Medicare managed care programs). See APPENDIX A: “CERTAIN FINANCIAL INFORMATION - Sources of Revenue.” As a result, the Health System has a significant dependence on Medicare as a source of revenue. Because of this dependence, changes in the Medicare program may have a material effect on the Health System. Future reductions in Medicare reimbursement, or increases in Medicare reimbursement in amounts less than increases in the costs of providing care, may have a material adverse financial effect on the Health System.

### *Hospital Inpatient Payments*

Hospitals are generally paid for inpatient services provided to Medicare beneficiaries based on established categories of treatments or conditions known as diagnosis related groups (“DRGs”). The actual cost of care, including capital costs, may be more or less than the DRG rate. DRG rates are subject to adjustment by CMS, including reductions mandated by the ACA and by the Budget Control Act of 2011 (the “BCA”) and are subject to federal budget considerations. There is no guarantee that DRG rates, as they change from time to time, will cover actual costs of providing services to Medicare patients. For information regarding the impact of the ACA on payments to hospitals for inpatient services, see “The Medicare Program—Market Basket Reductions” above.

In 2013, CMS adopted the Inpatient Hospital Prepayment Review “Probe & Educate” review process and the “Two-Midnight” rule. The “Two-Midnight” policy specifies that hospital stays spanning two or more midnights after the beneficiary is properly and formally admitted as an inpatient will be presumed to be “reasonable and necessary” for purposes of inpatient reimbursement. With some exceptions, stays not expected to extend past two midnights should not be admitted and instead be billed as outpatient. The “Probe & Educate” review process is designed to identify and correct claims improperly billed and to provide education to hospitals implementing the “Two-Midnight” rule. While the “Probe & Educate” review process commenced in 2013, CMS issued a notice in January, 2014, delaying enforcement of the “Two-Midnight” rule until September 30, 2014. Subsequent legislation directed CMS to refrain from conducting post-payment patient status reviews through recovery audit contractors on claims with dates of admission through March 31, 2015, absent evidence of systematic gaming, fraud, abuse, or delays in the provision of care. The legislation also extended the ability of Medicare administrative contractors (“MACs”) to select a limited number of claims for review of policy compliance with dates of admission through March 31, 2015. On April 1, 2015, CMS announced that it will delay enforcement of the “Two-Midnight” rule until April 30, 2015, to provide Congress with more time to pass a Sustainable Growth Rate (“SGR”) replacement package, which Congress did on April 16, 2015, as discussed below under “Physician Services Reimbursement.” The implementation of the “Two-Midnight” rule may have an adverse financial impact for hospitals.

### *Hospital Outpatient Payments*

Payments for hospital outpatient services under Medicare are paid under a separate outpatient PPS. Those hospital outpatient services are classified into groups called ambulatory payment classification (“APC”) groups. Services in each APC group are similar clinically and in terms of the resources they require. The ACA provides for a reduction to the market basket used to determine annual Outpatient PPS increases by an adjustment factor through 2019 and by a productivity adjustment. Application of the productivity adjustment can result in a market basket increase of less than zero, such that payments in a current year may be less than the prior year. There is no guarantee that APC rates, as they change from time to time, will cover actual costs of providing services to Medicare patients.

### *Graduate Medical Education Payments*

The hospitals of the Health System receive additional payments from Medicare to reimburse them for the costs of graduate medical education (“GME”). Direct graduate medical education (“DGME”) costs are reimbursed under a prospective methodology based on a hospital specific amount per medical resident. Additional payments are available to teaching hospitals reimbursed under the DRG system for the indirect medical education (“IME”) costs attributable to their approved GME programs. DGME and IME reimbursements are subject to certain limitations, including a cap on a hospital’s reimbursable medical residents based on the number of medical residents in a base year. In fiscal year 2014, the Health System received reimbursement in the amount of \$132.5 million for DGME and IME, collectively. These

additional funds are subject to appropriation and funding each year and may not be funded in the future. There can be no assurance that the payments under the Medicare program will be adequate to cover the direct and indirect costs of providing medical education to interns, residents, fellows, nurses and allied health professionals. In addition, in 2007, CMS proposed to eliminate all federal matching funds for state GME payments to hospitals under the Medicaid program. A Congressionally imposed moratorium on the CMS proposal expired in 2009. However, Congress included in ARRA a “sense of the Congress” statement that the proposal to abolish Medicaid GME should not be implemented, but ARRA does not prevent CMS from doing so. The President's fiscal year 2015 federal budget proposes to reduce Medicare indirect medical education payments by 10% beginning in 2015.

### *Physician Services Reimbursement*

Payments for physician services are made under Part B of Medicare. From the late 1990s until April 2015, Medicare rates were determined by a statutory formula that took into account a relative value for each physician service, multiplied by a geographic adjustment factor and a nationally uniform conversion factor to determine the amount Medicare would pay for each service. One component of the formula required application of the Sustainable Growth Rate (“SGR”) to Medicare rates. The SGR would have significantly limited the growth of Medicare payments for physician services if applied, and multiple temporary patches were put in place by Congress to delay application of the SGR. On April 16, 2015, Congress enacted, and the President signed, the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). MACRA permanently replaces the SGR formula in favor of a new system touted as promoting quality over volume. MACRA provides a combination of automatic increases for physicians and incentives for them to participate in a variety of pay-for-performance programs and alternative payment models (e.g. medical homes and accountable care organizations). Between 2015 and 2019, physicians in the Medicare program will receive an annual update of 0.5 percent. The base reimbursement rate will then hold steady at 2019 levels through 2025, while giving physicians the ability to supplement their reimbursement through payment adjustments in the newly created “Merit-Based Incentive Payment System” (MIPS) and participation in alternative payment models (APMs). Finally, starting in 2026 and beyond, physicians who receive a significant share of their revenues through an APM are eligible for one percent annual increases as opposed to 0.5 percent updates for those not participating in APMs. There can be no assurance that the payments under this system will be sufficient to cover all of the actual costs of providing physician services to Medicare patients.

### *The Medicaid Program*

Medicaid is a jointly administered federal and state program providing payment of medical benefits within prescribed limits within each state to persons meeting certain income limitations or other eligibility standards. The Pennsylvania Medicaid program, known as the Medical Assistance (“MA”) program, is administered by the Pennsylvania Department of Human Services and generally reimburses health care providers in Pennsylvania for providing services to covered patients as described below. For the fiscal year ended June 30, 2014, approximately 7% of the net patient service revenues of the Health System were derived from Medicaid (excluding Medicaid managed care programs). See APPENDIX A: “CERTAIN FINANCIAL INFORMATION - Sources of Revenue.”

Because the MA program is partially funded by, and its funding is administered through, the Commonwealth, the timing and amount of payments under the MA program may be particularly affected by Pennsylvania budgetary constraints. Act 49 of 2010 as extended by Act 55 of 2013, assesses a 3.22% fee on annual net inpatient revenue on all licensed acute care hospitals through June 30, 2016. Revenue from Act 49 is used to update Medicaid claims pricing for inpatient hospital services, revise disproportionate share payments and increase reimbursement through the state Medicaid managed care plan, HealthChoices. The reimbursement currently paid by the Medicaid program is likely to be

subject to restrictions in the future, and there can be no assurance that such payments will be adequate to cover the cost of care for Medicaid beneficiaries in the future.

The ACA is projected to expand access to Medicaid and the scope of services covered thereunder. Under the ACA, states have the option to expand Medicaid eligibility to cover individuals with income under 138% of the Federal Poverty Level ("FPL"). To assist states with the cost of this coverage expansion, the federal government will pay 100% of the new cost for a limited number of years. Thereafter, the cost share is expected to decrease to 90% until 2022. In 2014, the Commonwealth obtained a waiver pursuant to this authority to restructure Pennsylvania's Medicaid program to permit a three-pronged benefit plan alternative to traditional Medicaid expansion, "Healthy Pennsylvania." The plan offered Medicaid to individuals through either private health insurance or the HealthChoices managed Medicaid program and instituted new requirements for all Medicaid enrollees, such as payment of monthly premiums and providing evidence that they are looking for jobs. The Healthy Pennsylvania plan took effect on January 1, 2015. However, the Commonwealth's new Governor has proposed to remove parts of the Medicaid expansion plan implemented by his predecessor. The current Governor intends to transition Pennsylvania to a simple, traditional Medicaid expansion plan, by eliminating the use of the health screening tool put in place under Healthy Pennsylvania, and restructuring benefits from three plan options to one. The impact of these changes to the Medicaid expansion plan and its effect upon the revenues of the Health System, and upon the operations, results of operations and financial condition of the Health System, cannot be predicted at this time.

#### *HealthChoices and ACCESS Plus*

The Pennsylvania HealthChoices program requires Medicaid recipients in certain regions of the Commonwealth to enroll in managed care plans, including the region in which the Health System is located. In other parts of the Commonwealth, HealthChoices is either optional or not available. In 2007, the Commonwealth introduced the ACCESS Plus program for those counties in which participation in HealthChoices is optional.

Under the HealthChoices program, Medicaid recipients enroll in managed care programs. Like any private managed care plan, the HealthChoices program attempts to negotiate lower fee schedules with healthcare providers. There can be no assurance that the Health System will be successful in contracting with the assigned managed care organizations or that the reimbursements from these managed care organizations will be sufficient to cover the costs of delivering care to Medicaid recipients in the future. The ACCESS Plus program requires the Medicaid recipients to choose a primary care provider and if the recipients do not do so, one is chosen for them, who then provides, manages and coordinates the patient's healthcare. The ACCESS Plus program also provides disease management services, case management services and an enrollment assistance program.

#### *Inpatient Payments*

Medicaid payments for inpatient acute-care service are based on a prospective payment system similar to the federal Medicare DRG-based, prospective payment system described above.

#### *Hospital Outpatient Payments*

Traditional Medicaid pays for hospital outpatient services rendered based on either the lower of the usual charge to the public for the same service or the Medicaid maximum allowable fee. Managed care Medicaid pays for hospital outpatient services based on negotiated contract rates.

### *Capital Expenditures*

Traditional Medicaid payments for capital costs (including depreciation and interest, but excluding costs for moveable equipment) are integrated into the inpatient payment rates. There is no assurance that Medicaid reimbursement levels for depreciation and interest for the remaining traditional Medicaid business or the managed care Medicaid contract rates will be adequate to satisfy capital requirements.

### *Disproportionate Share Payments*

Additional payments may be made by the Commonwealth and matched by the federal government to hospitals within the Health System that treat a disproportionately large number of low-income patients (Medicaid and Medicare patients eligible to receive supplemental Social Security income). Currently, these hospitals receive additional payments in the form of “disproportionate share” (DSH) payments. There can be no assurance that hospitals within the Health System will continue to receive DSH payments in the future. As discussed above, based on the assumption that the new coverage and access provisions of the ACA will substantially reduce uncompensated care provided by hospitals, the ACA incrementally decreases the Medicare and Medicaid payments for DSH payments by \$36 billion dollars. The Bipartisan Budget Act of 2013 delayed the commencement of all Medicaid DSH cuts until October 1, 2015 and extended the end date through fiscal year 2023. As a result, DSH cuts will be doubled for fiscal year 2016.

### *Medicare and Medicaid Audits*

Hospitals participating in Medicare and Medicaid may be subject to audits and retroactive audit adjustments with respect to reimbursement claimed under those programs. Because such claims can be large or small amounts, it is impossible to predict the effect of such claims. Any such future adjustments could be material. Both Medicare and Medicaid regulations also provide for withholding payments in certain circumstances. Any such withholding with respect to the Health System could have a material adverse effect on the ability to generate funds sufficient to make required payments related to the 2015 Bonds and on the overall financial condition of the Health System. In addition, contracts between hospitals and third-party payors often have contractual audit, setoff and withhold language that may cause retroactive adjustments, which could have a material adverse effect on the future financial condition of the Health System.

Under both the Medicare and Medicaid programs, certain healthcare providers, including hospitals in the Health System, are required to report certain financial information on a periodic basis, and with respect to certain types of classifications of information, penalties are imposed for inaccurate reports. As these requirements are numerous, technical and complex, there can be no assurance that the Health System will avoid incurring such penalties in the future. These penalties may be material and adverse and could include criminal or civil liability for making false claims and/or exclusion from participation in federal healthcare programs. 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 a hospital to civil or criminal sanctions.

Medicare and Medicaid audits may result in reduced reimbursement or repayment obligations related to alleged prior period overpayments and may also delay Medicare and Medicaid payments to providers pending resolution of the appeals process. The ACA explicitly gives DHHS the authority to suspend Medicare and Medicaid payments to any provider or supplier during a pending investigation of fraud. The ACA also amended certain provisions of the FCA (as defined herein) to include retention of overpayments as a violation. It also added provisions respecting the timing of the obligation to identify,



report and reimburse overpayments. While it is not anticipated that Medicare and Medicaid audits will materially adversely affect the future financial condition or operations of the Health System, in light of the complexity of the regulations relating to both the Medicare and Medicaid programs, there can be no assurance that significant difficulties could not develop in the future.

### ***Private Health Plans and Managed Care***

Managed care plans generally use discounts and other economic incentives to reduce or limit their cost and utilization of healthcare services. Payments to the Health System from managed care plans typically are lower than those received from traditional indemnity/commercial insurers. There is no assurance that the Health System will maintain managed care contracts or obtain other similar contracts in the future. Failure to maintain contracts could have the effect of reducing the market share of the Health System and the Health System's net patient services revenues. Conversely, participation may maintain or increase the patient base but could result in lower net income or operating losses to the Health System if the Health System is unable to adequately contain its costs.

Many preferred provider organizations ("PPOs") and health maintenance organizations ("HMOs") currently pay providers on a negotiated fee-for-service basis or on a fixed rate per day of care, which, in each case, usually is discounted from the typical charges for the care provided. The discounts offered to HMOs and PPOs may result in payment to a provider that is less than its actual cost in a specific instance of patient care. Additionally, the volume of patients directed to a hospital may vary significantly from projections used to formulate the discount, and/or changes in the utilization of certain services offered by the provider may be significant and unexpected, thus further reducing revenues and jeopardizing the provider's ability to contain costs.

Some HMOs employ a capitation payment method under which hospitals are paid a predetermined periodic rate for each enrollee in the HMO who is assigned or otherwise directed to receive care at a particular hospital. In a capitation payment system, the hospital assumes a financial risk for the cost and scope of care given to such HMO's enrollees. In some cases, the capitated payment covers total hospital patient care provided. However, if payment under an HMO or PPO contract is insufficient to meet the hospital's costs of care or if utilization by such enrollees materially exceeds projections, the financial condition of the hospital could erode rapidly and significantly.

The ACA imposes, over time, increased regulation of the industry, the use and availability of state-based exchanges in which health insurance can be purchased by certain groups and segments of the population, the extension of subsidies and tax credits for premium payments by some consumers and employers and the imposition upon commercial insurers of certain terms and conditions that must be included in contracts with providers. In addition, the ACA imposes many new obligations on states related to health care insurance. With implementation of the ACA, substantial numbers of employers may elect to discontinue employer-funded medical care for employees eligible for federal assistance in securing private insurance, and the employees could then choose health insurance under the health insurance exchanges. Individuals choosing their own coverage are likely to be more price sensitive, which could increase the number of enrollees in lower-cost HMO plans and increase the use of capitation, making price negotiations with HMO and other insurance plans more difficult. It is unclear how the increased federal oversight of state health care may affect future state oversight or affect the Health System. The effects of these changes upon the revenues of the Health System, and upon the operations, results of operations and financial condition of the Health System, cannot be predicted.

As a consequence of the above factors, the effect of managed care on the Health System's financial condition is difficult to predict and may be different in the future than the financial statements for the current periods reflect.

For the fiscal year ended June 30, 2014, approximately 68% of the net patient service revenues of the Health System was derived from private health plans and third-party managed care programs (including Medicare and Medicaid managed care programs).

### ***International Classification of Diseases, 10<sup>th</sup> Revision Coding System.***

In 2009, CMS published the final rule adopting the International Classification of Diseases, 10th Revision coding system ("ICD-10"), requiring health care organizations to implement ICD-10 no later than 2013. DHHS has serially delayed the compliance deadline, currently until October 1, 2015. ICD-10 provides a common approach to the classification of diseases and other health problems, allowing the United States to align with other nations to better share medical information, diagnosis, and treatment codes. ICD-10 is not without risk as staff will need to be retrained, processes redesigned, and computer applications modified as the current available codes and digit size will dramatically increase. Additionally, there is a potential for temporary coding and payment backlog, as well as potential increases in claims errors. There is a potential for revenue stream disruption for health care organizations and the magnitude of the transition within the industry may add pressure to health care organizations' cash flows. Health care organizations will be dependent on outside software vendors, clearinghouses and third-party billing services to develop products and services to allow timely, full and successful implementation of ICD-10. Delays in the required implementation may occur if such ICD-10 products and services are not available to health care organizations from these outside sources well in advance of the implementation deadline to allow for adequate testing and installation. The continued delay of ICD-10 implementation is likely to result in increased training and related implementation costs for the Health System. Further, it remains unclear whether continued delay in ICD-10 implementation will ultimately resolve potential implementation issues.

### ***Self-Pay Patients and Charity Care***

Self-pay patients are billed at the Health System's standard charges as in effect from time to time. A charity care program is available for patients of limited personal financial means who are without third party payor coverage. See APPENDIX A: "CERTAIN FINANCIAL INFORMATION - Sources of Revenue."

### **Federal Budget Cuts**

The Budget Control Act of 2011 (the "BCA") mandates significant reductions and spending caps on the federal budget for Fiscal Years 2012 through 2021. The BCA also created a Joint Select Committee on Deficit Reduction (the "Super Committee") to develop a plan to further reduce the federal deficit by \$1.5 trillion on or before November 23, 2011. As the Super Committee failed to develop such a plan, a 2% reduction in payments became effective for all Medicare Parts A and B claims with dates-of-service or dates-of-discharge on or after April 1, 2013, and for all payments made to Medicare Advantage Organizations ("MAOs"), Part D plans and other programs (including Managed Care Organizations) with enrollment periods beginning on or after April 1, 2013. Additionally, ATRA significantly affects hospital Medicare reimbursement in that it requires the Medicare program to recoup funds from hospitals based on changes in documentation and coding that have increased Medicare inpatient prospective payment system ("IPPS") payments but that do not represent real increases in the intensity of services provided to patients. In the final IPPS regulations for federal fiscal year 2014, CMS stated that it intends to phase in this recoupment over time, starting with a 0.8% reduction in the Medicare standardized amount (base rate) for 2014. Additional recoupment adjustments are planned for federal fiscal years 2015-2017.

Ahead of a December, 2013, deadline, a bipartisan and bicameral budget agreement staved off further sequestration cuts, while keeping the current 2% Medicare sequestration cuts in place (the

"Bipartisan Budget Act of 2013") at least through March 31, 2015. The Office of Management and Budget sent a letter and report to Congress on January 20, 2015, stating that there will be no budget cuts because of sequestration in fiscal year 2015. President Obama's proposed budget for 2016 includes a proposal to eliminate sequestration. It is possible that Congress will take action to eliminate some or all of the reductions in the future and any Congressional action could be made retroactive in order to eliminate some or all of the cuts even to the extent they were imposed. However, there is no certainty that Congress will take any action. Absent further Congressional action, these automatic spending cuts will become permanent. Because Congress may make changes to the budget in the future, it is impossible to predict the impact any spending cuts may have upon the Health System. Similarly, it is impossible to predict whether any automatic reductions to Medicare may be triggered in lieu of other spending cuts that may be proposed by Congress. If and to the extent Medicare and/or Medicaid spending is reduced under either scenario, this may have a material adverse effect upon the financial condition of the Health System. Ultimately, these reductions or alternatives could have a disproportionate impact on hospital providers and could have an adverse effect on the financial condition of the Health System, which could be material.

## **Health Care Reform**

### ***Federal Health Care Reform.***

As a result of the 2010 enactment of the ACA, substantial changes have occurred and are anticipated to occur in the United States health care system. The ACA is affecting the delivery of health care services, the financing of health care costs, reimbursement of health care providers and the legal obligations of health insurers, providers, employers and consumers. Some of the provisions of the ACA (including various provisions described above) took effect immediately or within a few months of final approval, while others were or will be phased in over time, ranging from one year to ten years. Because of the complexity of the ACA generally, additional legislation may be considered and enacted over time. The ACA has also required, and will continue to require, the promulgation of substantial regulations with significant effects on the health care industry. Thus, the health care industry is the subject of significant new statutory and regulatory requirements and consequently to structural and operational changes and challenges for a substantial period of time. The full ramifications of the ACA may also become apparent only over time and through later regulatory and judicial interpretations. Portions of the ACA have already been limited and nullified as a result of legislative amendments and judicial interpretations and future actions may further change its impact. The uncertainties regarding the implementation of the ACA create unpredictability for the strategic and business planning efforts of health care providers, which in itself constitutes a risk.

The changes in the health care industry brought about by the ACA may have both positive and negative effects, directly and indirectly, on the nation's hospitals and other health care providers, including the Health System. For example, the projected increase in the numbers of individuals with health care insurance occurring as a consequence of Medicaid expansion, creation of health insurance exchanges, subsidies for insurance purchase and the penalty on certain individuals who do not purchase insurance could result in lower levels of bad debt and increased utilization or profitable shifts in utilization patterns for hospitals. However, these potential benefits may be offset to the extent that Medicaid expansion, which is now optional on a state by state basis, is either not pursued or results in a shifting of significant numbers of commercially-insured individuals to Medicaid or to health insurance options on exchanges that are limited or unaffordable, as well as the cost containment measures and pilot programs that the ACA requires. A negative impact to the hospital industry overall will likely result from scheduled cumulative reductions in Medicare payments; such reductions are substantial. The legislation's cost-cutting provisions to the Medicare program include reduction in Medicare market basket updates to hospital reimbursement rates under the inpatient prospective payment system, additional reductions to or

elimination of Medicare reimbursement for certain patient readmissions and hospital-acquired conditions, as well as anticipated reductions in rates paid to Medicare managed care plans that may ultimately be passed on to providers. Industry experts also expect that government cost reduction actions may be followed by private insurers and payors. Because approximately 26% of the revenues of the Health System (for its fiscal year ended June 30, 2014) were from Medicare spending, the reductions may have a material impact, and could offset any positive effects of the ACA. See also “—Patient Service Revenues—The Medicare Program” below.

Beginning in 2014, the ACA created state "health insurance exchanges" in which health insurance can be purchased by certain groups and segments of the population, expanded the availability of subsidies and tax credits for premium payments by some consumers and employers, and required that certain terms and conditions be included by commercial insurers in contracts with providers. In addition, the ACA imposed many new obligations on states related to health insurance. It is unclear how the increased federal oversight of state health care may affect future state oversight or affect the Health System. The health insurance exchanges may have positive impact for hospitals by increasing the availability of health insurance to individuals who were previously uninsured. Conversely, employers or individuals may shift their purchase of health insurance to new plans offered through the exchanges, which may or may not reimburse providers at rates equivalent to rates the providers currently receive. The exchanges could alter the health insurance markets in ways that cannot be predicted, and exchanges might, directly or indirectly, take on a rate-setting function that could negatively impact providers. Because the exchanges are still so new, the effects of these changes upon the financial condition of any third party payor that offers health insurance, rates paid by third-party payors to providers and, thus, the revenues of the Health System, and upon the operations, results of operations and financial condition of the Health System, taken as a whole, cannot be predicted.

Additionally, the administration delayed the effective date of certain aspects of the ACA such as the requirement that businesses with more than 50 employees provide health insurance to their workers or pay a penalty, of which the deadline has been delayed to 2015 for employers with 100 or more full-time employees and 2016 for employers with 50 to 99 full-time employees. In response to difficulties faced by individuals who received cancellation notices regarding plans that did not meet the coverage requirements for the ACA and may be unable to pay for standing coverage, the administration has granted those individuals an exception from the ACA's individual mandate, which requires individuals to have health insurance or face a penalty for tax year 2014. This exception, the "hardship exemption," permits individuals whose plans were cancelled to obtain catastrophic coverage, which is basic coverage generally available to those under age 30 or who meet the hardship exemption. Similarly, delaying the ACA adjusted community rating provisions for grandfathered small group plans temporarily stabilizes renewal rates for many small employers with young, healthy employees in many markets. When this delay expires, many of these small employers will receive significant rate increases as they are moved toward an average "community" rate.

High deductible insurance plans have become more common in recent years, and the ACA is expected to encourage the increase in high deductible insurance plans as the health care exchanges include a variety of plans, several of which offer lower monthly premiums in return for higher deductibles. Many plans offered on the exchanges have high deductibles. High deductible plans may contribute to lower inpatient volumes as patients may forgo or choose less expensive medical treatment to avoid having to pay the costs of the high deductibles. There is also a potential concern that some patients with high deductible plans will not be able to pay their medical bills as they may not be able to cover their high deductible.

Efforts to repeal provisions of the ACA are from time to time pending in Congress. In 2012, the U.S. Supreme Court upheld most provisions of the ACA, including the requirement that individuals

maintain health insurance. The ACA is subject to further judicial interpretations. For example, in 2014, two federal appeals courts issued conflicting rulings with respect to the ACA on whether the federal government could subsidize health insurance premiums in states that use the federal health insurance exchange. The Supreme Court will review the issue of whether the IRS has the authority to provide the insurance exchange subsidies in 2015. Removing the subsidies may make it financially difficult for individuals who rely upon such subsidies to pay their premiums. It may also weaken the ACA's requirement that most individuals carry health coverage by increasing the number who qualify for a hardship exemption based on insurance prices. In addition, because the penalties for violations of the employer health coverage mandate are triggered when an employee enrolls in an exchange plan and becomes entitled to a subsidy, the elimination of subsidies in the states with federally run exchanges also renders the employer mandate ineffective in those states. The ultimate outcomes of legislative attempts to repeal or amend the ACA and other legal challenges to the ACA are unknown and their impact on the Health System's operations cannot be determined.

### ***Pennsylvania Health Insurance Exchange***

The ACA requires states to implement health insurance exchanges that are operational by January 1, 2014. Under the ACA, uninsured Americans had until March 31, 2014, to purchase insurance through the health care exchanges or other venues, or face a financial penalty. As discussed in “The Medicaid Program” above, components of the Commonwealth’s current health insurance exchange are likely to be repealed as an alternate Medicaid expansion plan is implemented. The use and availability of this state-based exchange and its effect upon the revenues of the Health System, and upon the operations, results of operations and financial condition of the Health System, cannot be predicted at this time.

## **Healthcare Legislative and Regulatory Environment**

### ***Effect of Regulation Generally***

Hospitals, including the hospitals of the Health System, are subject to extensive regulation by federal, state and local governmental agencies and by certain nongovernmental agencies such as the Joint Commission. These 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, 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. No assurance can be given as to the effect on future operations of the Health System of existing laws, regulations and standards for certification or accreditation or of any future changes in such laws, regulations and standards.

### ***Licensing, Certification and Accreditation***

Health facilities, including those in the Health System, are subject to numerous legal, regulatory, professional and private licensing, certification and accreditation requirements. These include, but are not limited to, requirements for participation in Medicare, requirements for participation in Medicaid, state licensing agencies, private payors and the accreditation standards of the Joint Commission. Renewal and continuation of certain of these licenses, certifications and accreditations are based on inspections, surveys, audits, investigations or other reviews, some of which may require affirmative actions by the Health System.

The Health System anticipates that it will be able to renew periodically currently held licenses, certifications or accreditations when required. Nevertheless, adverse actions in any of these areas could

occur, which could result in the loss of utilization, revenue, or the ability to operate all or a portion of the Health System's facilities, and consequently, could have a material and adverse effect on the Health System.

### ***Increased Enforcement Affecting Academic Research.***

The conduct of clinical research at hospitals is subject to increasing federal regulation. The Department of Health and Human Services Office of Human Research Protection, the Food and Drug Administration (the "FDA") and National Institutes of Health have increased their enforcement efforts in relation to their oversight of federally funded research on human subjects. These agencies' enforcement powers range from substantial fines and penalties to exclusion of researchers and suspension or termination of entire research programs, and repayment for errors in billing of the Medicare Program for care provided to patients enrolled in clinical trials that is not eligible for Medicare reimbursement. To the extent the health facilities within the Health System participate in federally funded clinical trials, these enforcement activities could subject the Health System to sanctions as well as repayment obligations for adverse actions relating to the conduct of these trials, which could have a material and adverse effect on the Health System.

### ***Negative Rankings Based on Clinical Outcomes, Cost, Quality, Patient Satisfaction and Other Performance Measures.***

Health plans, Medicare, Medicaid, employers, trade groups and other purchasers of health services, private standard-setting organizations and accrediting agencies increasingly are using statistical and other measures in efforts to characterize, publicize, compare, rank and change the quality, safety and cost of health care services provided by hospitals and physicians. Published rankings (such as "score cards"), "pay for performance," "never-events" and other financial and non-financial incentive programs are being introduced to affect the reputation and revenue of hospitals and the members of their medical staffs and to influence the behavior of consumers and providers such as the Health System. Currently prevalent are measures of quality based on clinical outcomes of patient care, reduction in costs, patient satisfaction and investment in health information technology. Measures of performance set by others that characterize a hospital negatively may adversely affect its reputation and financial condition.

### ***Civil and Criminal Fraud and Abuse Laws, Regulations and Enforcement***

Federal and state healthcare fraud and abuse laws regulate both the provision of services to government program beneficiaries and the methods and requirements for submitting claims for services rendered to such beneficiaries. Under these laws, individuals and organizations can be penalized for submitting claims for services that are not provided, billed in a manner other than as actually provided, not medically necessary, provided by an improper person, accompanied by an illegal inducement to utilize or refrain from utilizing a service or product, or billed in a manner that does not otherwise comply with applicable government requirements.

Based upon the prohibited activity in which the provider has engaged, governmental agencies and officials may bring actions against providers under civil or criminal statutes prohibiting referrals for compensation or fee-splitting, the federal False Claims Act, the federal Anti-Kickback Law or the federal Stark Law. Federal and state governments have a range of criminal, civil and administrative sanctions available to penalize and remediate healthcare fraud and abuse, including exclusion of the provider from participation in the Medicare or Medicaid programs, fines, civil monetary penalties, and suspension of payments and, in the case of individuals, imprisonment. Fraud and abuse cases may be prosecuted by one or more government entities and/or private individuals, and more than one of the available penalties may be imposed for each violation. If and to the extent any Member of the Obligated Group engaged in a

prohibited activity and judicial or administrative proceedings are concluded adversely to such Member, such outcome could materially adversely affect the Health System. The ACA significantly increases funding for enforcement actions under these laws.

Under the ACA, 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. Further, the ACA authorizes the Secretary of DHHS to exclude a provider's participation in Medicare, Medicaid and CHIP as well as suspend payments to a provider pending an investigation of a credible allegation of fraud against a provider.

### ***False Claims Act***

The federal False Claims Act ("FCA") makes it illegal to submit or present a false, fictitious or fraudulent claim to the federal government, and may include claims that are simply erroneous. FCA investigations and resulting cases have become common in the healthcare field and may cover a wide range of activities from intentionally inflated billings, to highly technical billing and coding infractions, to allegations of inadequate care. Violation or alleged violation of the FCA can result in settlements that require multimillion dollar payments and compliance agreements with the federal government. The FCA also permits individuals to initiate civil actions on behalf of the government in lawsuits called "qui tam" actions. Qui tam plaintiffs, or "whistleblowers," can share in the damages recovered by the government or recover independently if the government does not participate. The FCA has become one of the government's primary weapons against healthcare fraud. FCA violations or alleged violations can lead to settlements, fines, exclusion from participation in the Medicare/Medicaid program or reputation damage that could have a material adverse impact on a hospital or other healthcare provider.

On May 20, 2009, President Obama signed the Fraud Enforcement and Recovery Act ("FERA") into law, which expands the reach of the FCA and strengthens the government's ability to combat health care and other program fraud. A health care provider now may face severe penalties for the knowing retention of government overpayments even though the provider or contractor made no false or improper claim for such payments. Under FERA, the FCA now applies even if a false claim was not submitted directly to the government. In addition, FERA enhances whistleblowers' ability to investigate alleged FCA violations and provides them enhanced protections.

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 is for items or services not provided as claimed, is false or fraudulent, is for services provided by an unlicensed or uncertified physician or by an excluded person, or represents a pattern of claims that are based on a billing code higher than the level of service provided or are 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 Program Fraud and Civil Remedies Act ("PFCRA") also creates administrative remedies for making false claims and false statements. These penalties are in addition to any liability that may be imposed under the False Claims Act.

Under the ACA, the FCA has been expanded to include overpayments that are discovered by a health care provider and are not promptly refunded to the applicable federal health care program, even if the claims relating to the overpayment were initially submitted without any knowledge that they were false. The ACA requires that providers return identified overpayments within 60 days of identification or

the overpayment becomes an "obligation" under the FCA. There is great uncertainty in the industry as to when an overpayment is technically "identified" and the ability of a provider to determine the total amount of an overpayment and satisfy its repayment obligation within the 60 day time period. CMS has proposed regulations interpreting this requirement, but those regulations do not provide significant clarification as to the "identification" of an overpayment. It is unclear whether these regulations will become final. This expansion of the FCA exposes hospitals and other health care providers to liability under the FCA for a considerably broader range of claims than in the past.

Federal legislation creates financial incentives for states to enact analogous state false claims acts. This legislation also imposes financial penalties on any state that does not require healthcare providers receiving more than \$5 million in annual Medicaid revenues to adopt policies about the elements of both federal and state false claim acts and their strategies for detecting and preventing fraud, waste and abuse.

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, may create pressures on providers that are targets of false claims actions or investigations to settle. Therefore, an action under the False Claims Act, CMP Law or PFCRA could have a material and adverse financial impact on the Health System, regardless of the merits of the case.

### ***The Anti-Kickback Law***

The Federal Medicare/Medicaid Anti-Fraud and Abuse Amendments to the Social Security Act (the "Anti-Kickback Law") make it a felony offense to knowingly and willfully offer, pay, solicit or receive remuneration in order to induce business for which reimbursement is provided under the Medicare or Medicaid programs. In addition to criminal penalties, including fines of up to \$25,000 and five years' imprisonment, violations of the Anti-Kickback Law can lead to civil monetary penalties and exclusion from Medicare, Medicaid and certain other state and federal healthcare programs. The scope of prohibited payments in the Anti-Kickback Law is broad and includes economic arrangements involving hospitals, physicians and other healthcare providers, including joint ventures, space and equipment rentals, purchases of physician practices and management and personal services contracts. DHHS has published regulations, which describe certain "safe harbor" arrangements that will not be deemed to constitute violations of the Anti-Kickback Law. The safe harbors described in the regulations are narrow and do not cover a wide range of economic relationships which many hospitals, physicians and other healthcare providers consider to be legitimate business arrangements not prohibited by the statute. Because the regulations describe safe harbors and do not purport to describe comprehensively all lawful or unlawful economic arrangements or other relationships between healthcare providers and referral sources, hospitals and other healthcare providers having these arrangements or relationships may alter them to meet the safe harbors in order to ensure compliance with the Anti-Kickback Law.

Violation or alleged violation of the Anti-Kickback Law can result in settlements that require multimillion dollar payments and compliance agreements. The Anti-Kickback Law can be prosecuted either criminally or civilly. Each violation is a felony, subject to a fine up to \$25,000 for each act (which may be each item or each bill sent to a federal program) and imprisonment up to five years or both. Conviction will also lead to automatic exclusion from Medicare, Medicaid and other federal healthcare programs. In addition, civil monetary penalties of \$5,000 per item or service in noncompliance (which may be each item or each bill sent to a federal program) or an "assessment" of three times the amount claimed on the bill may be imposed.

Management of the Health System has taken and is taking steps it believes are reasonable to ensure that its contracts with physicians and other referral sources are in material compliance with the Anti-Kickback Law. However, in light of the narrowness of the safe harbor regulations and the scarcity



of case law interpreting the Anti-Kickback Law, there can be no assurances that the Health System will not be found to have violated the Anti-Kickback Law, and if so, whether any sanction imposed would have a material adverse effect on its operations.

### ***The Ethics in Patient Referrals Act***

The federal Ethics in Patient Referrals Act (commonly known as the “Stark Law”) prohibits a “physician” (for purposes of the Stark Law this includes physicians, dentists, optometrists, podiatrists or chiropractors) or an immediate family member of that physician, who has a financial relationship with a provider of designated health services, from referring a Medicare or Medicaid patient to that provider for services pursuant to that referral, unless the financial relationship falls completely within one of several exceptions.

At this time, the “designated health services” subject to the referral prohibition include: clinical laboratory services, physical and occupational therapy services, radiology (including magnetic resonance imaging, computed tomography and ultrasound) services, radiation therapy services and supplies, durable medical equipment and supplies, parenteral and enteral nutrition equipment and supplies, prosthetics, orthotics, and prosthetic devices and supplies, home health services, outpatient prescription drugs, inpatient and outpatient hospital services and outpatient speech-language pathology services. A “financial relationship” may be defined as an ownership or investment interest in the entity or a compensation arrangement between the entity and the physician or the physician’s immediate family member. The financial relationship may be direct or indirect and may exist through equity, debt, direct compensation or other means.

There are certain exceptions to the Stark Law, based on the nature of the financial relationship between the referring physician and the entity. Unlike the Anti-Kickback Statute, the Stark Law is not an intent based statute. No wrongful intent or culpable conduct is required for violation of the Stark Law. When a financial relationship exists between an entity and a physician, the arrangement must meet the necessary elements of a Stark Law exception in order for a referral to be made for designated health services to that entity and for that entity to bill for those designated health services generated by the referral. The sanctions under the Stark law include denial and refund of payments, civil monetary penalties and exclusions from the Medicare and Medicaid programs. Also, because the Stark law is a Medicare payment rule, claims prohibited by the Stark law may also be the predicate for liability under the FCA.

In addition, when CMS published the final 2009 Inpatient Prospective Payment System (PPS) Rule, it significantly limited “under arrangement” transactions and created a prohibition on the use of “per-click” and percentage-based compensation arrangements for space and equipment leases.

Management of the Health System believes that the Health System is currently in material compliance with the Stark provisions. However, in light of the scarcity of case law interpreting the Stark provisions, there can be no assurances that the Health System will not be found to have violated the Stark provisions, and if so, whether any sanction imposed would have a material adverse effect on its operations or financial condition.

### ***Enforcement Activity***

Enforcement activity against hospitals and healthcare providers has increased and enforcement authorities have adopted aggressive approaches. Hospitals and other healthcare providers are frequently subject to audits, investigations or other enforcement actions regarding the healthcare fraud laws

mentioned above. In addition, enforcement agencies increasingly pursue sanctions for violations of healthcare fraud and abuse laws through civil administrative actions.

Federal and state enforcement authorities are often in a position to compel settlements by providers charged with or being investigated for false claims violations by withholding or threatening to withhold Medicare, Medicaid, and or similar payments and/or by instituting criminal action. In addition, the cost of defending such an action, the time and management attention consumed and the facts of the case may dictate a settlement. Therefore, regardless of the merits of a particular case, a hospital or healthcare provider could experience materially adverse settlement costs, as well as materially adverse costs associated with implementation of any settlement agreement. Prolonged and publicized investigations could be damaging to the reputation and business of a hospital or other healthcare provider, regardless of outcome.

### ***Patient Records and Patient Confidentiality***

The Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) created certain national standards to protect the confidentiality of individuals’ health information. Disclosure of certain broadly defined protected health information by “covered entities” including hospitals and other providers is prohibited when transmitting health information in connection with certain electronic transactions, unless expressly permitted under the provisions of the HIPAA statute and regulations or authorized by the patient. A covered entity 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.

HIPAA imposes civil monetary penalties for violations and criminal penalties for knowingly obtaining or using individually identifiable health information. The penalties range from \$50,000 and one year imprisonment for a person who knowingly obtains or discloses individually identifiable information in violation of HIPAA to \$250,000 and/or 10 year 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.

In 2007, the Federal Trade Commission issued regulations, known as the “Red Flags Rule.” The Red Flags Rule requires “creditors” with “covered accounts,” which potentially includes hospitals that bill patients after services are provided, to develop and administer a written identity theft prevention program to detect, prevent and mitigate identity theft. Enforcement of the Red Flags Rule began on December 31, 2010.

Provisions in HITECH, enacted as part of the economic stimulus legislation, increase the minimum and maximum civil monetary penalties for violations of HIPAA and grant enforcement authority of HIPAA to state attorneys general. The HITECH Act also (i) extends the reach of HIPAA beyond covered entities, (ii) imposes a breach notification requirement on covered entities, (iii) limits certain uses and disclosures of individually identifiable health information, (iv) restricts covered entities’ marketing communications and (v) permits imposition of civil monetary penalties for a HIPAA violation even if an entity did not know and would not, by exercising reasonable diligence, have known of a violation.

### ***Emergency Medical Treatment and Active Labor Act***

In response to concerns regarding inappropriate hospital transfers of emergency patients based on the patient's ability to pay for the services provided, in 1986 Congress enacted the Emergency Medical Treatment and Active Labor Act ("EMTALA"). EMTALA requires hospitals participating in the Medicare program to provide a medical screening examination and stabilizing treatment to all persons presenting themselves with emergency medical conditions (including women in labor). This so-called "anti-dumping" law also imposes certain requirements on hospitals prior to transferring a patient to another facility as well as obligations on the hospitals receiving transfers. Failure to comply with EMTALA can result in exclusion from the Medicare and Medicaid programs as well as a civil monetary penalty of up to \$50,000 per violation and criminal penalties, any of which could adversely affect the financial condition of the Health System. EMTALA and its implementing regulations are complex and compliance is dependent, in part, upon the actions of the medical staff of the Health System's facilities. While the Health System has established policies and procedures intended to assure compliance with EMTALA, no assurance can be given that a violation of EMTALA will not occur.

### ***Corporate Compliance Program***

The Health System has internal policies and procedures and has developed and implemented a compliance program that management of the Health System believes effectively reduces exposure for violations of these federal and State laws. However, because the government's enforcement efforts presently are widespread within the industry and may vary from region to region, there can be no assurance that the compliance program will significantly reduce or eliminate the exposure of the Health System to civil or criminal sanctions or adverse administrative determinations.

### ***Review of Outlier Payments***

CMS is reviewing health care providers that are receiving large proportions of their Medicare revenues from outlier payments. Health care providers found to have obtained inappropriately high outlier payments will be subject to further investigation by the CMS Program Integrity Unit and potentially the Office of the Inspector General. Management of the Health System does not believe that any potential review of the Health System would materially adversely affect the Health System's results of operations.

### ***State Regulatory Issues***

Health care providers, such as facilities in the Health System, are also subject to a variety of Pennsylvania laws as described below:

#### ***False Claims.***

The Commonwealth's Medicaid Fraud and Abuse Control Law (the "Medicaid Fraud Control Act") prohibits the submission of false or fraudulent claims to Pennsylvania's Medical Assistance (Medicaid) program. The Medicaid Fraud Control Act prohibits any person from, among other things: knowingly or intentionally presenting for allowance or payment any false or fraudulent claim or cost report for furnishing services or merchandise under the Medicaid program; knowingly presenting for allowance or payment any claim or cost report for medically unnecessary services or merchandise under the Medicaid program; knowingly submitting false information, for the purpose of obtaining greater compensation than that to which he or she is legally entitled for furnishing services or merchandise under the Medicaid program; or knowingly submitting false information for the purpose of obtaining or

furnishing services or merchandise under the Medicaid program. Violation of the Medicaid Fraud Control Act may lead to civil and criminal penalties, as well as exclusion from the Medicaid program.

The Pennsylvania Whistleblower Law provides protection from discrimination and retaliation to any person who witnesses or has evidence of wrongdoing or waste while employed by a public body (or any body which is funded in any amount by or through the Commonwealth) and who makes a good faith report of the wrongdoing or waste, verbally or in writing, to one of the person's superiors, to an agent of the employer or to an appropriate authority. No employer may discharge, threaten or otherwise discriminate or retaliate against an employee regarding the employee's compensation, terms, conditions, location or privileges of employment because the employee, or a person acting on behalf of the employee, makes a good faith report or is about to report, verbally or in writing, to the employer or appropriate authority an instance of wrongdoing or waste.

The potential imposition of large monetary penalties, criminal sanctions, and the significant costs of mounting a defense, create serious pressures to settle on providers who are targets of false claims actions or investigations. Therefore, an action under the Medicaid Fraud Control Act could have a material adverse financial impact on the Health System, regardless of the merits of the case.

#### *State Anti-Kickback Law.*

Pennsylvania regulations contain provisions that prohibit a provider enrolled in the Medicaid program from directly or indirectly doing any of the following acts: solicitation or receipt or offer of a kickback, payment, gift, bribe or rebate for purchasing, leasing, ordering or arranging for, or recommending purchasing, leasing, ordering or arranging for, a good, facility, service or item for which payment is made under Medicaid. This does not preclude discounts or other reductions in charges by a provider to a practitioner for services, that is, laboratory and x-ray, so long as the price is properly disclosed and appropriately reflected in the costs claimed or charges made by a practitioner.

Violation of the Commonwealth's Anti-Kickback Law may lead to civil and criminal penalties, as well as exclusion from the Medicaid program. The Health System attempts to comply with the provisions of these regulations. The mere allegation of such a violation, or if such violation were found to have occurred, or any sanctions imposed, could have a material adverse effect upon the operations and financial condition of the Health System.

#### *State Anti-Referral Law.*

Under current Pennsylvania law, physicians (and other practitioners of the healing arts) are required to disclose to patients any referral to a facility where the physician has a financial interest, and must advise the patient that he or she retains the freedom to choose among any recommended facilities. Providers participating in the Medicaid program may not refer a Medicaid recipient to an independent laboratory, pharmacy, radiology or other ancillary medical service in which the practitioner or professional corporation has an ownership interest.

#### *Breach of Personal Information Notification Act.*

The Commonwealth enacted the "Breach of Personal Information Notification Act" in 2006. The Act states that a state agency, political subdivision, individual or business that operates in the Commonwealth and maintains, stores or manages personal consumer information on a computer, must notify individuals if their security systems are breached. A private action under the Act can also result in treble damages. The Pennsylvania Attorney General may impose civil penalties of \$1,000 per violation, or \$3,000 if the injured person is 60 years of age or older.

## ***Environmental Laws and Regulations***

The Health System is subject to a wide variety of federal, state and local environmental and occupational health and safety laws and regulations. These include but are not limited to: air and water quality control requirements; waste management requirements; specific regulatory requirements applicable to asbestos and radioactive substances; requirements for providing notice to employees and members of the public about hazardous materials handled by or located at a hospital; and requirements for training employees in the proper handling and management of hazardous materials and wastes.

Hospitals may be subject to requirements related to investigating and remediating hazardous substances located on their property, including 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, biomedical, flammable and other hazardous materials, wastes, pollutants and contaminants. As such, hospital operations are susceptible to the practical, financial and legal risks associated with the environmental laws and regulations. Such risks may result in damage to individuals, property or the environment; may interrupt operations and/or increase their costs; result in liability, damages, injunctions or fines; may result in investigations, administrative proceedings, civil litigations, criminal prosecution, penalties or other governmental agency actions and may not be covered by insurance. No assurance can be given that a violation of federal, state or local environmental laws, rules, or regulations will not occur.

## ***Other Governmental Regulation***

The Health System's activities and operations are subject to regulation by federal agencies other than those that administer the Medicare and Medicaid programs. Such agencies include the FDA, the Drug Enforcement Agency, the Department of Labor, the Occupation Health and Safety Administration, the Environmental Protection Agency and the IRS.

The Health System is also subject to regulation by the Commonwealth, primarily by the Department of Health. Compliance with federal and State agencies may require substantial expenditures from time to time for administrative or other costs.

## ***Risks in Healthcare Delivery***

### ***General***

Efforts by health insurers and governmental agencies to limit the cost of hospital service and to reduce utilization of hospital facilities may reduce future revenues. Hospitals in the United States are considered to have significant excess capacity. Through various combinations of changes in governmental policy, competition, advances in technology and treatment, and changes in payment methodology to reduce incentives for inpatient hospital utilization, inpatient hospitalizations have generally decreased over the past five years. It is probable that these trends will continue, and the factors mentioned above will continue to create operational and economic uncertainty for hospitals. It is now generally acknowledged that hospital operations pose greater complexity and higher risk than in years past, and this trend may also continue. It is not practical to enumerate each and every operating risk which may result from the operations of the Health System, and certain risks or combinations of risks which are now unanticipated may have material adverse results in the future. Certain risks relating to the operations of the Health System are enumerated below.

## ***Competition***

Increased competition from a wide variety of potential sources, including, but not limited to, other hospitals, inpatient and outpatient healthcare facilities, clinics, physicians and others, may adversely and increasingly affect the utilization and/or revenues of the Health System. Existing and potential competitors may not be subject to various regulations and restrictions applicable to the Health System, and may be more flexible in their ability to adapt to competitive opportunities and risks. Certain new competitors, such as home health and infusion providers, and certain niche providers, such as specialized cardiology or oncology companies, specifically target hospital patients as their prime source of revenue growth. Some of these companies have aggressive business and marketing plans, and some are well capitalized. Regardless of any moratorium that may be imposed from time to time on such types of competition, if these competitors are successful, some of the most profitable aspects of the inpatient services of the Health System may be stripped away, and/or overall hospital utilization of the Health System may decline further. Competition may, in the future, arise from new sources not currently anticipated or prevalent.

## ***Antitrust***

Antitrust liability may arise in a variety of circumstances, including medical staff privilege disputes, payor contracting, joint ventures, merger, affiliation and acquisition activities, certain pricing or salary setting activities and anticompetitive business conduct or practices. The application of federal and state antitrust laws to health care entities is evolving, thus the legal guidance is not always lucid. Currently, the most common areas for potential liability for hospitals and other healthcare providers are joint action among providers with respect to payor contracting, medical staff credentialing disputes and anticompetitive business conduct or practices by hospitals or other healthcare providers with sufficiently large market share.

Violation of the antitrust laws could result in criminal and/or civil enforcement proceedings by federal and state agencies, as well as actions by private litigants. In certain actions, private litigants may be entitled to treble damages and in others, governmental entities may be able to assess substantial monetary fines. Moreover, successful private or governmental litigants may obtain injunctive relief that can affect the defendant's ability to conduct or continue certain business practices or activities.

## ***Service Area***

The financial performance of the Health System is, to some extent, dependent upon the economic vitality of its service area. If there were a general economic downturn in the Health System's extended service area, i.e., the greater Philadelphia metropolitan region, it could result in a decrease in the population served by the Health System or a loss of insurance benefits for a portion of the Health System's patients, either or both of which could lead to a decrease in revenues of the Health System.

## ***Labor Relations and Collective Bargaining***

Hospitals are large employers with a wide variety of employees. Increasingly, employees of hospitals are becoming unionized and many hospitals have collective bargaining agreements with one or more labor organizations. Employees subject to collective bargaining agreements may include essential nursing and technical personnel as well as food services, maintenance and other trade personnel. Renegotiation of such agreements upon expiration may result in significant cost increases to hospitals. Employee strikes or other unfavorable labor actions may have an adverse impact on operations, revenue and hospital reputation.

Certain employees of the Members of the Obligated Group currently are covered by collective bargaining agreements. See APPENDIX A: “ADDITIONAL HEALTH SYSTEM INFORMATION - Employees.”

### ***Staffing Shortages***

In recent years, the healthcare industry has suffered from a scarcity of nursing and other qualified healthcare technicians and personnel. This trend could force the Health System to pay higher salaries to nursing and other qualified healthcare technicians and personnel as competition for such employees intensifies and, in an extreme situation, could lead to difficulty in keeping the facilities licensed to provide nursing care and thus eligible for reimbursement under Medicare and Medicaid.

In addition to overall staffing shortages, there have been efforts in many states across the country, including Pennsylvania, to introduce legislation limiting a hospital’s ability to require nurses to work overtime and to mandate minimum nurse-patient staff ratios. In December 2008, the Commonwealth enacted legislation, effective July 1, 2009, prohibiting discipline or discrimination against a nurse for refusing to work beyond an agreed to, scheduled work shift, except in narrowly-defined unforeseeable circumstances. These and other similar future laws may exacerbate the nurse staffing shortage.

### ***Physician Relations***

The primary relationship between a hospital and physicians who practice in it is through the hospital’s organized medical staff. Medical staff bylaws, rules and policies establish the criteria and procedures by which a physician may have his or her privileges or membership curtailed, denied or revoked. Physicians who are denied medical staff membership or certain clinical privileges, or who have such membership or privileges curtailed, denied or revoked often file legal actions against hospitals. Such actions may include a wide variety of claims, some of which could result in substantial uninsured damages to a hospital. In addition, failure of the hospital governing body to oversee adequately the conduct of its medical staff may result in hospital liability to third parties. All hospitals, including those owned and operated by the Health System, are subject to such risks.

### ***Physician Contracting***

The Health System may contract with physician organizations (such as independent physician associations, and physician-hospital organizations) to arrange for the provision of physician and ancillary services. Because physician organizations are separate legal entities with their own goals, obligations to shareholders, financial status, and personnel, there are risks involved in contracting with the physician organizations.

The success of the Health System will be partially dependent upon its ability to attract physicians to join the physician organizations and to attract physician organizations to participate in their networks, and upon the ability of the physicians, including employed physicians, to perform their obligations and deliver high quality patient care in a cost-effective manner. There can be no assurance that the Health System will be able to attract and retain the requisite number of physicians, or that such physicians will deliver high quality healthcare services. Without impaneling a sufficient number and type of providers, the Health System could fail to be competitive, could fail to keep or attract payor contracts, or could be prohibited from operating until its panel provided adequate access to patients. Such occurrences could have a material adverse effect on the business or operations of the Health System.

## ***Technology and Services***

Scientific and technological advances, new procedures, drugs and appliances, preventive medicine, occupational health and safety and outpatient healthcare delivery may reduce utilization and revenues of the Health System in the future. Technological advances in recent years have accelerated the trend toward the use by hospitals of sophisticated, and costly, equipment and services for diagnosis and treatment. The acquisition and operation of certain equipment or services may continue to be a significant factor in hospital utilization, but the ability of the Health System to offer such equipment or services may be subject to the availability of equipment or specialists, governmental approval, the ability to finance such acquisitions or operations, or reimbursement at levels sufficient to support the cost of such equipment or services.

## ***Malpractice Claims and Liability Insurance***

Malpractice and other actions alleging wrongful conduct are often filed against hospitals. Potential liabilities associated with these claims can be significant. The Health System carries primary coverage for professional liability claims through a wholly owned captive insurance subsidiary of the University, through the state-administered M-Care program and through self-insurance. While the Health System believes its insurance program is adequate, it is possible that the cost of coverage, including other programs of insurance, in the future could significantly increase or that the amount payable in respect of liability claims could impose material increased expense to the Health System. Increases in the cost or limitations on the availability of malpractice insurance to other healthcare professionals could also result in a shortage of medical professionals and has the potential of disrupting the delivery of healthcare.

For a discussion of the professional liability insurance coverage of the Health System, see APPENDIX A: “BUSINESS OF THE HEALTH SYSTEM – Malpractice Insurance.”

## ***Affiliation, Merger, Acquisition and Divestiture***

Significant numbers of affiliations, mergers, acquisitions and divestitures have occurred in the healthcare industry in recent years. As part of its ongoing planning process, the Health System has considered and will continue to consider the potential acquisition of operations or property that may become affiliated with or become part of the Health System in the future, as well as the potential disposition of certain existing operations or properties of the Health System. As a result, it is possible that the organizations and assets which make up the Obligated Group may change from time to time, subject to the provisions in the Master Indenture and other financing documents that apply to merger, sale, disposition or purchase of assets, or with respect to joining or withdrawing from the Obligated Group.

## **Tax Matters**

### ***Tax-Exempt Status of Interest on the 2015 Bonds***

The tax-exempt status of the 2015 Bonds is based on the continued compliance by the Authority and the Members of the Obligated Group with certain covenants relating generally to restrictions on use of the facilities of the Members of the Obligated Group, maintenance of Section 501(c)(3) status under the Code by the Members of the Obligated Group, arbitrage limitations, rebate of certain excess investment earnings to the federal government, and restrictions on the amount of issuance costs financed with the proceeds of the 2015 Bonds. Failure to comply with such covenants could cause interest on the 2015 Bonds to become subject to federal income taxation retroactive to the date of issue of the 2015 Bonds.



Proposals to limit or eliminate the exclusion of interest on tax-exempt bonds from gross income for some or all taxpayers have been made in the past by the Administration and in Congress, and may be made again in the future. The prospects for any such legislation now or in the future are uncertain. The impact of such legislation, if enacted, on the 2015 Bonds and the financial condition of the Obligated Group cannot be predicted.

### ***Bond Examinations***

The IRS has an ongoing program of examining tax-exempt obligations to determine whether, in the view of the IRS, interest on such obligations is properly excluded from gross income for federal income tax purposes, and it is possible that the 2015 Bonds may be selected for examination under such program. If an examination is commenced, under current procedures, the IRS will treat the Authority as the relevant taxpayer under the Code, and the holders of the 2015 Bonds may have no right to participate. The commencement of an audit could adversely affect the market value and liquidity of the 2015 Bonds regardless of the ultimate outcome.

### ***Tax-Exempt Status of the Members of the Obligated Group***

The tax-exempt status of the 2015 Bonds presently depends upon the maintenance by each Member of the Obligated Group that receives or uses the proceeds of the 2015 Bonds or owns facilities financed with the 2015 Bonds of its status as an organization described in Section 501(c)(3) of the Code. The maintenance of such status is contingent on 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 which may cause their earnings or assets to inure to the benefit of private individuals. As these general principles were developed primarily for public charities, which do not conduct large-scale technical operations and business activities, they often do not adequately address the myriad of operations and transactions entered into by modern healthcare organizations.

The most significant adverse consequence to a tax-exempt entity for inurement or unlawful private benefit available to the IRS under the Code would be revocation of tax-exempt status. Although the IRS has seldom revoked the 501(c)(3) tax-exempt status of any organization, it could do so in the future. The loss of tax-exempt status by even one Member of the Obligated Group could adversely affect the tax exemption of the 2015 Bonds and of other tax-exempt debt of the Health System retroactively to the date of issuance of the 2015 Bonds or of such other debt, and defaults in covenants regarding the 2015 Bonds and other related tax-exempt debt would likely result. Loss of tax-exempt status could also result in substantial tax liabilities on income of affected Members of the Obligated Group. For these reasons, loss of tax-exempt status of any Member of the Obligated Group could have a material adverse effect on the financial condition of the Health System, taken as a whole.

With increasing frequency, the IRS has imposed substantial monetary penalties and future charity care or public benefit obligations on tax-exempt organizations that own and operate hospitals in lieu of revoking tax-exempt status, as well as requiring that certain transactions be altered, terminated or avoided in the future and/or requiring governance or management changes. These penalties and obligations typically are imposed on the tax-exempt organization pursuant to a closing agreement.

The IRS conducts comprehensive examinations of nonprofit organizations through its Coordinated Examination Program (“CEP”). These examinations generally cover a wide range of possible issues, including the community benefit basis of exemption, private inurement and private benefit, partnerships and joint ventures, retirement plans and employee benefits, employment taxes, tax-

exempt bond financing, political contributions and unrelated business taxable income. The Health System may be the subject of a CEP audit in the future.

In recent years, the IRS has issued a number of formal and informal statements or interpretations, which have increased uncertainty as to the position of the IRS on a wide variety of activities commonly undertaken by healthcare organizations, including the arrangements of such organizations with physicians and physician groups. As a result, tax-exempt hospitals and other providers are currently subject to an increased degree of scrutiny and possibly enforcement by the IRS with respect to such activities.

Legislation enacted by Congress in 1996 provides the IRS with an “intermediate” sanctions system of federal excise taxes to combat violations by tax-exempt organizations of the private inurement prohibition of the Code. Prior to the enactment of this law, the IRS could punish such violations only through revocation of an entity’s tax-exempt status. Intermediate sanctions may be imposed where there is an “excess benefit transaction” defined to include a disqualified person (i.e., an insider) (i) engaging in a non-fair market value transaction with the tax-exempt organization; (ii) receiving unreasonable compensation from the tax-exempt organization; or (iii) receiving payment in an arrangement that violates the private inurement proscription. Penalty excise taxes may be imposed in an amount up to 200% of the amount of the excess benefit and may be imposed by the IRS either in lieu of or in addition to revocation of exemption. The legislation is potentially favorable to tax-exempt entities since it provides the IRS with a punitive option short of revocation of tax-exempt status to deal with incidents of private inurement. However, the standards for tax exemption have not been changed and the IRS still has the authority for revoking tax-exempt status in appropriate circumstances.

The ACA also contains new requirements for tax-exempt hospitals. Under the ACA, each tax-exempt hospital facility is required to (i) conduct a community health needs assessment at least every three years and adopt an implementation strategy to meet the identified community needs, (ii) adopt, implement and widely publicize a written financial assistance policy and a policy to provide emergency medical treatment without discrimination, (iii) limit charges to individuals who qualify for financial assistance under such tax-exempt hospital’s financial assistance policy to no more than the amounts generally billed to individuals who have insurance covering such care and refrain from using “gross charges” when billing such individuals, and (iv) refrain from taking extraordinary collection actions without first making reasonable efforts to determine whether the individual is eligible for assistance under such tax-exempt hospital’s financial assistance policy. In addition, the Treasury Department is required to review information about each tax-exempt hospital’s community benefit activities at least once every three years, as well as to submit an annual report to Congress with information regarding the levels of charity care, bad debt expenses, unreimbursed costs of government programs, and costs incurred by tax-exempt hospitals for community benefit activities. The IRS issued final regulations under Section 501(r) of the Code on December 29, 2014, clarifying these new requirements and outlining reporting obligations and the consequences of failure to comply. The final regulations will become effective for taxable years beginning after December 29, 2015 (i.e., for the 2016 taxable year). The periodic reviews and reports to Congress regarding the community benefits provided by 501(c)(3) hospitals may increase the likelihood that Congress will require such hospitals to provide a minimum level of charity care in order to retain tax-exempt status and may increase IRS scrutiny of particular 501(c)(3) hospital organizations.

### ***Unrelated Business Income***

The IRS sometimes undertakes audits and reviews of the operations of tax-exempt hospitals with respect to their exempt activities and the generation of unrelated business taxable income (“UBTI”). The Members of the Obligated Group participate in activities which generate UBTI. Management believes it has properly accounted for and reported UBTI; nevertheless, an investigation or audit could lead to a challenge which could result in taxes, interest and penalties with respect to unreported UBTI and in some

cases could ultimately affect the tax-exempt status of one or more Members of the Obligated Group as well as the exclusion from gross income for federal income tax purposes of the interest payable on the 2015 Bonds and other tax-exempt debt of the Health System

### ***Internal Revenue Service Examination of Tax-Exempt Hospitals***

Hospitals, including those in the Health System, must satisfy the community benefit standard in order to qualify as tax-exempt charities under Section 501(c)(3) of the Code. In 2006, the IRS initiated the Hospital Compliance Project (the “Project”) in an effort to study nonprofit hospitals and community benefit, and to determine how hospitals establish and report executive compensation. To gather data concerning community benefit and charity care, the IRS submitted questionnaires to 487 hospitals. The questionnaires focused on hospital operations, services and the community benefit extended by each surveyed hospital. The IRS issued a report in February 2009 summarizing a study of nonprofit hospitals that evaluated uncompensated care as a factor in whether a hospital is providing a community benefit, a requirement to remain tax-exempt. The IRS continues to consider revising the community benefit standard. As a result, hospitals within the Health System may be required to provide services for which they receive reimbursement below cost, or for which they may receive no reimbursement, from the patient or third party payors.

### ***State Income Tax Exemption and Local Property Tax Exemption***

It is likely that the loss by a Member of the Obligated Group of federal tax exemption would also result in a challenge to the state tax exemption of such Member. Such an event would likely impose significant additional costs on the Health System.

In recent years, state, county, and local taxing authorities have been undertaking audits and reviews of the operations of tax-exempt healthcare providers with respect to their real property tax exemptions. In some cases, particularly where such authorities are dissatisfied with the amount of services provided as charity care to indigents, the real property tax-exempt status of the healthcare providers has been challenged. The majority of the real property of the Health System is exempt from real property taxation. Such challenges could have a material adverse effect on the financial condition of the Health System, taken as a whole.

In addition, state and local taxing authorities with jurisdiction over the Health System could enact tax laws or promulgate regulations under existing tax laws that would further limit or repeal the exemptions from state and local tax currently enjoyed by the Members of the Obligated Group. For example, in 2009, the City of Philadelphia proposed revisions to regulations under the City's Business Privilege Tax, a tax on gross receipts and net profits of businesses in Philadelphia, which could have significantly increased the scope of taxable activities of nonprofit organizations doing business in Philadelphia, including the Health System and the University. Those regulations have not been finalized, and since 2009 their proposed form has been revised such that, if adopted in their current form, management of the Health System does not believe their impact would be material to the financial performance of the Health System. However, there can be no assurance that such regulations will not be adopted in a form, or other state and local taxing initiatives approved, that could have a material impact on the financial performance of the Health System.

### ***Nonprofit Healthcare Environment***

The Members of the Obligated Group are nonprofit corporations, exempt from federal income taxation as organizations described in Section 501(c)(3) of the Code. As nonprofit tax-exempt organizations, such entities are subject to federal, state and local laws, regulations, rulings and court

decisions relating to their organization and operation, including their operation for religious and charitable purposes. At the same time, the Members of the Obligated Group conduct large-scale complex business transactions and are often the major employers in their geographic areas. There can often be a tension between the rules designed to regulate a wide range of charitable organizations and the day-to-day operations of a complex, multi-state healthcare organization.

Recently, an increasing number of the operations or practices of healthcare providers have been challenged or questioned to determine if they are consistent with the regulatory requirements for nonprofit tax-exempt organizations. These challenges are broader than concerns about compliance with federal and state statutes and regulations, such as Medicare and Medicaid compliance, and instead in many cases are examinations of core business practices of the healthcare organizations. Areas that have come under examination have included pricing practices, billing and collection practices, charitable care, executive compensation, exemption of property from real property taxation, and others. These challenges and questions have come from a variety of sources, including state attorneys general, the IRS, labor unions, Congress, state legislatures, and patients, and in a variety of forums. These examples are indicative of a greater scrutiny of the billing, collection and other business practices of these organizations, and may indicate an increasingly more difficult operating environment for healthcare organizations, including the Health System. The challenges and examinations, and any resulting legislation, regulations, judgments, or penalties, could have a material adverse effect on the Health System.

### **Certain Matters Relating to Enforceability of Obligations**

No facilities of the Health System are pledged as security for any 2015 Bonds. In addition, with certain minor exceptions, the facilities of the Health System are not general purpose facilities and are not likely to be suitable for industrial or commercial use. Consequently, it would be difficult to find a buyer or lessee for such facilities and, in the event of the institution of bankruptcy proceedings, the estate in bankruptcy may not realize an amount sufficient to pay the outstanding 2015 Bonds from the disposition of such facilities.

The practical realization of value upon any default will depend upon the exercise of various remedies specified in the Bond Indenture, the Loan Agreement and the Master Indenture. These and other remedies may, in many respects, require judicial actions which are often subject to discretion and delay. The various legal opinions to be delivered concurrently with the delivery of the 2015 Bonds will contain customary qualifications as to the enforceability of the various legal instruments by limitations imposed by state and federal laws, rulings and decisions affecting remedies and by bankruptcy, reorganization, fraudulent conveyance, or other laws affecting the enforcement of creditors' rights generally.

The effectiveness of the pledge of Gross Receipts of the Health System is limited since a security interest in money generally cannot be perfected by the filing of financing statements under the Pennsylvania Uniform Commercial Code ("UCC"). Rather, such a security interest is perfected by taking possession of the subject funds. The monies constituting Gross Receipts received by the Health System from time to time are not required to be transferred to or held by the Master Trustee or the Bond Trustee, and may be spent by the Members of the Obligated Group or commingled with other funds. Under the circumstances, the pledge of Gross Receipts might not be perfected under the UCC.

The provisions of the Master Indenture pursuant to which each Member of the Obligated Group guarantees the payment of any and all amounts due under the 2012 Master Note of all Health System, including the 2012 Master Note, may not be enforceable as to payments from any Member other than the actual issuer of a Master Note which: (a) are required with respect to any Master Note which was issued for a purpose which is not consistent with the charitable purpose of the Member of the Obligated Group

from which such payments are required or which is issued for the benefit of any entity other than a not-for-profit corporation which is exempt from federal income taxes under Sections 501(a) and 501(c)(3) of the Code and is not a “private foundation” as defined in Section 509(a) of the Code; (b) are required to be made from any moneys or assets of the Health System from which such payments are required which are donor restricted or which are subject to a direct or express trust which does not permit the use of such moneys or assets for such payments; (c) would result in a cessation or discontinuance of any material portion of the healthcare or related services previously provided by the Member of the Obligated Group from which such payments are required; or (d) are required to be made pursuant to any loan violating applicable usury laws.

There is no clear precedent in the law as to whether payments on a Master Note by any Member of the Obligated Group may be voided by a trustee in bankruptcy in the event of a bankruptcy of such Member or by third party creditors in an action brought pursuant to state fraudulent conveyances statutes. Under the United States Bankruptcy Code, a trustee in bankruptcy, and under state fraudulent conveyances statutes a creditor of a guarantor, may avoid any obligation incurred by a guarantor if, among other bases therefor, (a) the guarantor has not received fair consideration or reasonably equivalent value in exchange for the guaranty, and (b) the guarantor was insolvent at the time the obligation was incurred or the incurrence of the obligation renders the guarantor insolvent. Application by courts of the tests of “insolvency,” “reasonably equivalent value” and “fair consideration” has resulted in a conflicting body of case law. It is possible that, in an action to force any Member of the Obligated Group to make a payment on a Master Note, including the 2012 Master Note, issued other than by such Member, a court might not enforce such a payment in the event it is determined that sufficient consideration for the guaranty of such Member was not received or that the incurrence of such guaranty has rendered or will render the Member of the Obligated Group insolvent or the Member of the Obligated Group is or will thereby become under-capitalized.

There exists statutory authority in Pennsylvania for a court to dissolve a nonprofit corporation or undertake supervision of its affairs on various grounds, including a finding that such corporation is insolvent. Moreover, pursuant to the common law and statutory power to enforce charitable trusts and to see that charitable funds are applied to their intended uses, the Attorney General of the Commonwealth (in which each Member of the Obligated Group is incorporated) may commence legal proceedings to dissolve a non-profit corporation acting contrary to its charitable purposes or to restrain actions inconsistent with the charitable use of such funds or which render such non-profit corporation unable to discharge its charitable functions. Such actions may arise on a court’s own motion or pursuant to a petition of the Attorney General or such other persons who have interests different than those of the general public. The obligations of each Member of the Obligated Group may be limited by such charitable trust laws.

## **Bankruptcy**

The rights and remedies of owners of the 2015 Bonds are subject to various provisions of the United States Bankruptcy Code (the “Bankruptcy Code”). A filing under the Bankruptcy Code by a Member of the Obligated Group would operate as an automatic stay of the commencement or continuation of any judicial or other proceeding against such Member, and its property, and as an automatic stay of any act or proceeding to enforce a lien upon its property.

A Member of the Obligated Group may file a plan for the adjustment of its debts in any such proceeding, 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, binds all creditors who had notice or knowledge of the plan and discharges all claims against the debtor provided for in the plan. No plan may be confirmed unless certain conditions are met, among which are 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 has 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.

### **Secondary Market**

There can be no assurance that there will be a secondary market for the purchase or sale of the 2015 Bonds. From time to time, there may be no market for the 2015 Bonds depending upon prevailing market conditions, including the financial condition or market position of firms who may make the secondary market, the evaluation of the Health System's capabilities and the financial condition and results of operations of the Health System.

### **Bond Ratings**

There is no assurance that the ratings assigned to the 2015 Bonds at the time of issuance will not be lowered or withdrawn at any time, the effect of which could adversely affect the market price for, and marketability of, the 2015 Bonds.

### **Other Factors**

Additional factors may affect future operations of the Health System. The extent of such factors' influence cannot be determined at this time. Such factors include the following:

- (i) Adverse labor actions resulting in a reduction in revenues without corresponding decreases in cost.
- (ii) Reduced demand for healthcare or other services arising from future medical and scientific advances.
- (iii) 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, improved occupational health and safety, and outpatient care.
- (iv) Occurrence of natural or man-made disasters, which may damage the facilities of the Health System or interrupt utility service to the facilities or otherwise impair the operation of the Health System and the generation of revenues from the facilities.
- (v) Increased unemployment or other adverse economic conditions in the Health System's service area that 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 Health System's service area or the Commonwealth or by the closing of operations of one or more major employers in such service area may result in a loss of health insurance benefits for a portion of the Health System's patients.
- (vi) Cost and availability of energy.

## **TAX MATTERS**

### **Federal Tax Exemption**

#### ***General***

Concurrently with the issuance of the 2015 Bonds, Co-Bond Counsel will deliver their opinions to the effect that, under existing law as enacted and construed on the date of initial delivery of such Bonds, interest on the 2015 Bonds is excludable from gross income for purposes of federal income tax, assuming the accuracy of the certifications of the Authority and the Borrowers and continuing compliance by the Authority and the Borrowers with the requirements of the Internal Revenue Code of 1986, as amended (the “Code”). Interest on the 2015 Bonds is not a tax preference for purposes of either individual or corporate federal alternative minimum tax; however, interest on the 2015 Bonds held by a corporation (other than an S corporation, regulated investment company, or real estate investment trust) may be indirectly subject to federal alternative minimum tax because of its inclusion in the adjusted current earnings of a corporate holder. Co-Bond Counsel will not express any opinion regarding other federal tax consequences relating to ownership or disposition of, or the accrual or receipt of interest on, the 2015 Bonds.

The Code establishes requirements that must be complied with subsequent to the issuance of the 2015 Bonds for interest thereon to be and remain excluded from gross income pursuant to Section 103 of the Code. Failure to comply with these requirements could cause the interest on the 2015 Bonds to be included in gross income, retroactive to the date of issue of the 2015 Bonds or at some later date. The requirements include, but are not limited to, the provisions of Section 148 of the Code which prescribes yield and other limits within which the proceeds of the 2015 Bonds are to be invested and may require that certain investment earnings on the foregoing be rebated on a periodic basis to the United States. The Borrowers and the Authority have covenanted to comply with the provisions of the Code.

#### ***Original Issue Discount***

The initial public offering price of certain 2015 Bonds indicated on the inside front cover page hereof may be less than the principal amount thereof (the “Discount Bonds”). The difference between the stated principal amount of any Discount Bond and the public offering price thereof is “original issue discount.” For federal income tax purposes, original issue discount on a Discount Bond accrues periodically over the term of such Discount Bond as interest with the same tax exemption and alternative minimum tax status as regular interest. The accrual of original issue discount increases the holder's tax basis in such Discount Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Holders should consult their tax advisors for an explanation of the accrual rules.

#### ***Original Issue Premium***

The initial public offering price of certain 2015 Bonds indicated on the inside front cover page hereof may be greater than the principal amount thereof (the “Premium Bonds”). The difference between the stated principal amount of any Premium Bond and the public offering price thereof is “original issue premium.” For federal income tax purposes, original issue premium is amortizable periodically over the term of a Premium Bond through reductions in the holder's tax basis for such Premium Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Amortization of premium does not create a deductible expense or loss. Holders should consult their tax advisors for an explanation of the amortization rules.

### ***Information Reporting and Backup Withholding***

A person making payments of tax-exempt interest to a bondholder is generally required to make an information report of the payments to the Internal Revenue Service and to perform “backup withholding” from the interest if the bondholder does not provide an IRS Form W-9 to the payor. “Backup withholding” means that the payor withholds tax from the interest payments at the backup withholding rate, currently 28%. Form W-9 states the bondholder’s taxpayer identification number or basis of exemption from backup withholding.

If a holder purchasing a 2015 Bond through a brokerage account has executed a Form W-9 in connection with the account, as generally can be expected, there should be no backup withholding from the interest on the 2015 Bond.

If backup withholding occurs, it does not affect the excludability of the interest on the 2015 Bonds from gross income for Federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the owner’s Federal income tax once the required information is furnished to the Internal Revenue Service.

### **Pennsylvania Tax Exemption**

Co-Bond Counsel will also deliver their opinions to the effect that, under existing law as enacted and construed on the date of initial delivery of the 2015 Bonds, the 2015 Bonds are exempt from personal property taxes in Pennsylvania, and interest on the 2015 Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax.

### **Changes in Federal and State Tax Law**

From time to time, there are legislative proposals in the Congress and in the states that, if enacted, could alter or amend the federal and state tax matters referred to herein or adversely affect the market value of the 2015 Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether if enacted it would apply to bonds issued prior to enactment. In addition, regulatory actions are from time to time announced or proposed and litigation is threatened or commenced which, if implemented or concluded in a particular manner, could adversely affect the market value of the 2015 Bonds. It cannot be predicted whether any such regulatory action will be implemented, how any particular litigation or judicial action will be resolved, or whether the 2015 Bonds or the market value thereof would be impacted thereby. Purchasers of the 2015 Bonds should consult their tax advisors regarding any pending or proposed legislation, regulatory initiatives or litigation.

### **BOND TRUSTEE AND MASTER TRUSTEE**

The obligations of the Bond Trustee and the Master Trustee (the “Trustees”) are described in the Bond Indenture and the Master Indenture, respectively. The Bond Trustee and the Master Trustee have undertaken only those obligations and duties which are expressly set out in the Bond Indenture and the Master Indenture, respectively. The Trustees have not independently passed upon the validity of the 2015 Bonds or the 2015 Master Note, any security for the payment thereof, the adequacy of the provisions for such payment, or the status for federal or state income tax purposes of the interest on the 2015 Bonds. The Bond Indenture and the Master Indenture expressly provide that the respective Trustees will not be responsible for any loss or damage resulting from any action or inaction taken (i) in good faith in reliance upon an opinion of counsel or (ii) absent the Bond Trustee’s or Master Trustee’s negligence or gross misconduct.



## **LEGAL MATTERS**

Legal matters incident to the authorization, issuance, and sale of the 2015 Bonds will be passed upon by Ballard Spahr LLP, Turner Law, P.C., Obermayer Rebmann Maxwell & Hippel LLP and Ahmad Zaffarese LLC, each of Philadelphia, Pennsylvania, Co-Bond Counsel. The proposed form of opinion of Co-Bond Counsel with respect to the 2015 Bonds is included in APPENDIX F hereto. Certain legal matters will be passed upon for the Authority by its counsel, Hartman Underhill & Brubaker, LLC, Lancaster, Pennsylvania; for the University by Wendy S. White, Esquire, Senior Vice President and General Counsel of the University; and for the Underwriters by their counsel, Drinker Biddle & Reath LLP, Philadelphia, Pennsylvania.

Ballard Spahr LLP, which is acting as Co-Bond Counsel in connection with the 2015 Bonds, and Drinker Biddle & Reath LLP, which is acting as counsel to the Underwriters in connection with the 2015 Bonds, each periodically provide general legal services to the University and the Health System.

## **INDEPENDENT ACCOUNTANTS**

The combined financial statements of the Health System as of June 30, 2014 and June 30, 2013 and for the fiscal years then ended included in APPENDIX B to this Official Statement have been audited by PricewaterhouseCoopers LLP, independent accountants, as stated in their report appearing in APPENDIX B.

## **RATINGS**

Moody's Investors Service ("Moody's") and Standard & Poor's Ratings Services (a division of the McGraw-Hill Companies, Inc.) ("S&P") have assigned their respective long-term municipal bond ratings of "Aa3" and "AA-," with stable outlooks, to the 2015 Bonds.

Any explanation of the significance of any ratings may only be obtained from the rating agency furnishing the same.

Generally, rating agencies base their ratings on this information and materials and on investigations, studies and assumptions made by the rating agencies themselves. There is no assurance that the ratings initially assigned to any of the 2015 Bonds will be maintained for any given period or time or that such ratings may not be revised downward or withdrawn entirely by a rating agency if, in its judgement, circumstances so warrant. The Underwriters have not undertaken any responsibility to bring to the attention of the holders of the 2015 Bonds any proposed revision or withdrawal of the rating of the 2015 Bonds or to oppose any such proposed revision or withdrawal. Any downward change in or the withdrawal of any such rating might have an adverse effect on the market price or marketability of the 2015 Bonds to which it applies.

## **UNDERWRITING**

Pursuant to the provisions of a bond purchase contract among the Authority, the Members of the Obligated Group and Merrill Lynch, Pierce, Fenner & Smith, Incorporated, acting as a representative on behalf of itself and the other underwriters listed on the cover page of this Official Statement (collectively, the "Underwriters"), the Underwriters have agreed, subject to certain conditions, to purchase the 2015 Bonds from the Authority at an aggregate discount of \$1,726,773.02 from the initial public offering price

set forth on the inside front cover page hereof. The Underwriters will be obligated to purchase all of the 2015 Bonds if any are purchased. The public offering prices may be changed, from time to time, by the Underwriters. The 2015 Bonds may be offered and sold to certain dealers (including the Underwriters and other dealers depositing the 2015 Bonds into investment trusts) at prices lower than such public offering prices.

The purchase contract for the 2015 Bonds requires the Members of the Obligated Group to indemnify the Authority and the Underwriters against certain liabilities relating to this Official Statement.

The Underwriters may offer and sell the 2015 Bonds to certain dealers and others at a price lower than the initial offering price. The offering price of 2015 Bonds may be changed from time to time by the Underwriters.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Under certain circumstances, the Underwriters and their affiliates may have certain creditor and/or other rights against the Authority, any of the Members of the Obligated Group and their affiliates in connection with such activities.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the Members of the Obligated Group (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Members of the Obligated Group. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Morgan Stanley, parent company of Morgan Stanley & Co. LLC, an underwriter of the 2015 Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the 2015 Bonds.

J.P. Morgan Securities LLC ("JPMS"), one of the Underwriters of the 2015 Bonds, has entered into negotiated dealer agreements (each a "JPM Dealer Agreement") with each of Charles Schwab & Co., Inc. ("CS&Co.") and LPL Financial LLC ("LPL") for the retail distribution of certain securities offerings, including the 2015 Bonds, at the original issue prices. Pursuant to each JPM Dealer Agreement (if applicable to this transaction) each of CS&Co. and LPL will purchase 2015 Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any 2015 Bonds that such firm sells.

Loop Capital Markets LLC ("LCM"), one of the Underwriters of the 2015 Bonds, has entered into distribution agreements (each a "Distribution Agreement") with each of UBS Financial Services Inc. ("UBSFS"), Deutsche Bank Securities Inc. ("DBS") and Credit Suisse Securities USA LLC ("CS") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each

Distribution Agreement, each of UBSFS, DBS and CS will purchase the 2015 Bonds from LCM at the original issue prices less a negotiated portion of the selling concession applicable to any 2015 Bonds that such firm sells.

## **LEGALITY OF THE 2015 BONDS FOR INVESTMENT AND DEPOSIT**

Under the Act, bonds of the Authority (including the 2015 Bonds) are made securities in which all officers of the Commonwealth and its political subdivisions and municipal officers and administrative departments, boards and commissions of the Commonwealth, all banks, bankers, savings banks, trust companies, savings and loan associations, investment companies, and other persons carrying on a banking business, all insurance companies, insurance associations, and other persons carrying on an insurance business, and all administrators, executors, guardians, trustees and other fiduciaries, and all other persons whatsoever who are authorized to invest in bonds or other obligations of the Commonwealth, may properly and legally invest any funds, including capital belonging to them or within their control, and the bonds of the Authority (including the 2015 Bonds) are made securities which may properly and legally be deposited with, and received by, any State or municipal officers or agency of the Commonwealth for any purpose for which the deposit of bonds or other obligations of the Commonwealth is authorized by law.

## **NEGOTIABILITY**

Under the Act, the 2015 Bonds have all the qualities of negotiable instruments under the law merchant and the laws of the Commonwealth relating to negotiable instruments.

## **LITIGATION**

### **The Authority**

There is no litigation of any nature pending or, to the Authority's knowledge, threatened against the Authority at the date of this Official Statement to restrain or enjoin the issuance, sale, execution or delivery of the 2015 Bonds, or in any way contesting or affecting the validity of the 2015 Bonds or any proceedings of the Authority taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or the security provided for the payment of the 2015 Bonds or the existence or powers of the Authority.

### **The Health System**

There are various legal actions pending against the Health System and/or individual Members of the Obligated Group, which have arisen in the ordinary course of the business of the Health System, including medical malpractice claims that may or may not be covered by insurance or self-insurance because of the type of action or damages sought (such as punitive damages), because of a reservation of rights by an insurance carrier or self-insurance program or because the action has not proceeded to a stage that permits an accurate assessment of available coverage. Nonetheless, in the opinion of management of the Health System, there is no litigation pending or overtly threatened against any Member of the Obligated Group in which an adverse decision would have a material adverse effect on the current business, financial position or operations of the Health System. See "LITIGATION" in APPENDIX A hereto.

## CONTINUING DISCLOSURE

At the time of issuance of the 2015 Bonds, the University, as Obligated Group Agent acting on behalf of the Members of the Obligated Group, will enter into a Continuing Disclosure Agreement (the “Disclosure Agreement”) with the Bond Trustee for the benefit of the holders of the 2015 Bonds, as required to enable the Underwriters to comply with their obligations under Rule 15c2-12 of the Securities and Exchange Commission (the “Rule”). Under the Disclosure Agreement, the Members of the Obligated Group will covenant to provide, through the Electronic Municipal Market Access (“EMMA”) system of the Municipal Securities Rulemaking Board (“MSRB”), the following:

- within 150 days following the end of each fiscal year of the Health System, a copy of the annual financial statements of the Health System prepared in accordance with generally accepted accounting principles and audited by a certified public accountant, together with an update of the financial information and operating data set forth in Appendix A hereto (i) under “BUSINESS OF THE HEALTH SYSTEM,” the information under the headings “Hospital Facilities,” “Hospital Utilization Statistics,” and “Service Area and Market Share”; and (ii) under “CERTAIN FINANCIAL INFORMATION,” the information under the heading “Sources of Revenue;” and
- within 60 days following the end of each fiscal quarter, a copy of the following information for each fiscal quarter of the Health System: (i) the Health System’s unaudited financial statements for each fiscal quarter (beginning with the quarter ending June 30, 2015); and (ii) an update of the financial information and operating data set forth in Appendix A hereto, under “BUSINESS OF THE HEALTH SYSTEM,” the information under the heading “Historical Utilization Statistics;” and
- in a timely manner, but not in excess of ten business days after the occurrence of the event, notice of the occurrence of any of the following events with respect to the 2015 Bonds: principal and interest payment delinquencies; nonpayment related defaults, if material; unscheduled draws on debt service reserves reflecting financial difficulties; unscheduled draws on credit enhancements reflecting financial difficulties; substitution of credit or liquidity providers, or their failure to perform; adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, or a Notice of Proposed Issue (IRS Form 5701-TEB) or other material notices of determinations with respect to tax status of the 2015 Bonds, or other events affecting the tax status of the 2015 Bonds; modifications to rights of registered owners of the 2015 Bonds, if material; bond calls (excluding mandatory sinking fund redemptions) and tender offers; defeasances; release, substitution or sale of property securing repayment of the 2015 Bonds, if material; rating changes; bankruptcy, insolvency, receivership, or similar proceeding by the any Member of the Obligated Group; consummation of a merger, consolidation, acquisition involving any Member of the Obligated Group, or sale of all or substantially all of the assets of any Member of the Obligated Group, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and appointment of an additional or a successor trustee, or the change in name of a trustee, if material.

The Disclosure Agreement may be amended by the Obligated Group Agent and the Bond Trustee so long as such amendment does not contravene the Rule as applicable to the 2015 Bonds. In addition, the Members of the Obligated Group reserve the right (i) to modify from time to time the specific types of information provided or the format of the presentation of its annual financial information and other

operating data, to the extent necessary or appropriate in the judgment of the Obligated Group Agent, and (ii) upon prior written notice to EMMA to amend or terminate any or all of its continuing disclosure covenants for any reason if permitted to do so under the Rule. Prior to executing any requested amendment, the Bond Trustee may request the Obligated Group Agent to provide an opinion of counsel knowledgeable in federal securities laws and acceptable to the Bond Trustee to the effect that the proposed amendment is permitted under this Disclosure Agreement and would not, in and of itself, cause the undertakings therein, as modified by such amendment, to violate the Rule as it applies to the 2015 Bonds. To the extent that the Rule requires or permits an approving vote of beneficial owners of the 2015 Bonds, in connection with an amendment, the approving vote of beneficial owners of the 2015 Bonds constituting more than 50% of the aggregate principal amount of the then outstanding Bonds shall constitute such approval. Any notice of an amendment to the Disclosure Agreement shall be submitted to EMMA in accordance with the rules and procedures set forth by the MSRB.

In the event of a breach or default by the Members of the Obligated Group of their covenants to provide information and notices as specified in the Disclosure Agreement, the Bond Trustee or any record or beneficial owner of the 2015 Bonds may, but is not be required, to bring an action in a court of competent jurisdiction to compel specific performance by the Obligated Group. No monetary damages may be recovered under any circumstances for any breach or default by the Members of the Obligated Group of their covenants under the Disclosure Agreement. A breach or default under the Disclosure Agreement shall not constitute an event of default with respect to the 2015 Bonds or the Bond Indenture or the Loan Agreement.

The University and the Members of the Obligated Group have entered into similar disclosure agreements in accordance with the Rule in connection with prior debt obligations issued on behalf of the University and of the Health System. Such information may be available to investors so long as the University or the Members of the Obligated Group are obligated to provide such information as part of its other undertakings.

In connection with the University becoming the sole corporate member of TCCHHS effective September 1, 2013, and TCCHHS becoming a Member of the Obligated Group on June 12, 2014, the University filed an event notice with EMMA on February 12, 2015, which was more than the required 10 business days after the underlying event if the University considered the event material for purposes of the various continuing disclosure agreements entered into with respect to bonds issued for the benefit of the University and the Health System. In the event notice for the above-described acquisition, the University did not express a view as to whether the transaction was material. The University is currently in compliance in all material respects with its previous undertakings with regard to continuing disclosure for prior obligations issued. Further, the University has reviewed its disclosure policies and procedures to ensure that the University will continue to be in compliance with continuing disclosure undertakings in the future.

The Authority is not a party to the Disclosure Agreement, and is not required to provide disclosure regarding its financial condition because, among other things, its financial condition is not material to an investment in the 2015 Bonds. In addition, the Authority has no responsibility for the compliance by the Members of the Obligated Group with the Disclosure Agreement or for the information provided thereunder.

## **CERTAIN RELATIONSHIPS**

Certain Trustees of the University and/or members of the PENN Medicine Board (which provides separate governance of the Health System) have affiliations with firms participating in the issuance and sale of the 2015 Bonds, as follows:

- Hon. Thomas W. Wolf, Governor of the Commonwealth of Pennsylvania and an *ex officio* Trustee of the University, is a Board Member and President of the Pennsylvania Higher Educational Facilities Authority.

For a description of the University's comprehensive conflict-of-interest policy, see "THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA - Transactions between the University and Members of its Board of Trustees" in APPENDIX C hereto.

## **MISCELLANEOUS**

This Official Statement, issued by the Authority, has been duly approved by the Authority, the University, as Obligated Group Agent and the Health System, and the Authority, the University, as Obligated Group Agent and the Health System have authorized its distribution in connection with the offering of the 2015 Bonds. This Official Statement is not to be construed as a contract or agreement between the Authority, the University, as Obligated Group Agent, or the Health System and the purchasers or holders of any 2015 Bonds.

All of the summaries of the provisions of the Act, the Bond Indenture, the Loan Agreement, the Master Indenture, the 2015 Master Note and the 2015 Bonds set forth herein are only brief outlines of certain provisions thereof and are made subject to all of the detailed provisions thereof, to which reference is hereby made for further information, and do not purport to be complete statements of any or all such provisions of such document.

The 2015 Bonds have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offense.

Information concerning the Health System and the Project to be financed by the 2015 Bonds has been provided by the Members of the Obligated Group. All estimates, projections, 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, projections, 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 Authority and the Members of 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 - The Authority" herein and, except for those sections, the Authority is not responsible for any statements made in this Official Statement. Except for the authorization, execution, and delivery of documents required to effect the issuance of the 2015 Bonds, the Authority assumes no responsibility for the disclosures set forth in this Official Statement.

The delivery of this Official Statement has been duly authorized by the Authority and the Health System.

PENNSYLVANIA HIGHER EDUCATIONAL  
FACILITIES AUTHORITY

By: /s/ Robert Baccon  
Robert Baccon  
Executive Director

**Approved:**

THE TRUSTEES OF THE UNIVERSITY  
OF PENNSYLVANIA, as Obligated Group  
Agent under the Master Indenture

By: /s/ Stephen D. Golding  
Stephen D. Golding  
Vice President for Finance and  
Treasurer

UNIVERSITY OF PENNSYLVANIA  
HEALTH SYSTEM

By: /s/ Keith A. Kasper  
Keith A. Kasper  
Senior Vice President & Chief Financial  
Officer

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**APPENDIX A**

**INFORMATION CONCERNING THE  
UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM**

## TABLE OF CONTENTS

	<u>Page</u>		<u>Page</u>
THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM .....	1	BUSINESS OF THE HEALTH SYSTEM .....	17
Introduction .....	1	Services .....	17
Penn Medicine .....	2	Hospital Facilities.....	18
History .....	3	Licensure, Accreditations and Memberships.....	18
THE MEMBERS OF THE OBLIGATED GROUP .....	3	Clinical Training and Research Activities.....	18
The Master Indenture.....	3	Institutional Affiliations .....	19
The Hospital of the University of Pennsylvania.....	4	Centers, Institutes and Specialty Programs .....	21
Presbyterian Medical Center of the University of		Historical Utilization Statistics.....	22
Pennsylvania Health System .....	5	Service Area and Market Share .....	22
Pennsylvania Hospital of the University of		Inpatient Market Share for the 18-County Philadelphia	
Pennsylvania Health System .....	6	Region.....	24
The Chester County Hospital and Health System.....	6	CERTAIN FINANCIAL INFORMATION.....	26
The Clinical Practices of the University of		Summary of Financial Performance .....	26
Pennsylvania.....	7	Sources of Revenue .....	27
Clinical Care Associates of the University of		Transfer of Funds to Perelman School of Medicine .....	28
Pennsylvania Health System .....	8	Long Term Debt of the Health System.....	28
Wissahickon Hospice.....	8	Future Capital Expenditures .....	29
Other Affiliated Entities.....	9	Hedging Transactions and Derivative Instruments.....	29
Affiliation with Chestnut Hill Health Care .....	9	Management's Discussion of Recent Financial	
Affiliation with Good Shepherd Rehabilitation Network ...	9	Performance .....	30
Affiliation Agreement with Lancaster General Health .....	9	ADDITIONAL HEALTH SYSTEM INFORMATION .....	32
PERELMAN SCHOOL OF MEDICINE.....	10	Employees .....	32
GOVERNANCE OF THE HEALTH SYSTEM.....	12	Retirement Plans .....	32
Penn Medicine Board .....	12	Insurance .....	33
Executive Administration .....	14	Malpractice Insurance .....	33
		Litigation.....	34

### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements included or incorporated by reference in this APPENDIX A constitute projections or estimates of future events, generally known as forward-looking statements. These statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget" or other similar words. These forward-looking statements include, among others, the information under the caption "Certain Financial Information" in this APPENDIX A.

The achievement of certain results or other expectations in these forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. No Member of the Obligated Group plans to issue any updates or revisions to those forward-looking statements if or when changes in their expectations, or events, conditions or circumstances on which these statements are based, occur.

## **THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM**

### **Introduction**

The University of Pennsylvania Health System (the “Health System” or “UPHS”) consists of certain operating divisions of The Trustees of the University of Pennsylvania (the “University”) and affiliated entities, including:

- The Hospital of the University of Pennsylvania (“HUP”), a 821 licensed bed (including 32 bassinets) quaternary care hospital and academic medical center located on the campus of the University in the West Philadelphia area of Philadelphia, Pennsylvania;
- Presbyterian Medical Center of the University of Pennsylvania Health System (“Presbyterian” or “PPMC”), d/b/a Penn Presbyterian Medical Center, a 331 licensed bed acute care hospital located adjacent to the campus of the University in the West Philadelphia area of Philadelphia, Pennsylvania;
- Pennsylvania Hospital of the University of Pennsylvania Health System (“Pennsylvania Hospital” or “PAH”), a 546 licensed bed (including 50 bassinets) acute care hospital located in the Center City area of Philadelphia, Pennsylvania;
- The Chester County Hospital and Health System of the University of Pennsylvania Health System (“TCCHHS”), which includes the Chester County Hospital (“CCH”), a 289 licensed bed (including 32 bassinets) acute care hospital located in the West Chester, Pennsylvania;
- The Clinical Practices of the University of Pennsylvania (“CPUP”), the approved faculty practice plan for the clinical practices of 1,588 members of the medical faculty of the University’s Perelman School of Medicine;
- Clinical Care Associates of the University of Pennsylvania Health System (“CCA”), a community based physician network currently employing approximately 259 physicians at 55 office locations in Southeastern Pennsylvania and through its New Jersey affiliate in Southern New Jersey; and
- Wissahickon Hospice (“Wissahickon Hospice”), a hospice care facility serving the terminally ill, with facilities in Bala Cynwyd and Center City Philadelphia, Pennsylvania.

HUP and CPUP are operating divisions of the University. Presbyterian, Pennsylvania Hospital, TCCHHS, Wissahickon Hospice and CCA are separate nonprofit corporations affiliated with and controlled by the University. As described below, the University (as to HUP and CPUP only), Presbyterian, Pennsylvania Hospital, TCCHHS, Wissahickon Hospice and CCA are members of the obligated group established under the Master Indenture (defined below) and are sometimes referred to in this Appendix as the “Obligated Group” or the “Members of the Obligated Group.”

The University is an independent non-sectarian research institution of higher education chartered under the laws of the Commonwealth. One of only nine colleges and universities established during the colonial period, the University is the third oldest Ivy League school. It is a privately endowed, gift-supported non-profit institution.

This APPENDIX A contains certain information regarding the history, organization, operations, and financial condition of the Health System. APPENDIX B contains certain audited financial statements of the Health System. APPENDIX C contains certain general information regarding the University.

The obligation of the University to make payments under the Loan Agreement and any Master Notes issued under the Master Indenture is a limited obligation of the University to make payments solely from the assets and revenues of HUP and CPUP (or any additional Designated Units in the Master Indenture) and not from any other assets or revenues of the University, including the Perelman School of Medicine.

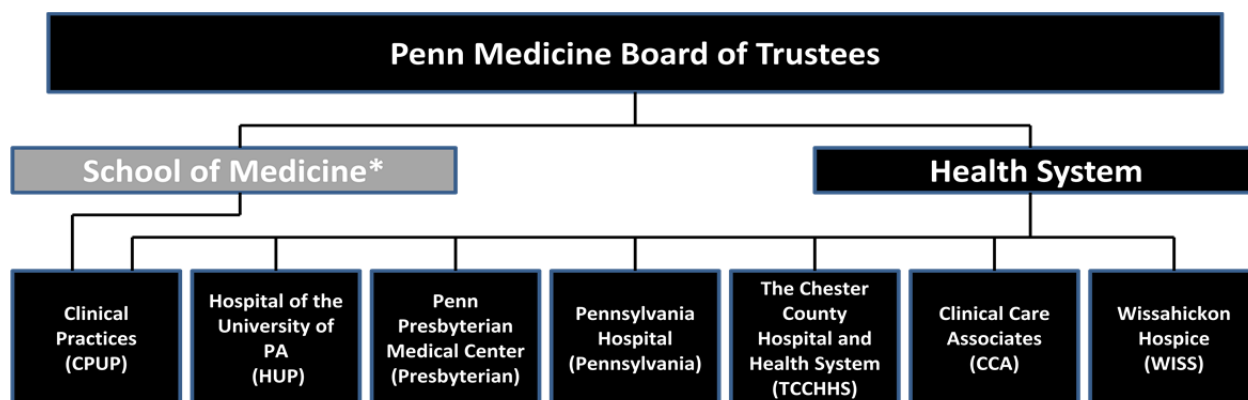
The academic component of the University includes the Raymond and Ruth Perelman School of Medicine at the University of Pennsylvania (the “Perelman School of Medicine”), which is the nation’s oldest medical school. In 2002, the University established a separate governance structure, known as “Penn Medicine,” to operate, oversee, and coordinate the academic, research, and clinical operations of the Health System and the Perelman School of Medicine. Penn Medicine has integrated many of the functions of the separate governing boards of the Health System and the Perelman School of Medicine into a single board, thus emphasizing the interdependency of the three missions.

The mission of Penn Medicine is excellence in education, research, and clinical care. It strives to achieve these goals by having the best people in medical education, health-related research, and patient care; making use of knowledge gained from nearly two and a half centuries of learning and discovery as part of a world-class university; delivering high-quality medicine to patients across a fully integrated academic health system; and fulfilling a commitment to improve the health of people in the communities served by the Health System and around the world.

## Penn Medicine

The Health System is committed to remain a world-leading institution in three equally valued and inter-related missions of patient care, education, and research. The success of these missions requires the integration of the Perelman School of Medicine and the Health System and a shared destiny with the University. By recruiting and retaining a world-class faculty and staff who strive for excellence, innovation, quality, and professionalism, Penn Medicine will accomplish the mission to be recognized nationally as an accomplished and respected school of medicine and health system.

The University maintains a separate governance structure with respect to its healthcare and medical education components under the governance umbrella of Penn Medicine. The following chart highlights the key component organizations within Penn Medicine.



\* The Perelman School of Medicine is not a Designated Unit of the University and is not included in the Obligated Group under the Master Indenture.

## **History**

John Morgan, a physician and 1757 graduate of the College of Philadelphia (the “College,” now the University), is the founding father of the University of Pennsylvania Perelman School of Medicine. Following his undergraduate education and apprenticeship in medicine, Morgan left Philadelphia and traveled to Europe where he earned a medical degree from the University of Edinburgh. Dr. Morgan’s educational experience in Europe convinced him that the apprenticeship system used in the colonies was insufficient in providing medical knowledge and training. Dr. Morgan felt that an academic base was required to provide the most up-to-date education and that medical studies should move progressively from basic concepts to the application of those concepts in clinical care. Therefore, shortly after returning from Europe, Dr. Morgan persuaded the Trustees of the College to fund a medical school at the College and to appoint him to the faculty. In May 1765, the Trustees of the College approved Dr. Morgan’s plan and he was elected Professor of the Theory and Practice of Physick (Medicine).

The founding of the Perelman School of Medicine, the first in the 13 colonies, introduced two important elements to American medical education. First is the placement of medical education within an institution of higher learning, thus promoting medicine as an academic pursuit. Second is the emphasis on the need to supplement medical education with bedside teaching. During the early years of the Perelman School of Medicine, bedside teaching was provided to apprentice physicians by practitioners at Pennsylvania Hospital, located a few blocks from the College. However, in the 1870s when the College moved from downtown Philadelphia to its present campus, the need for a teaching hospital nearby became apparent. As a result, the Trustees of the College built a teaching hospital owned by the College and staffed by the medical faculty. With its original building dating to 1874, HUP became the first teaching hospital in the United States built in support of a medical school. In the years after HUP was built, the Perelman School of Medicine was one of the first to encourage the development of specialties such as neurosurgery, rehabilitation medicine, ophthalmology, dermatology, and radiology.

In 1986, the University consolidated the Perelman School of Medicine (including CPUP) and HUP into the University of Pennsylvania Medical Center. This was a formal recognition that the academic and health services programs and resources of the Perelman School of Medicine, CPUP, and HUP are, and should be, interrelated and mutually supporting. In 1993, by action of the University’s Trustees, the University of Pennsylvania Health System was created to further integrate education, research and patient care. In 2002, the Board of Trustees established Penn Medicine, an umbrella governance structure. The purpose of this governance structure is to operate, oversee and coordinate the academic, research and clinical operations of the Health System and the Perelman School of Medicine. The University believes that these changes have improved its stature as one of the nation’s leading academic health systems.

## **THE MEMBERS OF THE OBLIGATED GROUP**

### **The Master Indenture**

In 1994, the University entered into a Master Indenture dated as of May 1, 1994 (as supplemented and amended, the “Master Indenture”) with U.S. Bank National Association (formerly Wachovia Bank, National Association and First Union National Bank), as master trustee, for the purpose of establishing the Obligated Group as a separate financial credit group limited to the healthcare and health-related businesses of the University. Initially, the Obligated Group consisted solely of HUP and CPUP as the Designated Units of the University. Today, the Obligated Group consists of HUP, CPUP, Pennsylvania Hospital, Presbyterian, TCHHS, CCA and Wissahickon.

The obligation of the University to make payments under the Loan Agreement and any Master Notes issued under the Master Indenture is a limited obligation of the University to make payments solely from the assets and revenues of HUP and CPUP (or any additional Designated Units established as provided in the Master Indenture) and not from any other assets or revenues of the University, including the Perelman School of Medicine.

Set forth below are general descriptions of the current Members of the Obligated Group (including HUP and CPUP as the Designated Units of the University).

### **The Hospital of the University of Pennsylvania**

HUP is a 821 licensed bed, including bassinets, quaternary care hospital and academic medical center operating in 1,900,000 square feet of interconnected buildings located on the campus of the University in the West Philadelphia area of Philadelphia, Pennsylvania.

HUP first opened its doors in 1874, becoming the nation's first teaching hospital. In conjunction with the Perelman School of Medicine, HUP has had a long history of pioneering new procedures and techniques that have been used worldwide. HUP is situated in the center of a complex of health, educational, scientific, civic and cultural institutions in a general area of approximately three square miles known as University City which includes most of the facilities of the University, the facilities of Presbyterian, and the following independent organizations: The Children's Hospital of Philadelphia, a 535-bed facility physically connected to HUP providing pediatric inpatient, rehabilitation and other services; the Philadelphia VA Medical Center with 145 acute care beds and 135-bed Community Living Center; Drexel University; and the University City Science Center.

Today, HUP provides secondary, tertiary, and quaternary care to the residents of Philadelphia and the surrounding tri-state area. PennSTAR, HUP's critical-care flight program since 1988, now operates six helicopters and has safely flown more than 40,000 patients in six states. Specialties include: Cancer and Cancer Genetics; Cardiovascular Services (electrophysiology, heart failure and transplant program, robotic surgery); Neurology (stroke center, Alzheimer's Disease Center, Parkinson's Center, Epilepsy Clinic); Women's Health (including infertility and high risk pregnancy); Diabetes; Multi-organ Transplant Program; Neurosurgery (brain disorders including tumors and aneurysms, spinal disorders including disc, cervical, thoracic and lumbar abnormalities, stenosis and peripheral nerve damage); Institute on Aging; Vascular Laboratory; Orthopedic Surgery; Gastroenterology; Proton Therapy; and Ophthalmology. Appointment to the medical staff at HUP is limited to individuals with an academic appointment to the Perelman School of Medicine.

Over the last century, HUP researchers have developed parenteral nutrition; pioneered computed tomography ("CT") scanning; discovered the Philadelphia Chromosome, the first defective chromosome linked to cancer; developed cognitive therapy; pioneered human in-vitro fertilization and endoscopic surgery; discovered the genes for Fragile X Syndrome, Kennedy's disease, and Charcot-Marie-Tooth disease; pioneered basic clinical applications of gene transfer; developed a cure for atrial fibrillation; discovered the hormone that triggers type 2 diabetes; developed a new therapy for sickle cell disease; discovered the genes contributing to Prader-Willi/Angelman syndrome; discovered the genetic mutation that may have led to human evolution; and created new advances in transcatheter heart valve replacement surgery. HUP also hosted the first televised surgical operation on March 16, 1952 performed by Dr. Isadore Ravdin. HUP scientists developed the use of positron emission tomography ("PET") scanning, which shows metabolic function in tissue and in 1976, the first metabolic images of the brain using PET scanning were taken at HUP. Today, scientists throughout the world use similar images to investigate organ functions of various disorders. HUP was the first hospital to treat muscular dystrophy in the United States. HUP is a pioneer in endoscopic surgery and human in-vitro fertilization, housing one of six

Centers for Infant Research and Treatment designated by the National Institutes of Health (“NIH”). HUP physicians also developed the “Pennsylvania Peel,” a surgical technique widely used to cure life-threatening arrhythmia.

In June 2008, the Perelman Center for Advanced Medicine officially opened its doors for radiology oncology patients. The \$302 million facility is the largest capital project undertaken in the history of the Health System and houses the Abramson Cancer Center, radiation oncology, cardiovascular medicine and outpatient surgical pavilion, as well as other outpatient practices.

The facilities of the Perelman Center for Advanced Medicine are connected to the Roberts Proton Therapy Center, which opened in January 2010. The Proton Therapy Center is an approximately 75,000 square foot facility that consists of four gantries and one fixed beam room. When the center is at full capacity, physicians can deliver proton therapy to up to 200 cancer patients in one day. The Roberts Proton Therapy Center is one of six similar centers in the country, and the largest proton therapy center in the world associated with an academic medical center. The 10-story Smilow Center for Translational Research, which is physically integrated into both the Perelman Center for Advanced Medicine and the Roberts Proton Therapy Center, brings basic scientists and physicians together to deliver discoveries quickly and effectively to patients. Just steps away within this same complex is the new Henry A. Jordan M’62 Medical Education Center, the Perelman School of Medicine’s new home for medical education. This facility, which opened in January 2015, is among the first in the nation to fully integrate education facilities with active clinical care and research lab space, placing students in the midst of the dynamic practice of medicine.

HUP has a long history of receiving numerous awards and recognitions for its excellence in medical, surgical and nursing care as well new technology.

HUP is one of only 17 hospitals chosen from the nearly 5,000 facilities surveyed and selected for the “Honor Roll” of best hospitals in America by *U.S. News & World Report 2014*. HUP was recognized for its demonstrated excellence in 11 of 16 adult medical specialties.

HUP has achieved Magnet status – the highest institutional honor awarded for nursing excellence from the American Nurses Credentialing Center (ANCC) and the first awarded to an academic medical center in Pennsylvania.

Other recent awards include the prestigious Beacon Award for HUP’s neuro-critical care unit for excellence in critical care; America’s 100 Choice Hospitals (American Alliance of Healthcare Providers), “25 Most Influential” for the recent installation of three new state-of-the-art high-powered MRI systems - a radiology first for any hospital in the US (RT Image magazine); Blue Distinction Award for Cardiac Care (IBC); Center of Excellence for Bariatric Surgery (American Society for Bariatric Surgery); and the Gift of Life Award from the Delaware Valley Hospital Council.

### **Presbyterian Medical Center of the University of Pennsylvania Health System**

Presbyterian Medical Center d/b/a Penn Presbyterian Medical Center (“Presbyterian” or “PPMC”) is a 331 licensed bed acute care facility located in University City, on a 16.5 acre site adjacent to the University’s campus. The Presbyterian campus consists of ten major buildings with approximately 1,106,000 gross square feet. Presbyterian provides primary, secondary and tertiary care to residents of metropolitan Philadelphia and Southern New Jersey, with a significant clinical focus on Interventional Cardiology, Cardiac Surgery and Orthopaedic Surgery. Presbyterian also operates Penn Presbyterian Infusion Services, an ambulatory care facility located in Cherry Hill, New Jersey. As a component hospital of the Health System and through its teaching affiliation in several medical disciplines with the

Perelman School of Medicine, Presbyterian serves as a clinical resource for the training of medical students. Most of the medical staff at Presbyterian hold academic appointments at the Perelman School of Medicine. In August 2014, Penn Medicine University City, an ambulatory facility and ambulatory surgery facility began operations. In early 2015, the Pavilion for Advanced Care (PAC) at Penn Presbyterian opened its doors, uniting more than 20 medical and surgical specialists in a six-story, 178,000-square-foot facility. The building is now home to Penn Medicine's Level I Regional Resource Trauma Center, which relocated from the Hospital of the University of Pennsylvania (HUP).

### **Pennsylvania Hospital of the University of Pennsylvania Health System**

Pennsylvania Hospital, initially founded in 1751 under a Royal Charter of King George II, issued to a group of citizens under the leadership of Benjamin Franklin and Dr. Thomas Bond, has 546 licensed beds, including bassinets, and today is an acute care tertiary facility located on an 8.5 acre site at Eighth and Spruce Streets, in the Society Hill-Independence Hall area of Philadelphia. Its campus consists of 15 major buildings with a total of more than 1,100,000 gross square feet. Pennsylvania Hospital provides primary, secondary and tertiary care to residents of metropolitan Philadelphia and Southern New Jersey, with a significant clinical focus on Orthopaedics, OB/GYN, including high-risk pregnancies, Neurosurgery, Interventional Cardiology, and Cardio-Thoracic Surgery. During fiscal year 2014, Pennsylvania Hospital performed 4,842 deliveries.

As a component hospital of the Health System and through its teaching affiliation in several medical disciplines with the Perelman School of Medicine, Pennsylvania Hospital serves as a clinical resource for the training of medical students. Approximately two-thirds of the members of the medical staff at Pennsylvania Hospital hold academic appointments at the Perelman School of Medicine.

Pennsylvania Hospital was the first hospital in North America, operating in a rented home on Market Street, below Seventh Street, where it began operating on February 6, 1752. It relocated to its present site in 1756. Over the 260 years since Dr. Bond and Benjamin Franklin received the charter and chose the story of the Good Samaritan ("Take care of him and I will repay Thee") for the official seal of Pennsylvania Hospital, many of the most significant events in American medical history have occurred in Pennsylvania Hospital's facilities. In addition, Dr. Benjamin Rush, signer of the Declaration of Independence, social reformer and known as the "Father of American Psychiatry," was on staff of Pennsylvania Hospital from 1783 to 1813, and Dr. Philip Syng Physick, "the Father of American Surgery," served on the staff from 1794 until 1816. The College of Philadelphia, later to become the University, established a School of Medicine in 1765 using Pennsylvania Hospital as its principal clinical facility. The first surgery room in the United States, with an amphitheater for medical students, was constructed at Pennsylvania Hospital in 1805. The Medical Library of Pennsylvania established in 1835 was not only the first in the United States, but it continues to serve as an important repository for current and historically significant works.

### **The Chester County Hospital and Health System**

The Chester County Hospital and Health System ("TCHHS") includes the Chester County Hospital which is a 289 licensed bed, including bassinets, acute care facility located in West Chester, as well as satellite locations in Exton, West Goshen, New Garden, Jennersville and Kennett Square. Chartered in 1892, the 535,520 square foot hospital complex offers an array of inpatient and outpatient medical/surgical services including interventional cardiovascular services, open heart surgery, oncology, radiation oncology and comprehensive maternal/infant health services. TCHHS also offers home health and hospice care, skilled nursing care, occupational and employee healthcare, professional and technical education, outpatient laboratory, radiology and physical therapy services, prenatal care and gynecological care centers for the underserved and cardiopulmonary rehabilitation. The Health System



became affiliated with TCCHHS in September 2013, though the substitution of the University as the sole corporate member of TCCHHS. In connection with its affiliation with TCCHHS, the Health System undertook certain commitments with respect to capital improvements and the expansion of services, including a commitment to provide a minimum of \$130,000,000 during the first five years after closing, of which at least \$90,000,000 is to be provided in the first three years, as well as assurances of fully funding depreciation at TCCHHS in the five years thereafter.

### **The Clinical Practices of the University of Pennsylvania**

CPUP was established in 1977 as the approved faculty practice plan of the Clinical Departments of the Perelman School of Medicine based on the principle that the practice of medicine by the faculty of the Perelman School of Medicine is an integral component of the University. The general purpose of CPUP is to improve and further both academic medicine and the clinical practice of medicine within the context of the educational, patient care and research missions of the University. Specifically, CPUP undertakes, among other things, to review clinical practice standards, coordinate the determination of clinical practice needs, exchange information, coordinate activities attendant to the clinical practices, further teaching programs, and establish and operate approved clinical programs or activities that may further the goals of CPUP, the Health System and the Perelman School of Medicine.

CPUP consists of 19 separate clinical practices ranging in size from six to 540 physicians. The CPUP organization permits a coordinated development of the practice of medicine by the 1,588 physician faculty members of the University in a manner that benefits the individual departments or practices, the hospitals of the Health System, the Perelman School of Medicine, and the University as a whole.

The University established CPUP to provide for the terms and conditions under which full-time, salaried members of the Perelman School of Medicine faculty are extended the privilege of clinical practice at the facilities of the Health System. CPUP is designed to serve patient needs of the Health System and to supplement the income and benefits of full-time faculty members so as to make their compensation competitive with other opportunities available to such physicians. CPUP consists of various departmentally based practices which may be further subdivided into divisions or groups or individual practices. It is not a separate corporation, partnership, or foundation but is a Designated Unit for purposes of the Master Indenture.

All physicians who have full-time, salaried positions on the faculty of the Perelman School of Medicine 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 CPUP unless specifically exempted by the Dean of the Perelman School of Medicine. CPUP members render their professional activities only at facilities owned, operated or approved by the University. A significant portion of CPUP revenue is paid to CPUP physicians as salary, supplementing their income as faculty of the Perelman School of Medicine.

The affairs of CPUP are conducted by the Clinical Practices Board of Directors and the Clinical Practices Executive Committee. The Clinical Practices Board of Directors consists of the chair of each clinical department of the Perelman School of Medicine and selected practice plan chiefs, and is responsible for developing policies in accordance with the policies of Penn Medicine and the University.

The following table sets forth the number and average ages of the CPUP physicians in the major clinical specialties as of June 30, 2014:

<u>Specialty</u>	<u>Number of Physicians</u>	<u>Average Age</u>
Anesthesiology	90	50
Dermatology	39	48
Emergency Medicine	54	47
Family Practice	26	44
Medicine	559	49
Neonatology	6	58
Neurology	59	47
Neurosurgery	19	50
Obstetrics/Gynecology	60	47
Ophthalmology	35	52
Oral Maxillofacial	13	48
Orthopaedic Surgery	35	49
Otorhinolaryngology	30	48
Pathology and Laboratory Medicine	101	53
Psychiatry	121	51
Radiation Oncology	55	49
Radiology	145	50
Rehabilitation Medicine	20	44
Surgery (Including Urology and Trauma)	<u>121</u>	<u>51</u>
Total/Average	<u>1,588</u>	<u>50</u>

*Source: Health System records.*

### **Clinical Care Associates of the University of Pennsylvania Health System**

CCA was formed in June 1993 to develop a geographically distributed network of primary care physicians. As of December 31, 2014, CCA and its New Jersey affiliate, Clinical Health Care Associates of New Jersey, P.C., employed or contracted with 236 physicians and 53 physician extenders at 55 office locations throughout the five county Southeastern Pennsylvania area and three county Southern New Jersey area. CCA has grown to be a primary and specialty care network with approximately 50% of CCA's physicians providing primary care. CCA physicians serve as teachers for students and residents of the Perelman School of Medicine, and the Health System has realized, and continues to realize, increased access to patients for teaching and research purposes as a result of CCA's development. HUP, CPUP, Presbyterian and Pennsylvania Hospital also expect to attract incremental admissions and outpatient visits because of the unique and specialized services they can provide to CCA's patients.

### **Wissahickon Hospice**

Wissahickon Hospice d/b/a Penn Wissahickon Hospice was established in 1982 to provide compassionate care for patients with life-limiting conditions. Wissahickon Hospice provides skilled nursing care for aggressive pain and symptom management, 24-hour on-call support, counseling and emotional support, and companionship, bereavement support and counseling for families, friends and caregivers. In November 2008, Wissahickon Hospice opened a 12 bed inpatient unit in Center City Philadelphia to accommodate patients with acute symptoms need; this unit expanded to 20 beds in July 2010. In addition to hospice care, Wissahickon Hospice has a special home care program, Caring Way, for the patient with an end-stage illness who may be continuing curative treatment or is not prepared to accept hospice care. As of December 2014, Wissahickon Hospice employed 52 full-time nurses who provide services at its hospice care facility located in Philadelphia, Pennsylvania and at the homes of patients in Philadelphia, Chester, Delaware, Bucks and Montgomery counties through its home care

program. Wissahickon Hospice provides a way for patients to take control of their lives and treatment, encouraging them to take an active role in the important medical, social and legal decisions that affect them and those around them.

### **Other Affiliated Entities**

The businesses of certain of the Members of the Obligated Group are partially conducted through certain subsidiary corporations or other nonprofit and for-profit entities that are controlled by such Members of the Obligated Group but that are not themselves Members of the Obligated Group. While the assets and revenues of these affiliated entities are included in the consolidated financial statements of the Health System, such assets and revenues might not be available to satisfy the payment obligations of the Members of the Obligated Group with respect to Master Notes or other Obligations issued under the Master Indenture unless distributed or otherwise made available to the Members of the Obligated Group. In the opinion of management of the Health System, the assets and revenues of such affiliated entities are not material to the financial condition or operations of the Members of the Obligated Group.

### **Affiliation with Chestnut Hill Health Care**

In 2005, UPHS acquired a 15% interest in Chestnut Hill Health System, LLC, a 135 licensed bed acute care hospital facility located in northwestern Philadelphia. The Health System acquired its minority interest solely in exchange for certain non-cash commitments, including principally (i) a trademark license, (ii) hospital governance commitments and (iii) clinical affiliation agreements. The 85% majority interest in the Chestnut Hill Health System was acquired by CHHS Holdings, LLC, a Delaware limited liability company, a wholly-owned subsidiary of CHS/Community Health System, Inc., Brentwood, Tennessee, for cash and other consideration.

### **Affiliation with Good Shepherd Rehabilitation Network**

In March 2007, the Health System acquired the properties of the former Graduate Hospital in Philadelphia from Tenet Healthcare Corporation for approximately \$18.0 million. The Health System contributed, though a long-term lease arrangement, a portion of these properties to a joint venture (Philadelphia Post Acute Partners LLC d/b/a Good Shepherd Penn Partners). This joint venture is operated by the Health System and The Good Shepherd Home (“GSH”), a Pennsylvania nonprofit organization which operates inpatient rehabilitation and other health facilities in the Lehigh Valley region of the Commonwealth. The facilities of the joint venture principally consist of a 30,000 square foot long-term acute care hospital (“LTACH”) and a 46,000 square foot inpatient rehabilitation facility (“IRF”) to which the Health System relocated the existing inpatient rehabilitation services provided at HUP and Pennsylvania Hospital. The LTACH is owned and operated by the joint venture, while the IRF is managed and staffed by the joint venture on behalf of the Health System and HUP. GSH paid substantially all costs of constructing and renovating these facilities. In addition to its contribution of the former Graduate Hospital facilities (now known as Penn Medicine at Rittenhouse) for use by the joint venture, the Health System also contributed to the joint venture all of its outpatient rehabilitation centers, which are operated by the joint venture. In return for their respective contributions to the joint venture, the Health System has a 30% interest in the joint venture, and GSH has a 70% interest. Operation of the LTACH and IRF at Penn Medicine at Rittenhouse commenced in July 2008.

### **Affiliation Agreement with Lancaster General Health**

On April 21, 2015, the Health System announced that it had signed a definitive affiliation agreement with Lancaster General Health (“LGH”), pursuant to which LGH is expected to become a clinical component of Penn Medicine through a member substitution in which the University would

become the sole member of LGH. The agreement does not require the payment by the Health System of any financial consideration or other financial undertakings. Consummation of the affiliation remains subject to various regulatory approvals, and, accordingly, there is no assurance as to whether or when the transaction will finally occur. The Health System and LGH had previously announced, on February 11, 2014, the formation of a strategic alliance to jointly develop innovative programs and initiatives improving patient care, research and education at both not-for-profit institutions, and had executed a further memorandum of understanding on October 28, 2014, with regard to a consolidated relationship. LGH operates three hospitals in South Central Pennsylvania, including Lancaster General Hospital, a 533-bed general acute care hospital, Women & Babies Hospital, a 98-bed facility specializing in women's health and maternity services, and Lancaster Rehabilitation Hospital, a 59-bed rehabilitation hospital, as well as 14 outpatient centers, three urgent care sites, and a physician practice network with nearly 200 primary care and specialty practices at 40 practice sites.

### **PERELMAN SCHOOL OF MEDICINE**

The following information is provided with respect to the Perelman School of Medicine, which serves as an integral part of the clinical and academic mission of Penn Medicine. The Perelman School of Medicine, which is an academic component of the University, is not a Designated Unit of the University under the Master Indenture, and none of its assets or revenues are available for the payment of the obligations of the Members of the Obligated Group with respect to the Master Indenture.

The Perelman School of Medicine currently enrolls 646 medical students. Current first-year students represent 33 states and 56 colleges and universities. Approximately 83% of the medical students receive financial assistance in the form of scholarships and loans. The following table sets forth certain information regarding medical student applications, acceptances, and matriculations for the academic years indicated:

	<u>Applications</u>	<u>Acceptances</u>	<u>Percent Accepted</u>	<u>Matriculants</u>	<u>Percent Matriculated</u>
<b>FY10</b>	6,217	229	3.7%	162	71.0%
<b>FY11</b>	6,374	262	4.2	165	63.0
<b>FY12</b>	6,157	276	4.4	166	60.1
<b>FY13</b>	5,973	284	4.7	163	57.3
<b>FY14</b>	5,740	273	4.8	168	61.5

*Source: Perelman School of Medicine records.*

The Perelman School of Medicine attracts highly qualified students. The following is a five-year comparison of the Medical College Admissions Test (“MCAT”) scores of medical students entering the Perelman School of Medicine compared to the national average score:

	<b>Mean Verbal Reasoning</b>	<b>Mean Physical Sciences</b>	<b>Mean Biological Sciences</b>	<b>Median Writing Sample</b>
<b>FY10</b>				
Perelman School of Medicine	11.0	13.0	13.0	Q
National	9.9	10.4	10.8	Q
<b>FY11</b>				
Perelman School of Medicine	11.4	12.5	12.7	R
National	9.8	10.4	10.8	Q
<b>FY12</b>				
Perelman School of Medicine	11.3	12.7	12.8	Q
National	9.8	10.5	10.9	Q
<b>FY13</b>				
Perelman School of Medicine	11.3	12.8	12.9	Q
National	10.0	10.6	10.8	Q
<b>FY14</b>				
Perelman School of Medicine	11.5	12.9	12.7	Q
National	10.0	10.6	10.9	Q

*MCAT verbal reasoning, physical sciences and biological sciences scores are based on a scale of 0 to 15, with 15 being the highest possible score. The writing sample scores are based on a scale of J to T, with T being the highest possible score. Source: Association of American Medical Colleges and Perelman School of Medicine.*

The Perelman School of Medicine faculty includes eight members of the Academy of Sciences, 65 members of the Institute of Medicine, eight members of the National Academy of Sciences, 23 members of the American Academy of Arts and Sciences, and three investigators of the Howard Hughes Medical Institute. The full-time faculty totals 2,193. The faculty is comprised of the basic science faculty, the research faculty, the pediatric faculty and the clinical faculty.

There are over 1,318 residents and fellows participating in post-graduate training programs, the majority of which are based at HUP with the remainder at other area hospitals, including Presbyterian and Pennsylvania Hospital.

The Biomedical Graduate Studies program in the Perelman School of Medicine currently offers Ph.D. training for 593 full-time doctoral students. The biomedical graduate faculty currently numbers 643. The combined M.D./Ph.D. program had 188 enrollees and the VMD/Ph.D. program had 20 enrollees as of June, 2014. There were also 453 students in other graduate/professional programs which include MS in Bioethics, MS in Biostatistics and MS in Clinical Epidemiology, MS in Health Policy Research, MS in Public Health, and MS in Translational Research. The Biomedical Graduate training program received approximately \$19.3 million in training grants from the National Institutes of Health (NIH) in FY14, ranking second nationally.

The Perelman School of Medicine supports active research programs in every area of modern biomedical research with major emphases in behavioral disorders, biomedical imaging, cancer, computer technology, diabetes, immunology, molecular genetics, the neurosciences and pharmacology. In January 2013, Penn Medicine completed a comprehensive multi-year Strategic Plan. This plan was developed with extensive input from the faculty, and bridges basic and clinical research in programmatic themes. There were six main strategic priorities that were put forth as part of this effort: 1) Realize Penn

Medicine's Potential for Innovation, 2) Enrich the Life of Faculty Through Diversity and Flexibility, 3) Impact Health Outcomes Locally and Globally, 4) Create Innovative Interdisciplinary Education Programs, 5) Lead in Delivering Individualized Medicine, and 6) Enhance the Penn Medicine Ecosystem. A key feature of Penn Medicine is the full integration of research and education with clinical service and hospital management. These structural attributes insure a cohesive and consistent institutional vision.

The University is one of the nation's premier biomedical research institutions. This excellence is evidenced by an extraordinary level of research impact and peer-reviewed grant support. In fiscal year 2014, the Perelman School of Medicine received \$638 million in support for its research activities from extramural sponsors, including \$410 million from the NIH, ranking third nationally among academic medical institutions nationally in receipt of NIH support.

The quality of research is also reflected through an extraordinary level of impact faculty publications as Penn Medicine faculty continue to be published widely in the most cited journals. From FY11 through FY14 the total number of articles in the top 20 most cited journals increased by 6.3%. From FY11 through projected FY15 the total number of articles in the top 20 most cited journals will show an estimated increase of 36%.

## **GOVERNANCE OF THE HEALTH SYSTEM**

The Board of Penn Medicine (the "Penn Medicine Board") and its executive committee (the "Penn Medicine Executive Committee") have responsibility delegated to them by the University Trustees to foster productive relationships among the components of Penn Medicine and between Penn Medicine and the University. The University maintains ultimate control over the governance and operation of the Health System and Perelman School of Medicine.

### **Penn Medicine Board**

The Penn Medicine Board has responsibility for the oversight of the Health System and the Perelman School of Medicine. The Penn Medicine Board meets at least twice a year to assure that its constituents operate in a coordinated manner to promote the goals of providing outstanding clinical care, education and research. The Penn Medicine Executive Committee meets at least six times a year to act on behalf of the Board in all matters unless provided otherwise by law or by Penn Medicine bylaws.

The Penn Medicine Board is appointed by the University Trustees upon nomination by the Chairman of the University Trustees, the Chairman of the Penn Medicine Board and the President of the University, acting jointly. The Board consists of not more than forty persons (excluding *ex-officio* or Emeriti members) who, by their experience and expertise, can further the mission of Penn Medicine. The Penn Medicine Board includes all members of the Penn Medicine Executive Committee, the Provost of the University, the Vice President for Finance and Treasurer of the University, the Chairman of the Board of Overseers of the School of Nursing, and the Chairmen of the Boards of HUP, Pennsylvania Hospital, TCCHHS and Presbyterian, as *ex-officio* members.

The Penn Medicine Board is currently comprised of the following individuals:

**Francis H. Abbott, Jr.<sup>5</sup>**

President  
Abbott Bloodstock  
West Chester, PA

**Madlyn K. Abramson<sup>1,6</sup>**

The Abramson Group  
Blue Bell, PA

**Robert S. Blank, Esq.<sup>8</sup>**

Co-Chairman & Co-Chief Executive Officer  
Whitney Communications Company  
Senior Partner, Whitcom Partners  
New York, NY

**David Blumenthal, MD, MPP<sup>6</sup>**

President  
The Commonwealth Fund  
New York, NY

**John M. Burnham<sup>6</sup>**

Burnham Securities, Inc.  
New York, NY

**John R. Cali<sup>8</sup>**

Member, Cali Futures, LLC  
Cranford, NJ

**Craig R. Carnaroli (ex-officio)<sup>1,2</sup>**

Executive Vice President  
University of Pennsylvania  
Philadelphia, PA

**Richard T. Clark<sup>2,5</sup>**

Retired Board Chairman  
Merck & Company, Inc.  
Whitehouse, NJ

**Catherine Roberts Clifton<sup>3,6</sup>**

Vice President  
Review Publishing, LLC  
Philadelphia, PA

**David L. Cohen, Esq. (ex-officio)<sup>1,7</sup>**

Executive Vice President  
Comcast Corporation  
Philadelphia, PA

**Richard J. Cohen, PhD, FACHE (ex-officio)**

President & Chief Executive Officer  
Public Health Management Corporation  
Philadelphia, PA

**I. Michael Coslov<sup>4,6</sup>**

Chairman  
IMS Management  
Conshohocken, PA

**Henry W. Foster, Jr., MD<sup>8</sup>**

Emeritus Professor & Former Dean & VP for  
Medical Affairs, Clinical Professor (OB-GYN)  
Vanderbilt Meharry Medical College  
Nashville, TN

**Walter J. Gamble, MD<sup>4,5</sup>**

Professor Emeritus  
Harvard University School of  
Medicine  
Brookline, MA

**Marc B. Garnick, MD<sup>4,5</sup>**

Clinical Professor of Medicine  
Harvard Medical School  
Boston, MA

**Stephen D. Golding (ex-officio)<sup>2</sup>**

Vice President for Finance &  
Treasurer  
University of Pennsylvania  
Philadelphia, PA

**Perry Golkin, Esq.<sup>1,2,3</sup>**

Chief Executive Officer  
PPC Enterprises, LLC  
New York, NY

**Richard J. Green<sup>2,3,4</sup>**

Vice Chairman & Chief  
Executive Officer  
FirstTrust Bank  
Conshohocken, PA

**James H. Greene, Jr.<sup>1,2,3</sup>**

True Wind Capital  
San Francisco, CA

**Amy Gutmann, PhD (ex-officio)<sup>1,7</sup>**

President  
University of Pennsylvania  
Philadelphia, PA

**Andrew R. Heyer<sup>1,2</sup>**

Chief Executive Officer and  
Managing Director  
Mistral Equity Partners  
New York, NY

**J. Larry Jameson, MD, PhD (ex-officio)<sup>1</sup>**

Executive Vice President for the  
Health System  
University of Pennsylvania  
Philadelphia, PA

**Barbara McNeil Jordan<sup>1,4,5</sup>**

Chester Springs, PA

**Daniel J. Keating III<sup>4,6</sup>**

Chairman & Chief Executive Officer  
The Keating Group  
Philadelphia, PA

**Dean C. Kehler (ex-officio)<sup>5</sup>**

Managing Partner  
Trimaran Capital Partners, LLC  
New York, NY

**Curtis S. Lane<sup>8</sup>**

Senior Managing Director  
MTS Health Partners, L.P.

**Charles B. Leitner III<sup>1,3,5</sup>**

President  
Berkshire Group  
Boston, MA

**Mariann T. MacDonald<sup>6</sup>**

Naples, FL

**Rosemary Mazanet, MD, PhD<sup>3,4,5</sup>**

President  
Rosemary Mazanet, LLC  
Chestnut Hill, MA

**Randall E. Mehrberg<sup>6</sup>**

Executive Vice President and  
General Counsel  
Vail Resorts, Inc.  
Broomfield, CO

**Leslie Anne Miller, Esq.<sup>4,6</sup>**

Leslie Anne Miller, Esq., LLC  
Philadelphia, PA

**Keith A. Morgan<sup>8</sup>**

Krispy Kreme  
Philadelphia, PA

**Ralph W. Muller (ex-officio)<sup>1</sup>**

Chief Executive Officer  
University of Pennsylvania Health  
System  
Philadelphia, PA

**Stephanie W. Naidoff, Esq.<sup>6</sup>**

Philadelphia, PA

**Raymond G. Perelman<sup>4</sup>**

RPG Holdings Inc.  
Bala Cynwyd, PA

**Vincent Price, PhD (ex-officio)**

Provost  
University of Pennsylvania  
Philadelphia, PA

**James S. Riepe<sup>1,2,5</sup>**

Senior Advisor & Retired Vice  
President  
T. Rowe Price Group, Inc.  
Baltimore, MD

**Ralph J. Roberts**

Founder & Chairman Emeritus  
Comcast Corporation  
Philadelphia, PA

**Thomas J. Sharbaugh, Esq. (ex-officio)<sup>3,6</sup>**

Partner  
Morgan Lewis & Bockius, LLP  
Philadelphia, PA

**Rev. Dr. William J. Shaw (ex-officio)<sup>6</sup>**

Pastor  
White Rock Baptist Church  
Philadelphia, PA

**William S. Smilow<sup>4,5</sup>**

President  
Great Oak Holdings, Inc.  
Philadelphia, PA

**Susan C. Taylor, MD<sup>5</sup>**

Owner  
Society Hill Dermatology  
Philadelphia, PA

**Richard W. Vague<sup>1,2,5</sup>**

Managing Partner  
Gabriel Investments  
President  
The Governor's Woods Foundation  
Philadelphia, PA

**Raymond H. Welsh<sup>4,8</sup>**

Senior Vice President  
UBS Financial Services, Inc.  
Philadelphia, PA

**George A. Weiss<sup>1,4</sup>**

President  
George Weiss Associates  
Chief Executive Officer  
Weiss Multi-Strategy Advisors, LLC  
New York, NY

**Mark O. Winkelman (Chair)<sup>1,2,7</sup>**

3G Capital  
New York, NY

**William W. Wylie, Jr. (ex-officio)<sup>1,6</sup>**

President  
Mitchell Sinkler & Starr  
Philadelphia, PA

**Joseph R. Zebrowitz, MD<sup>3,5</sup>**

Managing Partner  
Devon Hill Capital Partners  
Marion Station, PA

<sup>1</sup> Penn Medicine Executive Committee

<sup>2</sup> Penn Medicine Finance Committee.

<sup>3</sup> Penn Medicine Audit & Compliance Committee.

<sup>4</sup> Penn Medicine Development Committee

<sup>5</sup> Penn Medicine Research & Education Committee

<sup>6</sup> Penn Medicine Clinical Quality Committee

<sup>7</sup> Penn Medicine Compensation Committee.

<sup>8</sup> Emeriti Member, without vote

The Bylaws of the Penn Medicine Board prohibit members of the Board from voting on certain matters in which they have a conflict of interest. Board members with an interest in a proposed transaction or matter are required to disclose such interest and to refrain from voting on, or using their personal influence to impact, the transaction or matter.

## Executive Administration

The key administrators responsible for the Health System are:

**J. LARRY JAMESON, MD, PhD** was appointed *Executive Vice President*, University of Pennsylvania for the Health System and *Dean of the Perelman School of Medicine*, effective July 1, 2011. Before coming to Penn Medicine, Dr. Jameson was the Vice President for Medical Affairs and the Lewis Landsberg Dean of the Feinberg School of Medicine at Northwestern University in Evanston, Illinois from 2007 to 2011. Dr. Jameson began his tenure at Northwestern in 1993 as chief of the Division of Endocrinology, Metabolism and Molecular Medicine, and was the Irving S. Cutter Professor of Medicine and chair of the Department of Medicine at Northwestern from 2000 to 2007. Earlier in his career, he was associate professor of medicine at the Harvard Medical School and chief of the Thyroid Unit at Massachusetts General Hospital. Dr. Jameson was elected to the Institute of Medicine, the American Academy of Arts and Sciences, the American Society of Clinical Investigation and the Association of American Physicians. He has served as president of the Endocrine Society and the Association of American Physicians, as a member of the medical advisory board of the Howard Hughes Medical Institute, as a director of the American Board of Internal Medicine, and as a member of the Jury for the Lasker Award. He has also been the recipient of distinguished awards, including the Van Meter Award from the American Thyroid Association, Thomas G. Sheen Award from the American College of Surgeons, and Oppenheimer and Koch Awards from the Endocrine Society. Dr. Jameson received his doctor of medicine degree with honors and a Ph.D. in biochemistry from the University of North Carolina in 1981.

**RALPH W. MULLER** is *Chief Executive Officer* of the University of Pennsylvania Health System - Prior to joining UPHS, he was, from 1985 to 2001, the President and CEO of the University of Chicago Hospitals and Health System. In 2001-2002, he was a Visiting Fellow at the Kings Fund in London, U.K. In 1985-1986 Mr. Muller also served as the Deputy Dean of the Division of the Biological Sciences at the Pritzker School of Medicine at the University of Chicago. Previously, he had been Budget Director at the University. Before joining the University, Mr. Muller held senior positions with the Commonwealth of Massachusetts. His career with the Commonwealth included serving as Deputy Commissioner of the Massachusetts Department of Public Welfare, where he was the operating officer responsible for the state's major welfare programs, including Medicaid. Mr. Muller received his bachelor's degree in economics from Syracuse University and a master's degree in government from Harvard University. Mr. Muller has served and currently serves on the boards of several national healthcare organizations. He is a Director of the National Committee for Quality Assurance (NCQA). He has served as Commissioner on the Medicare Payment Advisory Commission (MedPAC) and as a Commissioner of The Joint Commission (TJC), Chairman of the Association of American Medical Colleges (AAMC), Chairman of the Council of Teaching Hospitals and Health Systems (COTH), Chairman of the University Healthsystem Consortium (UHC) and Chairman of the National Opinion Research Center at the University of Chicago (NORC). He is a Member of the Institute of Medicine of the National Academies (IOM) and a Fellow of the American Association for the Advancement of Science (AAAS).

**KEITH A. KASPER** is the *Senior Vice President and Chief Financial Officer* for the University of Pennsylvania Health System. In this role he is responsible for leading the Health System's capital and operating budget process, providing financial support in the development of strategic and operating plans, integrating financial services to support UPHS business objectives and missions, leading the implementation and oversight of efficient customer-focused financial processes and systems, and providing appropriate management controls and stewardship of assets. Mr. Kasper joined UPHS as Associate Vice President of Financial Operations and Budget in 2004 and more recently held the position of Vice President Operations, Finance and Budget. Prior to coming to UPHS he was the chief financial



officer of Hahnemann University Hospital in Philadelphia and spent 14 years previously in senior financial roles in hospitals around the country. Mr. Kasper received a bachelor of science in accounting from Saint Joseph's University and a master of business administration from the University of Phoenix. He is a member of the Healthcare Financial Management Association; and was named the 2010 CFO of the year by the Philadelphia Business Journal.

**GARRY L. SCHEIB** is Executive Director of the Hospital of the University of Pennsylvania (HUP), and in March of 2002 assumed the additional role of Senior Vice President of Hospital Operations for the University of Pennsylvania Health System. In July 2004 he was named the Chief Operating Officer of UPHS and continued the role of Executive Director of HUP. Prior to May 1999, Mr. Scheib served as Vice President of Network Operations and was responsible for managing the relationships between UPHS and its affiliated hospitals. Prior to joining UPHS, Mr. Scheib served as President at both Rancocas Hospital and Zurbrugg Hospital, affiliates of the Graduate Health System, Philadelphia, PA. Mr. Scheib has served as a business group president for Mediq, Incorporated, a publicly traded health care services company. In that role, Mr. Scheib was responsible for the hospital management and consulting services, durable medical equipment and home care companies, and the mobile X-ray and EKG services company. Mr. Scheib has also held positions with American Medicorp and Humana, both publicly traded hospital companies. From 2007 to 2009 he served on the American Hospital Association Board, chaired the Regional Policy Board 2, was a member of the AHAPAC Steering Committee and the AHA Operations Committee, and has served as a Regional Policy Board 2 section delegate. Mr. Scheib currently serves as immediate past chair of the Hospital and Healthsystem Association of Pennsylvania Board, is a past chair and current member of the Delaware Valley Healthcare Council Board, and is a past member of the Voluntary Hospitals of America East Board. Mr. Scheib received his Bachelor of Science degree, with honors, and his MBA from Lehigh University.

**KEVIN B. MAHONEY** is *Executive Vice President and Chief Administrative Officer* for the University of Pennsylvania Health System and *Executive Vice Dean for Integrative Services* for the University of Pennsylvania School of Medicine. Previously he served UPHS as the Executive Director of Phoenixville Hospital, Executive Director and Chief Operating Officer at CCA and Director of Network Development. Prior to joining UPHS, Mr. Mahoney was Vice President for Johnson & Higgins, where he provided leadership to the Health Group, including business plan development and management of an extensive client base. He also served as Vice President for Administration for nine years at Bryn Mawr Hospital and as Director of Administrative Services for Episcopal Hospital for three years. A lifelong resident of the Philadelphia area, Mr. Mahoney is actively involved in many community activities. He serves on the Board of Directors at Community Volunteers in Medicine and the Cradle of Liberty Boy Scout Council. He is also on the campaign cabinet at the United Way. He served as an elected member of the Tredyffrin-Easttown School District School Board for 10 years. Mr. Mahoney received his Bachelor of Arts degree in economics from Millersville University of Pennsylvania and his MBA from Temple University.

**PATRICK J. BRENNAN, MD** is the *Chief Medical Officer and Senior Vice President* of the University of Pennsylvania Health System and *Professor of Medicine* at the Perelman School of Medicine and the Hospital of the University of Pennsylvania. As Chief Medical Officer, Dr. Brennan leads implementation of Penn's Blueprint for Quality, a strategic effort to improve clinical accountability and the outcomes of care including the elimination of preventable readmissions and preventable deaths. Dr. Brennan oversees the departments of Healthcare Quality, Patient Safety, Regulatory Affairs, and Medical Affairs. He has developed a Center for Evidence Based Practice to apply scientific evidence to clinical operations. Dr. Brennan is an infectious diseases physician and previously served as Director of Infection Control for 11 years at the Hospital of the University of Pennsylvania and for periods of time held the same post at Penn Presbyterian Medical Center and the Philadelphia VA Medical Center. He also served as the Director of Tuberculosis Control for the City of Philadelphia for seven years. Dr. Brennan is a

fellow of the Infectious Diseases Society of America and The Society for Healthcare Epidemiology of America (SHEA) and in 2008 served as SHEA's president. From 2004 to 2010, Dr. Brennan chaired the Healthcare Infection Control Practices Advisory Committee (HICPAC), which advises the Secretary of the U.S. Department of Health and Human Services and the Centers for Disease Control and Prevention on a broad range of issues related to control of infectious diseases. Dr. Brennan is a member of the Patient Safety Advisory Group of The Joint Commission, an organization that accredits and certifies health care programs in the United States. He also chairs the Board of Directors of the Health Care Improvement Foundation (HCIF), an independent, nonprofit organization that leads health care initiatives aimed at improving the safety, outcomes and care experiences of patients in Southeastern Pennsylvania.

**PHIL A. OKALA** is the *Senior Vice President for Business Development* at the University of Pennsylvania Health System. In this role, he has executive oversight for business development initiatives, marketing, clinical service line integration, network affiliations and Penn Global Medicine Services. Mr. Okala joined Penn Medicine in 2007 as the Chief Administrative Officer for Cancer Services across the Health System; and was subsequently promoted in 2010 to Vice President of Service Line Integration, assuming additional responsibilities with other service lines, before moving to his current position in 2013. Prior to joining Penn Medicine, he was System Vice President of the Cancer Service Line at Geisinger Health System in Danville, PA; Vice President for Clinical Strategic Planning at Roswell Park Cancer Institute in Buffalo, NY; and served as a Senior Management Analyst at MD Anderson Cancer Center in Houston, TX. He has a Masters in Health Care Administration from Texas Woman's University; Bachelors of Science in Economics from the University of Houston; and earned an advanced certification in Healthcare Executive Leadership from The Wharton School of The University of Pennsylvania. He is a Fellow of the American College of Healthcare Executives (FACHE); Fellow in Healthcare Financial Management Association (FHFMA), and Certified by the American College of Medical Practice Executives (CMPE).

**SUSAN E. PHILLIPS** is *Senior Vice President for Public Affairs and Secretary of the Board* of Penn Medicine. In these roles, she manages internal and external communications, media, government and community relations, Trustee governance and public policy. Before coming to Penn in 2001, Ms. Phillips spent four years at Mount Sinai School of Medicine, first as Vice President and Dean for External Relations, then as Senior Vice President and Chief Operating Officer. Previously she was a vice president at the University of Chicago Hospitals and led marketing, government and public affairs. Ms. Phillips has also worked in similar capacities at the City of Hope National Medical Center and Beckman Research Institute in California, and led health care policy efforts for private markets for the Blue Cross and Blue Shield Association in Washington, D.C. Ms. Phillips began her health care career at the Federal Health Care Financing Administration (now Centers for Medicare & Medicaid Services). Ms. Phillips earned a B.S. degree in political science at Indiana University and a master's degree in public administration at the University of Southern California.

**PETER D. QUINN, DMD, MD** is *Vice Dean for Professional Services* at the Perelman School of Medicine, and *Senior Vice President* of the University of Pennsylvania Health System. In this capacity, he is responsible for the financial and operational aspects of CPUP. Prior to his current role, Dr. Quinn served as the Chair of Oral and Maxillofacial Surgery Department at the Hospital of the University of Pennsylvania and as the Schoenleber Professor and Chair of Oral and Maxillofacial Surgery and Pharmacology at the University of Pennsylvania School of Dental Medicine. He has served as Chair of the Medical Board of HUP and received the Lindback Award for Distinguished Teaching and the Alfred Stengel Health System Champion Award for his numerous Health System committee responsibilities. Dr. Quinn's main area of research interest is the surgical treatment of the temporomandibular joint. He has also published widely in the advanced techniques in management of high-flow arteriovenous malformations of the maxillofacial skeleton. He served as the President of the American Society of Temporomandibular Joint Surgeons (2009-2011). Dr. Quinn received his dental degree from the

University of Pennsylvania School of Dental Medicine and his medical degree from the Medical College of Pennsylvania. He completed post-graduate training in Oral and Maxillofacial Surgery at the Hospital of the University of Pennsylvania.

## **BUSINESS OF THE HEALTH SYSTEM**

### **Services**

The Health System offers a full range of acute care services, including highly specialized regional, national and international programs in areas of cancer, cardiology, dermatology, gene therapy, infertility, neurosurgery, oral and maxillofacial surgery, orthopaedics, otorhinolaryngology, transplantations, and urology.

The clinical specialties and subspecialties of the Health System include:

Adolescent Medicine	Orthopaedic Surgery
Anesthesiology	Otorhinolaryngology/ Head & Neck Surgery
Dermatology	Pathology and Laboratory Medicine
Emergency Medicine	Anatomic Pathology
Medicine	Laboratory Medicine
Allergy and Immunology	Neuropathology
Cardiovascular Medicine	Psychiatry
Diabetes	Radiation Oncology
Endocrinology	Radiology
Family Medicine	Breast Imaging
Gastroenterology	Chest
General Internal Medicine	Computed Tomography (CT)
Geriatric Medicine	Gastrointestinal & Genitourinary Radiology
Hematology/Oncology	Interventional Radiology
Human Genetics	Magnetic Resonance Imaging (MRI)
Infectious Diseases	Neuroradiology
Pulmonary and Critical Care Medicine	Nuclear Medicine
Renal- Electrolyte & Hypertension	Orthopaedic and Emergency
Rheumatology	Positron Emission Tomography (PET)
Neonatology	Teleradiology
Nephrology	Ultrasound
Neurology	Rehabilitation Medicine
Neurosurgery	Surgery
Obstetrics/Gynecology	Cardiothoracic Surgery
General Obstetrics and Gynecology	Colon & Rectal Surgery
Gynecologic Oncology	Gastrointestinal Surgery
Maternal/Fetal Medicine	Plastic Surgery
Reproductive Endocrinology & Infertility	Surgical Oncology
Reproductive Genetics	Transplantation Surgery
Ophthalmology	Trauma and Surgical Critical Care
Oral and Maxillofacial Surgery	Urology & Urologic Surgery
Oral Medicine	Vascular Surgery

## Hospital Facilities

The following table sets forth the licensed and staffed bed complements of the hospitals of the Health System as of December 31, 2014:

	Pennsylvania				
	HUP	Hospital	Presbyterian	TCCHHS	Total
Adult Medical/Surgical (1)	533	404	265	213	1,415
Psychiatric	0	42	22	0	64
Rehabilitation	58	--	--	--	58
Detoxification and Skilled Nursing Intensive Care/Intermediate Care	--	--	44	--	44
Nurseries	198	50	--	44	292
Total Adult and Neo-Natal	789	496	331	257	1,873
Newborn Bassinets	32	50	--	32	114
Total Licensed Beds	821	546	331	289	1,987
Total Staffed Beds	789	397	295	211	1,692

<sup>(1)</sup> Includes obstetrics, surgical intensive care unit, medical intensive care unit and critical unit.

## Licensure, Accreditations and Memberships

Each of the hospitals of the Health System is currently licensed by the Pennsylvania Department of Health and accredited by The Joint Commission. Each other component of the Health System is properly licensed by each appropriate licensing agency. In addition to the Joint Commission accreditation, a wide range of Health System programs are periodically surveyed for accreditation by other organizations. The Health System (or its components) is a member in a wide number of organizations including the American Hospital Association, the Hospitals and Healthsystems Association of Pennsylvania, the University Healthsystem Consortium, and the Council of Teaching Hospitals of the Association of American Medical Colleges. HUP was awarded Magnet Recognition by the American Nurses Credentialing Center in June 2007, which was reaffirmed in March 2012. Penn Presbyterian Medical Center and Chester County Hospital have also received the prestigious Magnet designation, in 2012 and 2015, respectively.

## Clinical Training and Research Activities

The clinical departments of the Health System currently support approved training programs for over 1,145 interns, residents and post graduate fellows. These physicians also receive training in other affiliated hospitals, most extensively at the resident level. Residency programs are offered in all the Health System clinical departments. All facilities offer a variety of fellowship programs in specialties and subspecialties such as Cardiology, Gastroenterology, Radiology, Pathology and Psychiatry. While a majority of the clinical training is conducted at the Health System facilities, the Health System facilities participate in rotating residency programs with The Children's Hospital of Philadelphia, the Philadelphia VA Medical Center and other Philadelphia area hospitals.

Each of the medical training programs of the Health System is currently accredited by the Accreditation Council of Graduate Medical Education.

The Health System's hospitals also make available their clinical facilities for use by the School of Nursing of the University of Pennsylvania for both clinical training and research activities. The facilities are also made available to students from other nursing schools. The Health System also conducts other teaching programs in the areas of Pharmacy, Radiology, Perfusion and Pastoral Care.

Research activities are conducted primarily by members of the medical staff, in their capacity as faculty of the Perelman School of Medicine. The Health System believes that the research activity of the Perelman School of Medicine enhances its patient care.

### **Institutional Affiliations**

In addition to its inter-school and inter-departmental affiliations, the Health System maintains many external institutional affiliations. These affiliations provide additional resources for the educational, research, and clinical missions of Penn Medicine. The most significant category of affiliations is related to medical education where the Health System maintains affiliations for undergraduate and graduate medical education (12 and seven institutions, respectively). Members of the standing faculty of the Perelman School of Medicine provide the vast majority of the medical staff at several leading medical institutions adjacent to the HUP and Perelman School of Medicine, including The Children's Hospital of Philadelphia including Children's Seashore House, Philadelphia Child Guidance Clinic and the Philadelphia Veterans Affairs Medical Center. In research, most of the affiliations are investigator-to-investigator. Penn Medicine also maintains significant institution-to-institution relationships with the Howard Hughes Medical Institute and the Wistar Institute.

The Health System also has numerous affiliations with other health enterprises and has established non-corporate affiliations (not owned or controlled by the University) with Chestnut Hill Health Care, Cape Regional Medical Center, Phoenixville Hospital, Shore Memorial Hospital and Bay Health Medical Center among others.

The Abramson Cancer Center of the University of Pennsylvania (the "Cancer Center") is one of the largest providers of cancer care in the Delaware Valley. Founded in the early 1970's, this interdisciplinary institute of the University has over 312 full-time faculty members who share a commitment to excellence in cancer care, research and education. The Cancer Center is one of only 41 cancer centers in the country to be approved and designated as a Comprehensive Cancer Center by the National Cancer Institute, a prestigious status that the Cancer Center has continuously maintained for 30 years. Cancer Center members have obtained annual research funding in excess of \$227 million per year; \$156 million per year of these grants are from the National Institutes of Health. Nearly 12,000 new patients with a diagnosis of cancer were seen in 2013 at the Cancer Center's major clinical facilities at HUP, Presbyterian and Pennsylvania Hospital. In order to meet the Cancer Center's commitment to ensure that patients and physicians in the region have access to the latest cancer treatments and research, the University of Pennsylvania Cancer Network (the "Network") was created in 1991. The Cancer Center has established cooperative relationships in cancer care with leading community hospitals strategically located throughout Southeastern Pennsylvania, New Jersey and Delaware. The Network creates an integrated system of cancer care, so that patients have access to the best possible level of cancer diagnosis, treatment, research and follow-up care regardless of where they live. Physicians, nurses and health care professionals participate in the Cancer Center's continuing education programs and clinical and cancer control research projects.

Current members of the Network include:

<u>Name</u>	<u>Location</u>
Bayhealth Medical Center	Dover, Milford, Delaware
The Chester County Hospital (AS)	West Chester, Pennsylvania
Chestnut Hill Health System (A)	Philadelphia, Pennsylvania
Doylestown Hospital (A)	Doylestown, Pennsylvania
Holy Redeemer Health System	Meadowbrook, PA
Kennedy Health System	Cherry Hill, Washington Twp, Stratford, New Jersey
Lancaster General Hospital	Lancaster, Pennsylvania
Phoenixville Hospital (A)	Phoenixville, Pennsylvania
Shore Memorial Hospital	Somers Point, New Jersey
University of Pennsylvania, Abramson Cancer Center (M)	Philadelphia, Pennsylvania
Cape Regional Medical Center	Cape May, Cape May Court House, New Jersey
Community Medical Center	Toms River, New Jersey
Monmouth Medical Center	Long Branch, New Jersey
<i>A = Radiation Oncology services are provided by full-time Penn Radiation Oncology faculty</i>	
<i>M = Obligated Group Member of Health System</i>	
<i>S= Subsidiary of TCCHHS (M)</i>	

## Centers, Institutes and Specialty Programs

Included below is a listing of Centers, Institutes and other Specialty Programs at the Health System:

### **ABRAMSON CANCER CENTER**

Bone Marrow and Stem Cell Transplantation Program  
Bone or Soft Tissue Sarcomas Program  
Center for Head and Neck Cancer  
Center for Lung Cancer and Related Disorders  
Gastrointestinal Cancer Program  
Gynecologic Cancer Program  
Hematology/Oncology  
Leukemia Program  
Lymphoma Program  
Multiple Myeloma Program  
Neuro-Oncology Program  
Nutrition Program  
Pain and Symptom Management Program  
Pigmented Lesions and Melanoma Program  
Rena Rowan Breast Center  
Skin Cancer Program  
Urologic Cancer Program  
Cancer Risk Evaluation Program

### **ALLERGY**

Penn Asthma Care Program

### **ANESTHESIA**

Anesthesia Pain Medicine Center  
Penn Pain Management Services

### **CARDIOVASCULAR DIVISION**

Adult Congenital Heart Disease Program  
Arrhythmia Evaluation Center  
Complex Aortic Surgery  
Electrophysiology Program  
Heart Failure and Transplant Program  
Minimally Invasive and Robotic Cardiac Surgery Program  
Non Invasive Cardiac Imaging  
Penn Molecular Cardiology Research Center  
Peripheral Vascular Intervention Program  
Preventive Cardiovascular Medicine and Lipid Center  
Vascular Medicine  
Women's Heart and Health

### **CENTER FOR BIOETHICS**

### **CENTER FOR BLOODLESS MEDICINE AND SURGERY**

### **CENTER FOR HUMAN APPEARANCE**

### **DERMATOLOGY**

Phototherapy Unit  
Psoriasis Unit  
Skin Enhancement Center

### **EMERGENCY MEDICINE**

Hyperbaric Medicine  
Occupational Medicine  
Travel Medicine

### **ENDOCRINOLOGY, DIABETES & METABOLISM**

Cox Institute  
Diabetes Education Center  
Franklin Dialysis Center  
Endocrinology Program  
Penn Diabetes Center  
Rodebaugh Clinical Diabetes Center

### **FAMILY PRACTICE AND COMMUNITY MEDICINE**

### **GASTROENTEROLOGY**

Acid Peptic Program  
Digestive and Liver Center  
Endoscopic Services  
Inflammatory Bowel Disease Program  
Motility/Physiology Program  
Pancreatic & Biliary Disease  
Swallowing Program

### **GERIATRICS ADULT CARE FOR ELDERLY (ACE)**

### **HEMATOLOGY / ONCOLOGY**

Developmental Therapeutics Program

### **INFECTIOUS DISEASES**

Antimicrobial Management Program  
Immunodeficiency Program  
Penn Medicine/ID Program in Botswana

### **INTERNAL MEDICINE**

### **JOAN KARNELL CANCER CENTER**

### **NEUROLOGY**

Center for Neuro-Oncology  
Headache Center  
Multiple Sclerosis  
Neurological Institute  
Center for Functional and Restorative Neurosurgery  
Deep Brain Stimulation  
ALS Center  
Parkinson's Disease & Movement Disorders Center  
Penn Epilepsy Center  
Penn Center for Sleep Disorders

### **NEUROSURGERY**

Brain Tumor Center  
Center for Cranial-Base Surgery & Pituitary Tumors  
Peripheral Nerve Disorders  
Spine & Spinal Reconstruction

### **OBSTETRICS & GYNECOLOGY**

Adolescent Gynecology  
Childbirth Education Program  
Family Planning Program  
Healthy Beginnings Plus Program  
Helen O. Dickens Center for Women's Health  
Human Reproduction  
Maternal Fetal Medicine  
Penn Special Delivery Plus Program  
Premenstrual Syndrome Program

### **OPHTHALMOLOGY (SCHEIE EYE INSTITUTE)**

Cornea & External Diseases  
Glaucoma  
Low Vision  
Macular Degeneration  
Neuro-ophthalmology  
Retina & Vitreous Services

### **ORTHOPAEDIC SURGERY**

Neuro-Orthopaedics  
Penn Upper Extremity Center  
Penn Shoulder and Elbow Service  
Penn Hand Service  
Penn Therapy & Fitness  
Penn Foot & Ankle Center  
Penn Joint Replacement  
Spine Center  
Sports Medicine Center

### **OTORHINOLARYNGOLOGY**

Balance Center  
Center for Head & Neck Cancer  
Hearing Sciences Center  
Smell & Taste Center

### **PATHOLOGY & LABORATORY MEDICINE**

Aphaeresis Program

### **PENN PAIN MEDICINE CENTER**

### **PENN TRANSPLANT CENTER**

Heart Transplant Program  
Lung Transplant Program  
Kidney/Pancreas Program  
Liver Transplant Program  
Islet Cell Transplant Program

### **PEDIATRICS**

Neonatology & Newborn Services

### **PENN SLEEP CENTERS**

### **PHYSICAL MEDICINE & REHABILITATION**

Penn Spine Center  
--Falls & Balance Program  
Pulmonary Rehabilitation Program  
Skilled Care Center  
Penn Center For Sleep Disorders

### **PSYCHIATRY**

Psychiatric Emergency Evaluation Center  
Bipolar Research Program  
Center for Cognitive Therapy  
Center for the Treatment and Study of Anxiety  
Depression Research Program  
Geriatric Psychiatry  
Mood & Anxiety Disorders  
Neuropsychiatry  
Weight & Eating Disorders Program

### **PULMONARY & ALLERGY**

Allergy Program  
Asthma Program  
Cystic Fibrosis Program for Adults  
Emphysema Program  
Lung Transplant Program  
Penn Lung Center  
Penn Quit Smoking Program  
Pulmonary Hypertension Program  
Pulmonary Rehabilitation Program  
Sarcoidosis & Beryllium Induced Lung Disease

### **RADIOLOGY**

Computerized Tomography (CT)  
Positron Emission Tomography (PET)  
Magnetic Resonance Imaging (MRI)  
Interventional Radiology

### **RALSTON CENTER**

Institute on Aging  
Alzheimer's Disease Center

### **RHEUMATOLOGY**

### **RENAL-ELECTROLYTE & HYPERTENSION**

Ambulatory Renal Disease Program  
Immune Nephritis Program  
Kidney Stone Evaluation Center  
Diabetic Nephropathy Program  
Renal Outpatient Dialysis Unit  
Renal Transplant Program

### **SURGERY**

Bariatric Surgery Program  
Cardiothoracic  
Colorectal  
General  
Minimally Invasive  
Neurosurgery  
Ophthalmology  
Orthopaedic  
Otorhinolaryngology  
Plastic & Reconstructive  
Surgical Oncology  
Urology  
Vascular

### **TRAUMA CENTER AT PENN**

Level 1 Trauma Center  
Firearm & Injury Center at Penn (FICAP)  
PENNSar

### **UROLOGY**

### **WOUND CARE**

## Historical Utilization Statistics

The following table summarizes certain historical utilization statistics of the Health System for the five fiscal years ended June 30, 2014, and for the six months ended December 31, 2014, and 2013:

	Six Months Ended December 31		Fiscal Year Ended June 30				
	2014	2013	2014	2013	2012	2011	2010
Adult and Neonatal Staffed Beds	1,692	1,667	1,683	1,524	1,530	1,526	1,524
Newborn Bassinets	97	97	97	82	82	82	82
Adult and Neonatal Admissions	41,573	40,004	81,750	73,588	77,378	78,262	80,739
Newborn Admissions	5,470	4,619	9,550	7,707	7,760	7,838	7,581
Adult and Neonatal Patient Days	244,584	237,486	483,711	442,782	450,852	457,030	453,580
Newborn Patient Days	12,871	10,989	22,755	18,873	18,987	19,443	18,611
Adult and Neonatal Average Length of Stay (Days)	5.88	5.94	5.92	6.02	5.83	5.84	5.62
Newborn Average Length of Stay (Days)	2.35	2.38	2.38	2.45	2.45	2.48	2.45
Adult and Neonatal Staffed Beds Occupancy	78.6%	78.3%	78.4%	79.8%	80.6%	82.1%	81.6%
Inpatient Surgical Procedures (I/P)	15,012	14,124	29,078	26,364	27,829	27,769	29,293
Day Surgery Procedures	18,733	17,374	35,562	31,660	31,214	30,714	29,320
Emergency Room Visits	91,770	82,474	172,115	137,987	136,374	132,745	128,618
Outpatient Visits	1,194,853	1,059,360	2,242,196	1,624,817	1,534,720	1,589,733	1,539,819

*Source: Health System records.*

## Service Area and Market Share

The extended metropolitan service area of the Health System includes nine counties in Southeastern Pennsylvania (Philadelphia, Bucks, Chester, Delaware, Montgomery, Berks, Lancaster, Lehigh, Northampton) and nine counties in Southern New Jersey (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem). The area is home to 8.5 million people with projections showing a 1.5% increase in population between 2014 and 2019. The area accounted for 93.2% of all hospital admissions of the Health System in the first half of fiscal year 2015.



<b><u>Market Area</u></b>	<b><u>Percent of Discharges<sup>1</sup></u></b>
City of Philadelphia	45.22%
PA Suburbs (Bucks, Chester, Delaware, Montgomery Counties)	33.01%
External PA Counties (Berks, Lancaster, Lehigh, Northampton Counties)	2.12%
<u>All Other Counties in Pennsylvania</u>	<u>2.25%</u>
<b>Total Pennsylvania</b>	<b><u>82.60%</u></b>
Southern New Jersey (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem Counties)	12.84%
<u>All Other Counties in New Jersey</u>	<u>1.09%</u>
<b>Total New Jersey</b>	<b><u>13.93%</u></b>
Delaware	1.73%
Maryland	0.39%
New York	0.27%
<u>All Other Areas</u>	<u>1.08%</u>
<b>Total</b>	<b><u>100.00%</u></b>

<sup>1</sup> Includes discharges at HUP, PAH, PPMC, and CCH; excludes normal newborns and neonates; represents admit FY15 July through December

The primary community service area (“PCSA”) of the Health System includes four sections in the City of Philadelphia: West Philadelphia, Southwest Philadelphia, South Philadelphia, and Center City Philadelphia. In 2011, this area had a total population of approximately 511,000 and represented 33% of the City of Philadelphia’s population. The PCSA, an important market for the hospitals and physicians in the Health System, accounted for approximately 38% of admissions in fiscal year 2011.

The tertiary and quaternary services of the Health System attract patients from throughout the Middle Atlantic region and across the United States. In fiscal year 2014, the Health System treated patients from almost every county in a four state region that includes Pennsylvania, New Jersey, Delaware and Maryland, as well as all 50 states, the District of Columbia, Puerto Rico, and the US Virgin Islands. The Health System competes with tertiary providers in New York City and Baltimore, as well as other academic medical centers throughout the country.

The Medicare Case Mix Index (“CMI”) provides an indication of the average complexity of the Medicare inpatients treated at a healthcare facility, the greater the CMI the more complex the patient care. The following table indicates the average CMI for hospitals in the Health System as compared to both hospitals identified by the Health System as principal competitors within the general Philadelphia Region, and to certain peer institutions also recognized as “Honor Roll” hospitals by the *U.S. News & World Report*, in each case, excluding specialty hospitals.

Philadelphia Regional Hospitals		Nationally Recognized Peer Institutions	
<u>Hospital</u>	<u>Medicare CMI</u>	<u>Hospital</u>	<u>Medicare CMI</u>
<b>HUP*</b>	2.4510	Cleveland Clinic	2.5230
<b>PPMC</b>	2.2085	<b>HUP*</b>	2.4510
Temple University Hospital	2.0008	University of Washington	2.3881
Cooper University Hospital	1.9317	UCLA Medical Center	2.3512
Thomas Jefferson University Hospital	1.9284	Duke University Hospital	2.2960
Our Lady Of Lourdes Medical Center	1.9205	Mayo Clinic	2.2852
Main Line Hospital Lankenau	1.8136	Brigham and Woman's Hospital	2.2295
St Luke's Hospital Bethlehem	1.8112	University of Pittsburgh Medical Center	2.2192
<b>PAH</b>	1.8050	Barnes – Jewish Hospital	2.2139
Lehigh Valley Hospital	1.7889	NYU Langone	2.2131
Hahnemann University Hospital	1.7293	<b>PPMC</b>	2.2085
Lancaster General Hospital	1.7249	New York Presbyterian Hospital	2.1052
St Joseph Medical Center	1.6543	Massachusetts General	2.0339
Reading Hospital	1.6227	Mt. Sinai Hospital	2.0323
Lancaster Regional Medical Center	1.5928	Cedars-Sinai Medical Center	1.9816
Abington Memorial Hospital	1.5528	Northwestern Memorial Hospital	1.9712
<b>CCH</b>	1.5126	Johns Hopkins Hospital	1.9152
Crozer-Chester Medical Center	1.4930	<b>PAH</b>	1.8050
Virtua Voorhees	1.3977	<b>CCH</b>	1.5126

\*Hospitals marked in bold indicate Health System facilities

Excludes specialty hospitals

Source: Centers for Medicare & Medicaid Services, Case Mix Index, FFY15 Final Rule Data, based on data from FY2013.

### Inpatient Market Share for the 18-County Philadelphia Region

*General Market Share.* The following table indicates the aggregate market share of the hospitals in the Health System and their principal competitors (excluding specialty hospitals) by CMI level for the fiscal year 2014.

### Inpatient Market Share for the 18-County Philadelphia Region

Overall Market Share and by CMI Level

UPHS vs. Select Competitors

#### Case Mix Index Level

Health System/Hospital	# Hospitals Included*	Overall Share	Case Mix Index Level					
			<2.0	>2.0	>2.5	>3.0	>3.5	>4.0
Univ of PA Health System	4	12.12%	11.56%	14.69%	16.43%	16.63%	17.50%	19.08%
Main Line Health System	4	8.44%	8.42%	8.54%	7.80%	8.05%	7.76%	6.73%
Jefferson Health System	2	6.63%	6.07%	9.17%	9.04%	8.57%	9.27%	9.50%
Temple Health System	3	5.82%	5.82%	5.83%	6.36%	6.21%	6.49%	7.08%
Abington Health System	2	5.09%	5.17%	4.71%	4.19%	4.18%	4.12%	3.95%
Crozer Keystone	4	4.20%	4.45%	3.11%	3.07%	2.91%	2.85%	3.03%
Virtua Health **	4	4.14%	4.32%	3.26%	2.53%	2.28%	2.23%	1.94%

Sources: Pennsylvania Health Care Cost Containment Council, New Jersey Department of Health (NJDHSS), Maryland Health Services Cost Review Commission (HSCRC) and New York Statewide Planning and Research Cooperative System (SPARCS).

*Excludes all pediatric, psychiatric and rehabilitation hospitals, as well as newborn, psychiatric, rehabilitation and certain other patient discharges.*

Jefferson Health System: Jefferson University Hospitals (Thomas Jefferson University Hospital; TJUH-Methodist Division)

Main Line Health: Lankenau Hospital; Bryn Mawr; Paoli Memorial Hospital; Riddle Memorial Hospital

Virtua Health: Virtua-Voorhees; Virtua-Berlin; Virtua-Marlton; Virtua-Burlington County.

Crozer Keystone: Crozer Chester Medical Center; Taylor Hospital; Delaware County Memorial Hospital; Springfield Hospital

Temple Health System: Temple University Hospital; Jeanes Hospital; Fox Chase Cancer Center

Abington Health System: Abington Memorial Hospital; Lansdale Hospital

*\*\* New Jersey state data is not currently available; data included for Virtua Health represents information for FY13, which is the last available historical data*

*Market Share by Service Line.* The following table reflects the market share of the Health System's hospitals by service line within the 18-county Philadelphia market based upon the most recently available data (excluding New Jersey hospitals for which data is not available).

**Inpatient Market Share by Service Line**  
**18-County Philadelphia Market, FY2014**

	HUP	PAH	PPMC	CCH
Transplant	34%	0%	0%	0%
Cardiothoracic Surgery	13%	2%	7%	2%
Neurosurgery	10%	7%	0%	0%
Hematology/Oncology	10%	4%	2%	1%
Thoracic Surgery	9%	2%	4%	1%
Obstetrics - Non Delivery	9%	8%	0%	2%
Otorhinolaryngology	9%	2%	2%	1%
General Surgery	8%	2%	2%	2%
Plastic Surgery	8%	4%	2%	2%
Oral Max Surgery	8%	2%	2%	1%
Gynecology	7%	8%	1%	2%
Obstetrics - Delivery	6%	7%	0%	4%
Cardiology - Interventional	5%	3%	6%	2%
Vascular Surgery	5%	3%	3%	2%
Endocrinology	5%	2%	2%	1%
Dermatology	5%	2%	2%	1%
Trauma / Injury	5%	1%	1%	1%
Gastrointestinal	4%	2%	1%	2%
General Medicine	4%	2%	2%	3%
Neurology	4%	1%	1%	1%
Urology	4%	2%	2%	2%
Cardiology - Non Invasive	3%	2%	3%	2%
Ophthalmology	3%	1%	3%	1%
Nephrology	3%	2%	2%	1%
Orthopaedics	3%	3%	4%	1%
Pulmonary	2%	1%	1%	1%

Source: Pennsylvania Health Care Cost Containment Council, July 2013 – Dec 2013

*Excludes all pediatric, psychiatric and rehabilitation hospitals, as well as newborn, psychiatric, rehabilitation and certain other patient discharges.*

## CERTAIN FINANCIAL INFORMATION

### Summary of Financial Performance

The following table sets forth the summaries of combined revenues and expenses for the six months ended December 31, 2014 and 2013, and for the five fiscal years ended June 30, 2014. The information set forth below with respect to the five fiscal years ended June 30, 2014 is derived from the audited combined statements of operations for the Health System for such years. The information set forth below with respect to the six months ended December 31, 2014 and 2013 is unaudited. In the opinion of management of the Health System, such unaudited financial information has been prepared on a basis consistent with the preparation of the Health System's annual financial statements and includes all adjustments necessary to present fairly the information contained therein.

The summary information set forth below (in thousands) should be read in conjunction with the combined financial statements of the Health System for the fiscal years ended June 30, 2014 and 2013, including the notes thereto, included as APPENDIX B to this Official Statement.

	Six Months Ended December 31 (unaudited)		Fiscal Year Ended June 30,				
	2014	2013	2014	2013	2012	2011	2010
Net Patient Service Revenue	\$2,120,951	\$1,947,182	\$3,951,103	\$3,487,651	\$3,374,627	\$3,187,845	\$2,995,027
Provision for Bad Debt	(115,830)	(123,787)	(239,649)	(191,479)	(182,043)	(143,593)	(149,666)
Net patient service revenue less provision for bad debt	2,005,121	1,823,395	3,711,454	3,296,172	3,192,584	3,044,252	2,845,361
Other Operating Revenue	128,922	95,713	227,772	204,806	189,218	179,318	168,305
Total Operating Revenue	2,134,043	1,919,108	3,939,226	3,500,978	3,381,802	3,223,570	3,013,666
Salaries and Wages	896,324	811,836	1,658,234	1,483,747	1,429,484	1,357,789	1,308,577
Employee Benefits	239,802	226,492	462,171	456,806	405,587	361,437	311,665
Supplies and Service	638,312	551,188	1,173,293	1,040,459	992,247	934,876	859,705
Utilities	13,769	13,928	32,537	27,465	30,604	33,416	31,723
Perelman School of Medicine Support	10,133	10,207	21,411	21,966	20,675	20,379	21,133
Malpractice	55,623	60,054	105,623	108,115	115,650	124,233	110,541
Total Operating Expenses before Interest, Taxes, Depreciation and Amortization, Earnings before Interest, Taxes, Depreciation and Amortization	1,853,963	1,673,705	3,453,269	3,138,558	2,994,247	2,832,130	2,643,344
Less:							
Interest Expense	14,417	18,719	36,731	37,737	37,298	28,285	27,637
Depreciation & Amortization	83,382	77,381	157,836	139,551	133,077	126,826	117,517
Excess of Revenues Over Expenses from Operations	182,281	149,303	291,390	185,132	217,180	236,329	225,168
Non-Operating Gains/(Losses):							
Interest and dividends	13,290	12,025	22,780	24,541	23,411	26,927	32,459
Net Realized Gains/(Losses), Contributions and Other Support	54,047	24,542	74,469	56,656	16,748	42,910	37,608
Unrealized Gain/(Loss) on Alternative Investments	(25,405)	26,321	49,926	30,009	(2,247)	40,889	38,415
Excess of Revenues Over Expenses	224,213	212,191	438,565	296,338	255,092	347,055	333,650
Unrealized Gain/(Loss) on Investments	(19,156)	51,223	57,911	36,192	(7,990)	43,808	(156)
Transfers	(54,118)	(52,221)	(113,527)	(90,930)	(102,606)	(120,788)	(91,937)
Reclassifications for Capital Purposes	7,131	263	730	525	1,140	24,318	6,151
Chester County Health System Member Substitution	-	85,415	130,308	-	-	-	-
Pension and other postretirement plan adjustments	-	-	(37,935)	199,771	(270,156)	37,434	(89,990)
Increase in Unrestricted Net Assets	\$ 158,070	\$ 296,871	\$ 476,052	\$ 441,896	\$ (124,520)	\$ 331,827	\$ 157,718

## Sources of Revenue

In addition to serving as the leading health care system in its primary service area, the Health System, through its breadth of tertiary care centers of excellence, draws high acuity patients from throughout eastern Pennsylvania, southern New Jersey and Delaware.

The following is a percentage breakdown of payer mix based on total adult patient discharges for the five fiscal years ended June 30, 2014 and for the six months ended December 31, 2014 and December 31, 2013:

	Six Months Ended December 31		Fiscal Year Ended June 30,				
	2014	2013	2014	2013	2012	2011	2010
Medicare	27%	25%	26%	25%	25%	24%	22%
Managed Care <sup>1</sup>	50%	53%	50%	52%	53%	54%	55%
Blue Cross <sup>2</sup>	15%	13%	13%	12%	12%	12%	12%
Commercial Insurance	2%	2%	4%	2%	2%	2%	2%
Medicaid	5%	6%	5%	5%	5%	5%	5%
Self Pay and Other	1%	1%	2%	4%	3%	3%	4%
	100%	100%	100%	100%	100%	100%	100%

<sup>1</sup> Includes all managed care programs including Medicaid and Medicare managed care programs.

<sup>2</sup> Includes only traditional indemnity coverage and Personal Choice® plans.

Source: Health System records.

The Health System has contracts with the two largest non-governmental payers in the Philadelphia healthcare market, Independence Blue Cross (“IBC”) and Aetna U.S. Healthcare (“Aetna”). Payments under the IBC contract, which covers all subscribers under IBC’s traditional indemnity and managed care plans, represented approximately 32% of total net patient revenue of the Health System, and payments under the Aetna contract represented approximately 10% of total net patient service revenue for the Health System, in each case for the fiscal year ended June 30, 2014.

The IBC contract was executed in June 2012 and has an initial four-year term expiring on July 1, 2016. Under the IBC contract, the Health System is paid for inpatient services to IBC traditional subscribers and managed care subscribers on a per case basis with annual increases for inflation and bonus incentive opportunities based on quality and outcomes. Payment for outpatient services are generally made on a fee schedule basis.

The Aetna contract was executed in June 2010 and has an initial five-year term expiring on July 1, 2015. The Health System and Aetna are currently in negotiations for a new contract to replace the one slated to expire on July 1, 2015. Rates for inpatient and outpatient services receive annual increases for inflation.

### **Transfer of Funds to Perelman School of Medicine**

During the fiscal years ended June 30, 2014 and June 30, 2013, the Members of the Obligated Group made aggregate transfers of funds to the Perelman School of Medicine of \$110,926,000 and \$87,351,000, respectively. In addition, the Health System’s results of operations include expenses representing academic operating support to the clinical departments of the Perelman School of Medicine. The Health System anticipates similar support to the Perelman School of Medicine in fiscal year 2015.

### **Long Term Debt of the Health System**

As of December 31, 2014, the Health System was obligated in respect of \$850,800,000 aggregate principal amount of long-term indebtedness incurred through the issuance of revenue bonds of the Authority issued under the Bond Indenture, equally and ratably payable from loan payments from the Members of the Obligated Group under the Loan Agreement and secured by additional Master Notes issued under the Master Indenture. As of December 31, 2014, the Members of the Obligated Group were

additionally obligated with respect to other long-term debt (including with respect to other revenue bonds issued by the Authority) for \$63,742,000, constituting general obligations of one or more Members of the Obligated Group, but which are not payable from or secured by Master Notes issued under the Master Indenture.

The following table indicates the outstanding long-term indebtedness of the Health System at December 31, 2014:

<b>Outstanding Long-Term Debt (at December 31, 2014)</b>	
<b>Description</b>	<b>Principal Amount</b>
<b><i>Parity Debt:</i></b>	
PHEFA University of Pennsylvania Health System Revenue Bonds, Series A of 2005	\$ 133,855,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series B of 2005	25,185,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series A of 2008	81,210,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series B of 2008	149,230,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series A of 2009	74,370,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series A of 2011	150,000,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series A of 2012	136,950,000
PHEFA University of Pennsylvania Health System Revenue Bonds, Series A of 2014	<u>100,000,000</u>
<b>Total Parity Debt</b>	<b><u>\$850,800,000</u></b>
<b><i>Other Debt:</i></b>	
Build-to-suit lease	47,656,000
Mortgages	16,086,000
<b>Total Other Debt</b>	<b><u>\$ 63,742,000</u></b>
<b><i>Unamortized Debt Premium/(Discount)</i></b>	<b><u>12,450,000</u></b>
<b>TOTAL LONG-TERM DEBT</b>	<b><u>\$926,992,000</u></b>

For a description of the Health System's aggregate annual debt service requirements see "HEALTH SYSTEM DEBT SERVICE REQUIREMENTS" in the forepart of this Official Statement.

## **Future Capital Expenditures**

For fiscal years 2015 through 2020, the Health System expects to make capital expenditures of approximately \$2.395 billion. Included in the five-year capital spending plan is the continued revitalization of PPMC with the 178,000 square foot Pavilion for Advanced Care. The pavilion serves as the new home to Penn Medicine's level-one trauma center, which relocated from HUP. The building houses the interdisciplinary orthopedic institute, improved perioperative and operating suites and an expanded Emergency Room. The capital budget also includes the removal of the Penn Tower facility and plans for replacement beds and ancillary services at HUP, the development of several off-site practice locations, as well as significant investments the Health System plans to make in information technology and clinical interventional equipment (e.g., surgical robots and diagnostic equipment).

## **Hedging Transactions and Derivative Instruments**

In the normal course of its business, the Health System may enter into interest rate swap agreements or other hedging transactions to hedge cash flows, reduce costs, hedge against floating interest rate risk, alter the relative amounts of its fixed and floating rate obligations or otherwise manage risk.

As of December 31, 2014, the Health System was obligated with respect to three interest rate swap agreements with notional amounts of approximately \$105.8 million, \$30.0 million and \$30.0

million, respectively. The \$105.8 million agreement was entered into in order to synthetically convert the 2008 Series A Bonds to a fixed rate. The notional amount, amortization and term of the swap are identical to the 2008 Series A Bonds. The remaining two \$30.0 million agreements were entered into for the purpose of reducing total interest expense by synthetically converting a portion of the Health System's 2009 Series A Bonds from a fixed rate debt to variable rate debt. The amortization and term of the swaps are identical to the 2009 Series A Bonds. All swaps constitute effective hedges and the payments by the Health System with respect to these agreements are reflected as reductions or additions to interest expense.

The Health System may in the future enter into other similar financial arrangements, including additional interest rate swaps or similar hedging arrangements.

## **Management's Discussion of Recent Financial Performance**

### *Financial Results for the Fiscal Year Ended June 30, 2014*

Unrestricted net assets increased from \$1.581 billion to \$2.057 billion, an increase of \$476.1 million (30.1%) for the fiscal year ended June 30, 2014. This was primarily the net result of positive excess of revenue over expenses of \$438.6 million and TCCHHS membership substitution of \$130.3 million, which was partially offset by a negative pension and post retirement plan adjustment of \$37.9 million and transfers to the Perelman School of Medicine and the University of \$113.5 million.

The excess of revenue over expenses from operations was \$291.4 million for the fiscal year ended June 30, 2014, reflecting an increase of \$106.3 million from the prior fiscal year, and the fourteenth consecutive year of positive operating performance, exclusive of investment income. Including non-operating gains (interest and dividends, net realized gains, contributions and other support and unrealized gains on alternative investments) the total excess of revenue over expenses was \$438.6 million.

Total operating revenue for the fiscal year ended June 30, 2014 was \$3.939 billion, compared to \$3.501 billion for the prior fiscal year, reflecting an increase of \$438 million or 12.5%. Net patient service revenue less provision for bad debt totaled \$3.711 billion, compared to \$3.296 billion for the prior fiscal year, reflecting an increase of \$415 million (12.6%). FY 2014 included ten months of TCCHHS operations which became part of the Health System during the fiscal year. Net patient service revenue was also positively impacted by activity growth in targeted high intensity programs such as radiology, cardiac surgery, transplant, oncologic gynecology and outpatient surgery. With the addition of TCCHHS, emergency room visits increased by 24.7%, ambulatory surgeries increased by 11.1%, and outpatient visits (net of primary care network visits) increased by 38.0%.

Total operating expenses for the fiscal year ended June 30, 2014, were \$3.648 billion, reflecting a \$332 million (10.0%) increase over the prior fiscal year. Salaries and wages totaled \$1.658 billion and were higher than the prior fiscal year by \$174 million (11.8%) as a result of fiscal year 2014 base wage increases (3%), additional months of TCCHHS operations, selected additional market-based nursing and allied health personnel increases, and increased patient volumes. Although labor costs have increased, salaries as a percentage of operating revenue were lower than the prior fiscal year, and overall productivity measures such as full time equivalents per adjusted occupied bed remained relatively constant with the prior fiscal year and continue to be extremely competitive to peer group benchmarks.

Employee benefit expense totaled \$462 million and was higher than the prior fiscal year by \$5.4 million (1.2%) primarily as a result of stable medical expenses and pension costs due to favorable pension plan performance. Supplies and utility expenses totaled \$1.206 billion and were higher than the prior fiscal year by \$138 million (12.9%) as a result of inflationary increases, as well as increased supply



utilization. The increase in supply utilization is particularly attributable to the increased use of drug and blood products due to increased volumes and patient acuity levels. Malpractice expense totaled \$106 million and was lower than the prior fiscal year expense of \$108 million by \$2 million (2.3%). The Health System obtains a comprehensive, independent actuarial analysis of its medical malpractice liabilities each year along with quarterly updates to validate the adequacy of those self-insured reserves. The information is also used to provide a measure for establishing current fiscal year reserves along with any necessary quarterly adjustments. This analysis is validated quarterly for the purpose of reserve validation. Interest expense totaled \$37 million and was consistent with prior year. Perelman School of Medicine support expense totaled \$21 million and was consistent with the prior year. Additionally, the provision for doubtful accounts totaled \$240 million and was higher than the prior fiscal year by \$48 million (25.2%) due to increased revenues and additional TCCHHS operations.

As of June 30, 2014, unrestricted financial assets, consisting of cash, board-designated assets and investments, totaled \$2.301 billion as compared to \$2.151 billion at June 30, 2013, or an increase of \$150 million (7.0%). Days cash on hand at June 30, 2014 were 241, as compared to 247 at June 30, 2013. The decrease in days cash on hand was primarily related to the timing of construction projects.

The Health System days revenue outstanding in accounts receivable at June 30, 2014 were slightly higher at 39 days revenue outstanding, as compared to 37 days at June 30, 2013. The change is primarily due to timing of year-end cash collections.

#### *Financial Results for the Six Months Ended December 31, 2014*

Unrestricted net assets increased from \$2.057 billion at June 30, 2014 to \$2.215 billion at December 31, 2014, an increase of \$158 million (7.7%) for the six-month period, primarily as a result of positive operating performance and equity market performance.

The excess of revenue over expenses from operations for the six-month period ended December 31, 2014 totaled \$182.3 million. Including non-operating gains (interest and dividends, net realized gains, contributions and other support and unrealized losses on alternative investments), the total of revenue over expenses was \$224.2 million, reflecting a \$12.0 million increase from the corresponding prior fiscal year six-month period.

Total operating revenue for the six-month period ended December 31, 2014 was \$2.134 billion, compared to \$1.919 billion for the prior fiscal year six-month period, reflecting an increase of \$215 million (11.2%). Net patient service revenue totaled \$2.005 billion, compared to \$1.823 billion for the corresponding prior fiscal year six-month period. Net patient revenue reflects the additional two months of TCCHHS operations in FY 15. Excluding TCCHHS, adjusted admissions (admissions adjusted for outpatient activity) were 2.5% higher than the prior fiscal year six-month period. Other outpatient activity remains strong in high acuity non-surgical areas with increases in chemotherapy and radiation oncology of 16.9% and 2.2% respectively from the prior fiscal year six-month period.

Total operating expenses for the six-month period ended December 31, 2014 were \$1.952 billion, reflecting a \$182 million (10.3%) increase over the prior fiscal year six-month period. The increase was primarily comprised of the two additional months of TCCHHS operations, higher expense levels within salaries and wages, benefits and supplies expenses. Salaries and wages totaled \$896 million and were higher than the prior fiscal year six-month period by \$84 million (10.3%), as a result of fiscal year 2014 base wage increase and TCCHHS. Overall productivity measures, such as full time equivalents per adjusted occupied bed, remained relatively constant with the prior fiscal year six-month period and continue to be extremely competitive to peer group benchmarks. Employee benefit expense totaled \$240 million and was higher than the prior fiscal year six-month period by \$13 million (5.8%), primarily as a

result of higher salary expense. Supplies and utility expenses totaled \$652 million and were higher than the prior fiscal year six-month period by \$87 million (15.4%), as a result of increased supply largely due to increased volumes and patient acuity levels. Malpractice expense totaled \$56 million, a decrease of \$4 million (7.4%) from the prior fiscal year six-month period .

Unrestricted financial assets, consisting of cash and cash equivalents, board designated funds and unrestricted investments decreased from \$2.301 billion at June 30, 2014 to \$2.243 billion at December 31, 2014, a decrease of \$58 million (2.5%). Correspondingly, day's cash on hand decreased from 241 days at June 30, 2014 to 223 days at December 31, 2014.

## **ADDITIONAL HEALTH SYSTEM INFORMATION**

### **Employees**

At December 31, 2014, the Health System had 18,705 employees. Employees of certain components of the Health System are covered by three collective bargaining agreements representing employees at certain facilities as follows (numbers of employees are at December 31, 2014):

- 95 physical plant employees at HUP are represented by the International Union of Operating Engineers, Local 835 (AFL-CIO) under a collective bargaining agreement that expires on June 30, 2016;
- 12 physical plant employees at Penn Medicine at Rittenhouse are represented by the International Union of Operating Engineers, Local 835 (AFL-CIO) under a collective bargaining agreement that expires on September 30, 2016; and
- 20 licensed practical nurses and 62 certified nursing assistants employed by the Penn Center for Rehabilitation and Care, a wholly-owned subsidiary of PPMC, are represented by the National Union of Hospital and Healthcare Employees, Local 1199C, under collective bargaining agreements that expire on June 30, 2018.

### **Retirement Plans**

Effective July 1, 2011, retirement benefits were provided to UPHS employees through a new defined contribution plan (UPHS DC). Employer contributions to the defined contribution plan are based on a formula as defined by the plan document. Contributions amounted to \$17,395,000 and \$14,193,000, in 2014 and 2013, respectively.

CCA and certain other UPHS entities have a noncontributory defined contribution retirement plan covering all eligible employees, which was frozen to new entrants effective July 1, 2010. Employees enrolled in this plan were moved into the new UPHS defined contribution plan effective January 1, 2011. CCA also has a non-qualified supplemental retirement plan that provides retirement benefits to a select group of physician employees. Contributions to both of these plans are based upon the annual compensation of the eligible employees. Retirement plan expense for these plans was \$672,000 and \$600,000 for 2014 and 2013, respectively.

Retirement benefits are provided for CPUP physicians and certain administrative personnel through payments to the University of \$25,197,000 and \$23,790,000 in 2014 and 2013, respectively.

TCCHS has a number of affiliates with either a 403(b) or 401(k) defined contribution savings plan design. All affiliates share the same employer discretionary matching process; each affiliate will

match 50% of an employee's contribution (subject to the IRS annual contribution limit) up to a total of 4% of the employee's salary in a given year. Total contributions to the plans were \$1,405,791 from September 1, 2013 through June 30, 2014.

TCCHS also has a defined contribution profit sharing plan covering all eligible employees, as defined. TCCHS may choose to contribute a discretionary amount to the plan each year. No amount was funded.

The Health System has a noncontributory defined benefit pension plan for substantially all full-time, non-faculty employees hired prior to July 1, 2010 who elected participation in this plan rather than in the Health System defined contribution plan. Benefits under the plan generally are based on an employee's years of service and compensation during the years preceding retirement. The current funding policy for the Plan is to contribute an amount equal to the greater of pension expense for the fiscal year determined in accordance with generally accepted accounting and actuarial principles and the minimum required ERISA contribution. At June 30, 2014, plan assets of \$1,225,411,000 were less than the projected benefit obligation of \$1,652,199,000 by \$426,788,000, as calculated in accordance with Accounting Standard Codification 715.

In addition to providing pension benefits, HUP, CPUP, PPMC, PAH and corporate services of UPHS provide certain healthcare and life insurance benefits (Other Postretirement Employee Benefits or OPEB) for retired employees. Only a limited number of employees may become eligible for such benefits if they reach retirement age while working for the entity. These and similar benefits for active and certain retired employees are provided through insurance contracts. UPHS uses a measurement date of June 30 for their defined benefit and postretirement health care benefit plans.

## **Insurance**

The assets of the University, including assets of the Health System, are protected by a comprehensive program of insurance. The University's primary general liability coverage is reinsured through a group captive known as "Genesis," owned by a group of seventeen universities who collectively pool their risks. The general liability coverage is placed with a reciprocal risk retention group known as "Pinnacle," which is also owned by the same seventeen universities. The general liability limit in the amount of \$2,000,000 is subject to a \$500,000 deductible, with the risk retention group and the captive covering the next \$1,500,000 of exposure on a quota share basis. Automobile liability is insured with a commercial carrier in which there is a retention that is insured through a policy written by "Pinnacle". The University maintains total coverage of \$2.0 billion for property, plant and equipment, with a \$500,000 deductible per incident for University properties and \$100,000 deductible per incident for Health System properties. In addition to Genesis and Pinnacle, the University's present coverage includes excess liability coverage, property insurance, workers' compensation, crime insurance, directors and officers insurance, and fiduciary liability, pollution liability, and cyber liability. The University conducts periodic reviews of its insurance needs in an effort to maintain adequate coverage at reasonable cost.

## **Malpractice Insurance**

Act 111, the Pennsylvania Health Care Services Malpractice Act, requires every health care provider (hospitals, physicians and nurse mid-wives) to insure their medical malpractice liability exposure by purchasing commercial insurance or qualifying as a self-insurer. This statute, as amended by Act 13, provides for a Medical Care Availability and Reduction of Error Fund (the "MCare Fund") which provides coverage for medical malpractice awards against a health care provider in excess of the primary limits with limits of \$500,000 per incident and \$1,500,000 in the aggregate. The primary limit of coverage prescribed by the statute is currently \$500,000 per occurrence per health care provider and

\$1,500,000 annual aggregate for physicians and nurse mid-wives, and \$2,500,000 annual aggregate for a hospital. Nurse practitioners, physician assistants, clinical nurse specialists, perfusionists, occupational therapists and physical therapists also are required to secure coverage with limits of \$1 million per incident and \$3 million annual aggregate. The Health System insures these exposures through Franklin Casualty Insurance Company RRG, a wholly owned insurance subsidiary included in the combined financial statements of the Health System that has been operational since July 1, 1997. The company insures the primary medical professional liability risk of employed physicians, nurse midwives, nurse practitioners, physician assistants, clinical nurse specialists, perfusionists, physical therapists, occupational therapists and owned hospitals. Franklin Casualty Insurance Company, RRG is ultimately responsible for payment of malpractice awards within the primary limits and the prescribed limits for nurse practitioners, physician assistants, clinical nurse specialists, perfusionists, occupational therapists and physical therapists. The Health System's exposure in excess of coverage provided by the MCare Fund or the limits for nurse practitioners, physician assistants, occupational therapists and physical therapists is covered by a program that utilizes self retention and commercial insurance.

### **Litigation**

The nature of the business of the Health System generates claims and litigation against the Members of the Obligated Group. At any given time, the Members of the Obligated Group will have pending medical malpractice actions and may be subject to other claims arising in the ordinary course of business. In the opinion of management, the Health System maintains adequate insurance and/or other financial reserves to cover the estimated potential liability for damages in these cases, or, to the extent such liability is uninsured, adverse decisions will not have a material adverse effect on the financial position or operations of the Health System.

## **APPENDIX B**

### **COMBINED FINANCIAL STATEMENTS OF THE HEALTH SYSTEM FOR THE FISCAL YEARS ENDED JUNE 30, 2014 AND JUNE 30, 2013**

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UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM

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REPORT ON AUDITS OF COMBINED FINANCIAL STATEMENTS  
AND COMBINING SUPPLEMENTARY DATA

For the years ended June 30, 2014 and 2013

**University of Pennsylvania Health System**  
**Table of Contents**  
**June 30, 2014 and 2013**

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	<b>Page(s)</b>
Report of Independent Auditors	1-2
Combined Financial Statements:	
Combined Balance Sheets	3
Combined Statements of Operations	4
Combined Statements of Changes in Net Assets	5
Combined Statements of Cash Flows	6
Notes to Combined Financial Statements	7-49
Supplementary Combining Information:	
Combining Balance Sheets	50-51
Combining Statements of Operations	52-53
Combining Statements of Changes in Net Assets	54-55
Combining Statements of Cash Flows	56-57





## **Independent Auditor's Report**

To the Trustees of the University of Pennsylvania:

We have audited the accompanying combined financial statements of the University of Pennsylvania Health System (UPHS) which comprise the combined balance sheets as of June 30, 2014 and June 30, 2013 and the related combined statements of operations, of changes in net assets and of cash flows for the years then ended.

### ***Management's Responsibility for the Combined Financial Statements***

Management is responsible for the preparation and fair presentation of the combined 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 combined financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express an opinion on the combined 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 combined financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combined financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the combined financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to UPHS' preparation and fair presentation of the combined 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 UPHS' 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 combined 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 combined financial statements referred to above present fairly, in all material respects, the financial position of UPHS at June 30, 2014 and 2013, 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.



### ***Other Matter***

Our audit was conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The combining information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the combined financial statements. The combining information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves and other additional procedures, in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining information is fairly stated, in all material respects, in relation to the combined financial statements taken as a whole. The combining information is presented for purposes of additional analysis of the combined financial statements rather than to present the financial position, results of operations and cash flows of the individual entities and is not a required part of the combined financial statements. Accordingly, we do not express an opinion on the financial position, results of operations and cash flows of the individual entities.

A handwritten signature in black ink that reads "PricewaterhouseCoopers LLP". The signature is written in a cursive, flowing style.

PricewaterhouseCoopers, LLP  
Philadelphia, PA  
September 19, 2014

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combined Balance Sheets at June 30, 2014 and 2013  
(thousands of dollars)

ASSETS			LIABILITIES AND NET ASSETS		
	2014	2013		2014	2013
Current:			Current:		
Cash and cash equivalents	\$ 697,264	\$ 738,771	Accounts payable	\$ 130,045	\$ 107,693
Patient receivables, net of reserve for uncollectible accounts of \$177,599 (2014) and \$148,345 (2013)	399,821	330,968	Accrued expenses	401,118	383,632
Third party payer receivables	1,669	8,776	Current portion of long-term debt	42,044	86,500
Due from the University of Pennsylvania	1,008	-	Due to the University of Pennsylvania	-	119
Other current assets	100,624	80,094	Third party payer settlements	46,348	35,270
Total current assets	1,200,386	1,158,609	Total current liabilities	619,555	613,214
Assets whose use is limited:			Long-term debt, net of current portion	917,425	796,887
Held by trustees	8,546	13,586	Other liabilities	763,398	750,629
RRG\Captive	120,181	114,569	Third party payer settlements, net of current	5,022	209
Designated	1,147,562	975,684	Pension and post-retirement benefit liability	581,778	538,630
Donor-restricted investments	536,170	452,626	Total liabilities	2,887,178	2,699,569
Donor-restricted pledges	5,630	948	Net assets:		
	1,818,089	1,557,413	Unrestricted	2,057,377	1,581,325
Investments	456,407	436,467	Temporarily restricted	380,837	321,370
Property and equipment, net	1,852,090	1,471,979	Permanently restricted	165,043	137,845
Other assets	163,463	115,641	Total net assets	2,603,257	2,040,540
Total assets	\$ 5,490,435	\$ 4,740,109	Total liabilities and net assets	\$ 5,490,435	\$ 4,740,109

See accompanying notes to combined financial statements.

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combined Statements of Operations  
for the years ended June 30, 2014 and 2013  
(thousands of dollars)

	<u>2014</u>	<u>2013</u>
Revenues:		
Net patient service revenue	\$ 3,951,103	\$ 3,487,651
Provision for bad debts	<u>(239,649)</u>	<u>(191,479)</u>
Net patient service revenue less provision for bad debts	3,711,454	3,296,172
Other revenue	<u>227,772</u>	<u>204,806</u>
Total revenues	<u>3,939,226</u>	<u>3,500,978</u>
Expenses:		
Salaries and wages	1,658,234	1,483,747
Employee benefits	462,171	456,806
Supplies and expenses	1,205,830	1,067,924
Depreciation and amortization	157,836	139,551
Malpractice	105,623	108,115
Interest	36,731	37,737
School of Medicine (SOM) support	<u>21,411</u>	<u>21,966</u>
Total expenses	<u>3,647,836</u>	<u>3,315,846</u>
Excess of revenue over expenses from operations	291,390	185,132
Non-Operating Gain/(Loss):		
Interest and dividends	22,780	24,541
Net realized gain/(loss), contributions and other support	74,469	56,656
Change in unrealized gain/(loss) on alternative investments	<u>49,926</u>	<u>30,009</u>
Excess of revenue over expenses	438,565	296,338
Change in unrealized gain/(loss) on other investments	57,911	36,192
Transfers to SOM and University	(113,527)	(90,930)
Net assets released from restrictions for capital	730	525
Chester County Health System membership substitution	130,308	-
Pension and other postretirement plan adjustments	<u>(37,935)</u>	<u>199,771</u>
Increase/(decrease) in unrestricted net assets	<u>\$ 476,052</u>	<u>\$ 441,896</u>

See accompanying notes to combined financial statements.

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combined Statements of Changes in Net Assets  
for the years ended June 30, 2014 and 2013  
(thousands of dollars)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Net assets, June 30, 2012	<u>\$ 1,139,429</u>	<u>\$ 293,139</u>	<u>\$ 133,620</u>	<u>\$ 1,566,188</u>
Excess of revenue over expenses	296,338	-	-	296,338
Change in unrealized gain/(loss) on other investments	36,192	-	-	36,192
Pension and other postretirement plan adjustments	199,771			199,771
Contributions and investment income	-	12,591	217	12,808
Net assets released from restrictions for:				
Operations	-	(10,955)	-	(10,955)
Capital	525	(525)	-	-
Net realized and unrealized gain/(loss) on endowment funds	-	27,120	4,008	31,128
Transfer to the academic accounts at the School of Medicine and University, net	<u>(90,930)</u>	<u>-</u>	<u>-</u>	<u>(90,930)</u>
Increase in net assets	<u>441,896</u>	<u>28,231</u>	<u>4,225</u>	<u>474,352</u>
Net assets, June 30, 2013	<u>1,581,325</u>	<u>321,370</u>	<u>137,845</u>	<u>2,040,540</u>
Excess of revenue over expenses	438,565	-	-	438,565
Change in unrealized gain/(loss) on investments	57,911	-	-	57,911
Pension and other postretirement plan adjustments	(37,935)	-	-	(37,935)
Contributions and investment income	-	13,001	6,199	19,200
Net assets released from restrictions for:				
Operations	-	(9,544)	-	(9,544)
Capital	730	(730)	-	-
Net realized and unrealized gain/(loss) on endowment funds	-	44,486	7,261	51,747
Chester County Health System membership substitution	130,308	12,254	13,738	156,300
Transfer to the academic accounts at the School of Medicine and University, net	<u>(113,527)</u>	<u>-</u>	<u>-</u>	<u>(113,527)</u>
Increase in net assets	<u>476,052</u>	<u>59,467</u>	<u>27,198</u>	<u>562,717</u>
Net assets, June 30, 2014	<u>\$ 2,057,377</u>	<u>\$ 380,837</u>	<u>\$ 165,043</u>	<u>\$ 2,603,257</u>

See accompanying notes to combined financial statements.

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combined Statements of Cash Flows  
for the years ended June 30, 2014 and 2013  
(thousands of dollars)

	2014	2013
Cash flows from operating activities:		
Increase/(decrease) in net assets	\$ 562,717	\$ 474,352
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation and amortization	157,836	139,551
Provision for bad debts	239,649	191,479
Increase (decrease) from changes in:		
Patient receivables	(277,437)	(183,909)
Other current assets	(7,919)	75,027
Other assets	(22,027)	14,717
Accounts payable and accrued expenses	(13,244)	3,369
Estimated third party payer settlements	19,474	6,705
Due from University of Pennsylvania	(1,127)	1,049
Other liabilities	25,102	18,361
Pension and post-retirement benefit liability	5,213	4,931
Net realized and unrealized gain/(loss) on investments, net	(232,517)	(152,848)
Transfers, restricted contributions and pension adjustment	(12,190)	(122,686)
Net cash provided by operating activities	<u>443,530</u>	<u>470,098</u>
Cash flows from investing activities:		
Purchases of property and equipment	(334,969)	(201,799)
Net (purchase)/sale of assets whose use is limited and investments	(12,889)	23,701
Chester County Health System membership substitution	15,397	-
Net cash used for investing activities	<u>(332,461)</u>	<u>(178,098)</u>
Cash flows from financing activities:		
Repayment of long-term debt and notes payable	(150,076)	(33,261)
Cost of issuance of debt	(384)	-
Proceeds from restricted contributions	11,411	8,416
Proceeds from issuance of long-term debt	100,000	-
Transfers and other	(113,527)	(90,930)
Net cash provided by financing activities	<u>(152,576)</u>	<u>(115,775)</u>
Net increase in cash and cash equivalents	(41,507)	176,225
Cash and cash equivalents, beginning of year	738,771	562,546
Cash and cash equivalents, end of year	<u>\$ 697,264</u>	<u>\$ 738,771</u>
Supplemental disclosure of cash flow information:		
Cash paid for interest	<u>\$ 40,299</u>	<u>\$ 41,154</u>
Purchases of property and equipment excluded from accounts payable	<u>\$ 158,684</u>	<u>\$ 107,074</u>

See accompanying notes to combined financial statements.

## 1. Organization

The University of Pennsylvania Health System (UPHS or Health System) is comprised of the following operating entities: Clinical Practices of the University of Pennsylvania (CPUP), Clinical Care Associates (CCA), Hospital of the University of Pennsylvania (HUP), Penn Presbyterian Medical Center (PPMC), Pennsylvania Hospital of the University of Pennsylvania Health System (PAH-UPHS) and Wissahickon Hospice of the University of Pennsylvania Health System. In addition, the activities of UPHS' risk retention program, supported and administered by Franklin Casualty Insurance Company (FCI), a wholly owned Risk Retention Group and Quaker Insurance Company Ltd. (QIC), a wholly owned offshore captive insurance company (collectively referred to as RRG/Captive), are included in the combined financial statements. In September 2013, through a membership substitution, Chester County Hospital and Health System (TCCHHS) became part of the UPHS.

UPHS and the University of Pennsylvania Perelman School of Medicine (PSOM) operate under the governance of Penn Medicine. The governing body, approved by the University, operates, oversees, and coordinates the academic, research, and clinical missions of Penn Medicine. Penn Medicine replaced the prior multiple governing boards of UPHS and the PSOM, all of which were dissolved, with this single governing board. UPHS is a tax-exempt organization under Section 501(c) (3) of the Internal Revenue Code. The University (as to HUP and CPUP), PPMC, PAH-UPHS, TCCHHS and Wissahickon Hospice of the University of Pennsylvania Health System are sometimes referred to herein as the "Obligated Group." In addition, UPHS is included in the financial statements of the Trustees of the University of Pennsylvania (University).

## 2. Significant Accounting Policies

### 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 and disclosure of contingent assets and liabilities at the date of the combined financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates made by management include the valuation of alternative investments, the estimated net realizable value of patient and contributions receivables and the actuarially determined pension and other postretirement benefits, malpractice and self-insurance reserves.

### Cash and Cash Equivalents

Cash equivalents consist primarily of demand deposits and money market mutual funds. Investments in highly liquid debt instruments with original maturities of three months or less when purchased are included in cash and cash equivalents. The carrying amount of cash and cash equivalents are at fair value based on quoted market prices.

### Investments and Investment Income

Investments in marketable equity securities (common stocks), U.S. Treasury obligations and marketable debt securities (corporate bonds) are generally valued based on quoted market prices or by broker/dealers who actively make markets in these securities, and are accordingly categorized as Level 1, 2 or 3 in the fair value hierarchy, with no valuation adjustments applied.

Realized gains and losses are reported as a component of excess of revenue over expenses. The change in unrestricted unrealized gains and losses on investments are reported below the excess of revenue over expenses. Investment income or loss, realized and unrealized gains and losses on investments of donor restricted funds is added to or deducted from the appropriate net asset category based on the donor's restriction. A write down in the cost basis of investments is recorded when the decline in fair value of investments has been judged to be other than temporary. Depending on any donor-imposed restrictions on the underlying investments, the amount of the write down is reported as a realized loss in either temporarily restricted net assets or in excess of revenue over expenses, with no adjustment in the cost basis for subsequent recoveries in fair value. There were no other-than-temporary write downs reported in excess of revenues over expenses for the year ended June 30, 2014 and June 30, 2013.



## 2. Significant Accounting Policies (continued)

### Assets Whose Use Is Limited (AWUIL)

Assets whose use is limited are comprised of cash, investments and pledges, which are reported at fair or net realizable value. These assets include assets held by trustees under indenture agreements or self-insurance trust arrangements, assets of FCI and QIC funded by the other UPHS entities to settle malpractice claims, assets set aside by management for future purposes, over which they retain control and may subsequently use for other purposes, and donor-restricted funds (Endowments, Specific Purpose and Plant Replacement and Expansion Funds and Contributions Receivable). Contributions receivable are recognized as increases to net assets in the period received, at their net realizable value, net of discounts and allowances.

### Fair Value

UPHS values certain financial and non-financial assets and liabilities by applying the FASB pronouncements on *Fair Value Measurements*. The pronouncement defines fair value and establishes a framework for measuring fair value that includes a hierarchy that categorizes and prioritizes the sources used to measure and disclose fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The hierarchy is broken down into three levels based on inputs that market participants would use in valuing the asset or liability developed based on market data obtained from sources independent of UPHS as follows:

- Level 1: Unadjusted quoted market prices in active markets for identical assets or liabilities.
- Level 2: Unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable.
- Level 3: Unobservable inputs for the asset or liability.

Inputs broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, specific and broad credit data, liquidity statistics, and other factors. UPHS is required by the pronouncement to maximize the use of observable inputs (Levels 1 and 2) and minimize the use of unobservable inputs (Level 3). UPHS considers observable data to be that market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant market. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of the instrument and does not necessarily correspond to UPHS' perceived risk of that instrument.

Assets and liabilities are disclosed in the Notes to Combined Financial Statements within the hierarchy based on the lowest (or least observable) input that is significant to the measurement. UPHS' assessment of the significance of an input requires judgment, which may affect the valuation and categorization within the fair value hierarchy. The fair value of assets and liabilities using Level 3 inputs are generally determined by using pricing models, discounted cash flow methods or calculated net asset value per share, which all require significant management judgment or estimation.

## 2. Significant Accounting Policies (continued)

As a practical expedient, UPHS is permitted under the pronouncement to estimate the fair value of an investment in an investment company at the measurement date using the reported net asset value (NAV). Adjustment is required if the Health System expects to sell the investment at a value other than NAV or if the NAV is not calculated in accordance with US generally accepted accounting principles (US GAAP). The investments in private equity, natural resources, real estate and certain hedge funds in the absolute return portfolio are generally valued based on the most current NAV adjusted for cash flows when the reported NAV is not at the measurement date. This amount represents fair value of these investments at June 30, 2014 and June 30, 2013. UPHS follows the University's valuation policy for subsequent receipt of NAV's for these types of investments.

### Associated Investment Fund (A.I.F.)

The A.I.F. is a diversified pooled investment vehicle available solely to the University, its affiliates and subsidiaries. The A.I.F. is invested in accordance with the investment policies set out by an Investment Board which has been appointed by the Trustees of the University. The Office of Investments is responsible for the day-to-day management of the portfolio including identifying, selecting and monitoring a variety of external investment managers to implement the strategic asset allocation set forth by the Investment Board. Unrestricted realized and the change in unrealized gain/(loss) from Level 3 assets are reported as a component of the excess of revenue over expenses. The change in unrestricted unrealized gain/(loss) from Level 1 or 2 assets are reported in the change in net assets, while realized gain/(loss) are reported as a component of the excess of revenue over expenses. The fair value of the A.I.F. represents UPHS' ownership in the underlying fair value of the assets as determined by the University. The following is a summary of the investments held by UPHS in the A.I.F. by asset allocation.

### Short-Term (A.I.F.)

Short-term investments include cash equivalents and fixed income investments with maturities of less than one year. Short-term investments are valued using observable market data and are categorized as Level 1 based on quoted market prices in active markets. The majority of these short-term investments are held in a US Treasury money market account.

### Equity (A.I.F.)

Equity investments consist of direct holdings of public securities in managed accounts, mutual funds, exchange traded funds, commingled funds and limited partnerships. Securities held in managed accounts, mutual funds and exchange traded funds are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1. Commingled funds are valued at NAV and are categorized as Level 2. Limited partnership interests are valued at NAV. If the University has the ability to redeem from the limited partnership up to 180 days beyond the measurement date, June 30, at NAV, the investment is classified as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3.

## 2. Significant Accounting Policies (continued)

### Debt (A.I.F.)

Debt investments consist of direct holdings of securities in managed accounts and a single limited partnership. Securities such as US Treasuries, which are held in managed accounts, are valued based on quoted market prices in active markets and are categorized as Level 1. Securities such as corporate bonds, high yield bonds and bank loans, also held in managed accounts, are valued based on quoted market prices or dealer or broker quotations and are categorized as Level 2 or in the cases where they trade infrequently as Level 3. A limited partnership interest in a fund dedicated to credit investments is valued at NAV. If the University has the ability to redeem from the limited partnership up to 180 days beyond the measurement date at NAV, the investment is classified at Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3.

### Absolute Return (A.I.F.)

The absolute return investments are made up of allocations to partnerships. The fund managers invest in a variety of securities based on the strategy of the fund which may or may not be quoted in an active market. Illiquid investments, if any, are generally designated as a side pocket by hedge fund managers and may be valued based on an appraised value, discounted cash flow, industry comparables or some other method. Limited partnership interests are valued at NAV. If the University has the ability to redeem from the limited partnership up to 180 days beyond the measurement date at NAV, the investment is classified as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3. Side pocket investments would be classified as Level 3.

### Private Equity (A.I.F.)

Investments in private equity are in the form of closed-ended limited partnership interests. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV, are not redeemable within 180 days and are categorized as Level 3.

### Real Estate (A.I.F.)

Investments in real estate are primarily in the form of close-ended limited partnership interests. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV, are not redeemable within 180 days and are categorized as Level 3. Real estate investments also included an open-ended real estate investment trust which is categorized as a Level 2 investment given the University's ability to redeem from the limited partnership up to 180 days beyond the measurement date at NAV.

## 2. Significant Accounting Policies (continued)

### Natural Resources (A.I.F.)

Investments in natural resources are made up of limited partnership interests, securities in a managed account and a commingled fund. The limited partnership fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV, are not redeemable within 180 days and are categorized as Level 3. The University directly holds the securities held in the managed account through a custodial relationship. The securities held in the managed account are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1. The commingled fund is valued at NAV and is categorized as Level 2 investment given the University's ability to redeem from the limited partnership up to 180 days beyond the measurement date at NAV.

### Derivatives (A.I.F.)

In the normal course of business, the investment utilizes derivative financial instruments in connection with its investing activity. Derivatives utilized by the investment include futures, options, swaps and forward currency contracts and are reflected at fair value following the definition of Level 1 and 2 assets and liabilities as previously described. Investments in such derivative contracts are subject to foreign exchange and equity price risks that can result in a loss of all or part of an investment. In addition, the investment is also subject to additional counterparty risk should its counterparties fail to meet the terms of their contracts.

### Investment Risk (A.I.F.)

The Health System's investing activities expose it to a variety of risks, including market, credit and liquidity risks and attempts to identify, measure and monitor risk through various mechanisms including risk management strategies and credit policies.

Market risk is the potential for changes in the fair value of UPHS' investment portfolio. Commonly used categories of market risk include currency risk (exposure to exchange rate differences between functional currency relative to other foreign currencies), interest rate risk (changes to prevailing interest rates or changes in expectations of futures rates) and price risk (changes in market value other than those related to currency or interest rate risk, including the use of NAV provided).

Credit risk is the risk that one party to a financial investment will cause a financial loss for the other party by failing to discharge an obligation (counterparty risk).

Liquidity risk is the risk that UPHS will not be able to meet its obligations associated with financial liabilities (restrictions on ability to redeem investments). UPHS has made investments in various long-lived partnerships and, in other cases, has entered into contractual agreements that may limit its ability to initiate redemptions due to notice periods, lock-ups and gates. Details on remaining estimated life, current redemption terms and restrictions by asset class and type of investment are provided as follows:

## 2. Significant Accounting Policies (continued)

Strategy	Remaining Life	Redemption Terms	Redemption Restrictions
Short-term	N/A	Daily	None
Equity			
Managed accounts	N/A	Daily and semi-annually	Lock-up provisions range from none to 1 year
Mutual funds	N/A	Daily	None
Exchange traded funds	N/A	Daily	None
Commingled funds	N/A	Weekly to quarterly with varying notice periods	None
Partnerships	N/A	Quarterly to annually with varying notice periods	Lock-up provisions ranging from 0 to 2 years and \$1 million of side pocket investments
Total Equity			
Debt			
Managed accounts	N/A	Daily	None
Partnership	N/A	N/A	Illiquid side pocket investments
Total Debt			
Absolute return	N/A	Quarterly, annually, and 2 years with varying notice periods. Excludes 14 limited partnerships with no redemptions permitted. Distributions received as underlying investments are liquidated.	Lock-up provisions ranging from 0 to 2 years with some earlier redemptions permitted subject to redemption fee. Excludes \$54 million in 14 limited partnerships with no redemptions permitted and \$18 million of side pocket investments.
Real estate	1 to 13 years	Redemptions not permitted. Distributions received as underlying investments are liquidated. Excludes 1 fund with quarterly liquidity on 90 day notice period.	N/A
Private equity	1 to 16 years	Redemptions not permitted. Distributions received as underlying investments are liquidated.	N/A
Natural resources			
Managed account	N/A	Daily	None
Commingled fund	N/A	Daily	None
Partnerships	2 to 14 years	Redemptions not permitted. Distributions received as underlying investments are liquidated.	N/A

## 2. Significant Accounting Policies (continued)

### Property, Equipment and Depreciation

Property and equipment are stated at cost at the date of acquisition less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets. Useful lives range from 40 years for buildings, 15 years for building improvements, 8 to 10 years for fixed equipment and 5 to 10 years for major movable equipment. Equipment under capital lease obligations is amortized on the straight-line method over the shorter period of the lease term or the estimated useful life of the equipment. Interest cost incurred on borrowed funds during the period of construction of major capital assets is capitalized as a component of the cost of acquiring those assets.

### Intangible Assets

Goodwill, representing the excess of cost over assets acquired in the 1996 statutory merger of the Presbyterian Medical Center into PPMC, was \$52,850,000. The remaining balance of \$24,888,000 is included in other assets in the accompanying combined balance sheets. As noted below, goodwill is no longer subject to amortization. UPHS performs an annual impairment test of the PPMC reporting unit during the second quarter of the fiscal year. The calculation compares the reporting unit's carrying value to its fair value that is calculated using a discounted cash flow approach, which incorporates market participant data. In addition to the annual impairment test, additional evaluations will be done if circumstances exist that may lead to impairment. There were no goodwill impairments during 2014 or 2013.

### Deferred Financing Fees and Bond Insurance

Deferred financing fees and bond insurance, included in other assets at June 30, 2014 and 2013, totaling \$7,416,000 and \$7,812,000, respectively are amortized using the effective interest method over the life of the related debt.

### Self Insurance

UPHS accrues for estimated risks arising from both asserted and unasserted medical professional and workers' compensation claims based on historical claims data utilized by an independent actuary. Liabilities were recorded utilizing a discount rate of 2.25% in 2014 and 2013.

### Split-Interest Agreements

UPHS' split-interest agreements with donors consist primarily of irrevocable charitable perpetual trusts and charitable lead trusts. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements.

## 2. Significant Accounting Policies (continued)

Perpetual trust assets are initially valued at the current market value of the underlying assets using observable market inputs based on its beneficial interest in the trust. The initially contributed assets are categorized as a Level 3 measurement in the fair value hierarchy and are reported as investments, at fair value on the combined balance sheets and as contribution revenue on the combined statements of operations. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to investments, at fair value on the combined balance sheets and gain/(loss) on investments, net on the combined statements of operations.

Charitable remainder trust assets, where UPHS does not serve as the trustee, are initially valued using the current fair value of the underlying assets, using observable market inputs based on its beneficial interest in the trust, discounted to a single present value using current market rates at the date of the contribution. The initially contributed assets are categorized as Level 3, and reported as Investments, at fair value on the balance sheet and as contribution revenue on the combined statements of operations. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to donor-restricted investments, net of the statement of changes in net assets.

### Participation in Joint Venture and Member Substitution Activities

UPHS has entered into these activities to further its missions.

In 2007, UPHS entered into an agreement with Good Shepherd Rehabilitation Network, for a 30% interest in Good Shepherd Penn Partners, a joint venture and strategic alliance that provides post-acute medical care in Eastern Pennsylvania. The investment is accounted for by utilizing the equity method.

Effective September 1, 2013, UPHS has agreed to become the corporate member of the Chester County Hospital and Health System (TCHHS), a non-profit health system located in West Chester, PA, under the terms of a membership substitution transaction. UPHS acquired \$275,183,000 of total assets, consisting primarily of property, plant and equipment, and assumed \$118,883,000 of total liabilities consisting primarily of long-term debt obligations. Net assets of \$156,300,000 were recorded as contributions in the Combined Statement of Operations in the respective net asset classes, of which \$12,254,000 was temporarily restricted and \$13,738,000 was permanently restricted.

## 2. Significant Accounting Policies (continued)

### Interest Rate Exchange Agreements

The Health System enters into interest rate swap agreements to synthetically modify the interest rate terms of its long term debt. The agreements are not entered into for trading or speculative purposes. Fair value of interest rate swap agreements are obtained by quotes from Merrill Lynch, which is based on the income approach that uses observable market data to discount future net payment streams. The quote provided by Merrill Lynch also represents the amount the Health System would accept or be required to pay to transfer the agreement to Merrill Lynch, or exit price as defined by *Fair Value Measurements*. The Health System verifies the reasonableness of the quote provided by Merrill Lynch by comparing it to a similar quote from a swap adviser and the results of similar observable inputs used in a pricing model. The Health System also assesses the risk of nonperformance by reviewing bond ratings, and accordingly considers the agreements to be Level 2 measurements in the fair value hierarchy. The Health System has recognized an asset of \$4,582,000 and \$4,777,000 and liability of \$7,046,000 and \$8,235,000 at the years ended June 30, 2014 and June 30, 2013, respectively, which represents the accumulated fair market value of the swaps. All gains/(losses) of the interest rate swap agreements are recorded as interest expense in the combined statement of operations.

	Merrill Lynch / Bank of America	Merrill Lynch / Bank of America	Merrill Lynch / Bank of America
Notional Amount	\$26,150,000	\$26,150,000	\$81,210,000
Trade Date	7/15/2009	1/7/2010	10/24/2007
Maturity Date	8/15/2023	8/15/2023	1/1/2038
Rate:			
Receive	3.184%	2.902%	67% of 1-Month LIBOR
Pay	SIFMA	SIFMA	3.755%
Default Optional Termination @ Market Value	Default by UPHS	Default by UPHS	Default by UPHS
Optional Termination @ Market Value	UPHS Only	UPHS Only	UPHS Only
Collateral Threshold	AAA/Aaa = Infinite AA(+/-) / Aa(1,2,3) = \$40M A(+/-) / A(1,2,3) = \$20M A(+/-) / A(1,2,3) = \$20M A(+/-) / A(1,2,3) = \$20M BBB+ / Baa1 = \$10M BBB or below = None	AAA/Aaa = Infinite AA(+/-) / Aa(1,2,3) = \$40M A(+/-) / A(1,2,3) = \$20M A(+/-) / A(1,2,3) = \$20M A(+/-) / A(1,2,3) = \$20M BBB+ / Baa1 = \$10M BBB or below = None	AAA/Aaa = Infinite AA(+/-) / Aa(1,2,3) = \$40M A(+/-) / A(1,2,3) = \$20M A(+/-) / A(1,2,3) = \$20M A(+/-) / A(1,2,3) = \$20M BBB+ / Baa1 = \$10M BBB or below = None



## 2. Significant Accounting Policies (continued)

### Net Assets

Net assets are classified for accounting and financial reporting purposes into three net asset categories according to donor imposed restrictions, if any. A description of the three net asset categories is as follows:

Unrestricted net assets are those 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 include gifts or endowment income that has been limited as to use by donors for a specific purpose and/or time period.

Permanently restricted net assets include gifts which have been restricted by donors to be maintained in perpetuity, and only the income to be made available for operations in accordance with donor imposed restrictions. Contributions originated as a result of donors establishing irrevocable trusts, in perpetuity, which distribute the UPHS' percentage share of the income generated from the assets (Funds Held in Trust by Others) are also included as permanently restricted net assets.

### Excess of revenues over expenses

The combined statements of operations include excess of revenue over expenses. Changes in unrestricted net assets which are excluded from excess of revenue over expenses, consistent with industry practice, include the change in unrealized gains and losses on investments other than trading securities, permanent transfers of assets to and from the PSOM other than for goods and services, net assets released from restrictions for capital, and pension- related changes other than net periodic pension cost.

### Transfers between UPHS entities

All significant inter-entity accounts and transactions are eliminated in combination.

## 2. Significant Accounting Policies (continued)

### New Accounting Pronouncements

In May 2014, the FASB issued a standard on Revenue from Contracts with Customers. This standard implements a single framework for recognition of all revenue earned from customers. This framework ensures that entities appropriately reflect the consideration to which they expect to be entitled in exchange for goods and services by allocating transaction price to identified performance obligations and recognizing revenue as performance obligations are satisfied. Qualitative and quantitative disclosures are required to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The standard is effective for fiscal years beginning after December 15, 2016. UPHS is evaluating the impact this will have on the consolidated financial statements beginning in Fiscal Year 2018.

### Net Patient Service Revenue

UPHS has agreements with third-party payers that provide for payments at amounts different from its established rates. A summary of the payment arrangements with major third-party payers is as follows:

- Medicare: Inpatient acute care services and outpatient services rendered to Medicare program beneficiaries are paid at prospectively determined rates. These rates vary according to a patient classification system that is based on clinical, diagnostic, and other factors. Inpatient psychiatric services and medical education costs related to Medicare beneficiaries are paid based on a cost reimbursement methodology. UPHS is reimbursed for cost reimbursable items at a tentative rate with final settlement determined after submission of annual cost reports by each hospital and audits thereof by the Medicare fiscal intermediary.
- Medicaid: Inpatient and outpatient services rendered to Medicaid program beneficiaries are paid at prospectively determined rates. Additional amounts are allocated to each hospital for training residents and serving a disproportionate indigent population.

Revenue from the Medicare and Medicaid programs accounted for approximately 26% and 14%, respectively, of UPHS' hospital net patient service revenue for the year ended 2014, and 26% and 15%, respectively, of the Health System's net patient service revenue, for the year ended 2013. 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 will change by a material amount in the near term. Certain revenue received for third party payers is subject to audit and retrospective adjustments.

Final adjustments resulting from settlements with third-party payers are recorded in the year in which they are settled. The amount was an increase of \$1,197,000 and \$4,726,000 to net patient service revenue in 2014 and 2013, respectively, as a result of final settlements and the revision or removal of allowances previously estimated that were no longer necessary.

## 2. Significant Accounting Policies (continued)

### Provision For Bad Debt Expense

The provision for bad debt expense is based on management's assessment of expected net collections considering economic conditions, historical experience, trends in health care coverage and other collection indicators. Periodically throughout the year, management assesses the adequacy of the allowance for uncollectible accounts based upon historical write-off experience by payer category, including not covered by insurance, and history of cash collections. The results of this review are then used to make any modifications to the provision for bad debt expense to establish an appropriate allowance for uncollectible accounts and is recorded in the period of service. No significant modifications were made for fiscal years 2014 and 2013. After satisfaction of amounts due from insurance and reasonable efforts to collect from the patient have been exhausted, UPHS follows established guidelines for placing certain past-due patient balances with collection agencies, subject to terms of certain restrictions on collection efforts as determined by UPHS. Account receivables are written off after collection efforts have been followed in accordance with UPHS' policy.

### Medicaid Modernization Program

On July 3, 2010, the Pennsylvania General Assembly passed the Public Welfare Code amendment (Act 49) which was signed into law by the Governor, establishing a new program referred to as Medicaid Modernization. The program was subsequently approved by the federal Centers for Medicare and Medicaid Services. The program is designed to provide additional funding to Pennsylvania hospitals for the purpose of enhancing access to quality healthcare for qualifying Medicaid beneficiaries, helping to partially mitigate the losses incurred by hospitals resulting from low reimbursement rates. To accomplish this objective, for fiscal years 2011 through 2016, the program provides participating hospitals with improved inpatient fee-for-service hospital payments, establishes enhanced hospital payments through Medicaid managed care organizations (MCOs), and secures additional federal matching Medicaid funds through a Quality Care Assessment, under which hospitals pay the state a percentage of their net inpatient revenue. After deducting the cost of the assessment due to the state, UPHS recognized additional revenues over expenses of \$15,435,000 in FY 2014 and \$17,546,000 in FY 2013 from the Pennsylvania Medicaid Modernization program.

## 2. Significant Accounting Policies (continued)

### Electronic Health Records Incentive Program (EHR)

In 2011, UPHS received the initial payment of the incentive relating to electronic Health Records, as part of the American Recovery and Reinvestment Act of 2009 (ARRA). The Health Information Technology for Economic and Clinical Health Act provision within the ARRA allowed for \$19 billion worth of incentives to hospitals who implement and meaningfully use Electronic Health Record technology by 2014. UPHS is accounting for payments using FASB Codification Standard 450-30-50-1, Gain Contingency. Accordingly, when all contingencies have been met and the funds have been received, UPHS recognizes these incentives as “Other Operating Revenue” in the Statement of Operations. UPHS received \$15,432,000 in FY 2014 and \$23,974,000 in FY 2013.

### Third Party Agreements

During 2012, UPHS and Independence Blue Cross (IBC) reached an agreement on terms of a new four-year agreement. Payments made for inpatient services provided to IBC traditional and managed care subscribers are effected on a per case rate basis for most services. Payment for outpatient services is principally based upon negotiated fee schedules. Hospital and physician rates also provide for annual inflationary increases. In addition, incentives are paid for high performance with regard to clinical outcomes and patient quality.

During 2010, UPHS and Aetna reached agreement on terms of a new five-year agreement. The terms of the new agreement provide payments for inpatient hospital services on a per case rate basis. Payments for outpatient services continue to be predominantly based upon negotiated fee schedules.

UPHS also has reimbursement agreements with certain commercial insurance carriers, health maintenance organizations and preferred provider organizations. The basis for reimbursement under these agreements includes prospectively determined rates per discharge, discounts from established charges, and prospectively determined per diem rates.

## 2. Significant Accounting Policies (continued)

### Endowments

The Commonwealth of Pennsylvania has not adopted the Uniform Management of Institutional Funds Act (UMIFA) or the Uniform Prudent Management of Institutional Funds Act (UPMIFA). Rather, the Pennsylvania Uniform Principal and Income Act (Pennsylvania Act) governs the investment, use and management of the UPHS' endowment funds. The Pennsylvania Act allows a nonprofit to elect to spend between 2% and 7% of the endowment market value, determined at least annually and averaged over a period of three or more preceding years.

The Pennsylvania Act does not require the preservation of the fair value of a donor's original gift as of the gift date of a donor-restricted endowment fund, absent explicit donor stipulations to the contrary. However, based on its interpretation of the Pennsylvania Act and relevant accounting literature, UPHS classifies as permanently restricted net assets for reporting purposes (i) the original value of gifts donated to the permanent endowment, (ii) the original value of subsequent gifts to the permanent endowment, and (iii) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Health System.

UPHS follows the University's endowment spending policy. In accordance with the Pennsylvania Act, the University has elected to adopt and follow an investment policy seeking a total return for the investments held by the A.I.F., whether the return is derived from appreciation of capital or earnings and distributions with respect to capital or both. The endowment spending policy which the Board has elected to govern the expenditure of funds invested in the AIF is designed to manage annual spending levels and is independent of the cash yield and appreciation of investments for the year. The University determines its spending rule target payout based on the sum of: (i) 70% of the prior fiscal year distribution adjusted by an inflation factor; and (ii) 30% of the prior fiscal year-end fair value of the AIF, lagged one year, multiplied by 6.5% for financial aid funds and 4.7% for all other funds.

### 3. Assets Whose Use Is Limited

Assets whose use is limited at June 30, 2014 and 2013 are set forth in the following table (in thousands):

Held by Trustees:	2014	2013
Debt Service		
Cash and cash equivalents	\$ 1,106	\$ 1,008
Other		
Cash and cash equivalents	2,098	7,455
U.S. Treasury obligations	1,170	1,155
Marketable equity securities	4,095	3,720
Other	77	248
	<u>7,440</u>	<u>12,578</u>
 Total Held By Trustees	 <u>8,546</u>	 <u>13,586</u>
 RRG/Captive		
Cash and cash equivalents	120,181	114,569
Total RRG Captive	<u>120,181</u>	<u>114,569</u>
 Designated		
Cash and cash equivalents	5,630	1,031
Associated Investment Funds (A.I.F)	1,141,225	973,313
Other	707	1,340
Total Designated	<u>1,147,562</u>	<u>975,684</u>
 Donor-Restricted:		
Cash and cash equivalents	42,960	28,911
U. S. Treasury obligations	1,033	1,403
Marketable debt securities	7,430	5,086
Marketable equity securities	90,750	70,603
Associated Investment Funds (A.I.F)	392,189	344,026
Contribution receivable, net	5,630	948
Notes, mortgages and other	1,808	2,597
Total Donor-Restricted	<u>541,800</u>	<u>453,574</u>
 Total Assets Whose Use is Limited	 <u>\$ 1,818,089</u>	 <u>\$ 1,557,413</u>

Designated Associated Investment Funds (A.I.F) was increased by \$432,768 at June 30, 2013 for comparability as a result of the inclusion of those funds in the 2014 presentation. Those funds were previously included with reported Investments.

#### 4. Investments

Investments at June 30, 2014 and 2013 are set forth in the following table (in thousands):

	2014	2013
Cash	\$ 487	\$ 428
U.S. Treasuries Obligations	356,878	354,337
Intermediate Investments (GMO)	98,901	81,563
Other	141	139
	<u>\$ 456,407</u>	<u>\$ 436,467</u>

#### 5. Fair Value Measurement

Investments, derivative instruments and assets whose use is limited, excluding contribution receivable, measured at fair value in accordance with the Fair Value Measurements standard as of June 30, 2014 and 2013 are as follows (in thousands):

Assets	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total 2014
Cash and Cash Equivalents	\$ 184,164	\$ -	\$ -	\$ 184,164
US equities	104,212	-	-	104,212
US Treasuries	359,632	-	-	359,632
Split-interest agreements	-	-	93,074	93,074
Derivative instruments	-	(2,464)	-	(2,464)
	<u>\$ 648,008</u>	<u>\$ (2,464)</u>	<u>\$ 93,074</u>	<u>\$ 738,618</u>
Associated Investment Fund (A.I.F.)	-	1,533,414	-	1,533,414
Total AWUIL & Investments	<u>\$ 648,008</u>	<u>\$ 1,530,950</u>	<u>\$ 93,074</u>	<u>\$ 2,272,032</u>

Assets	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total 2013
Cash and Cash Equivalents	\$ 149,042	\$ -	\$ -	149,042
US equities	96,370	-	-	96,370
US Treasuries	358,360	-	-	358,360
Split-interest agreements	-	-	72,769	72,769
Derivative instruments	-	(3,458)	-	(3,458)
	<u>\$ 603,772</u>	<u>\$ (3,458)</u>	<u>\$ 72,769</u>	<u>\$ 673,083</u>
Associated Investment Fund (A.I.F.)	-	1,317,339	-	1,317,339
Total AWUIL & Investments	<u>\$ 603,772</u>	<u>\$ 1,313,881</u>	<u>\$ 72,769</u>	<u>\$ 1,990,422</u>

## 5. Fair Value Measurement (continue)

Changes to the reported amounts of split interest agreements, measured at fair value using unobservable (Level 3) inputs as of June 30, 2014 and 2013 are all recorded as net realized gains and losses. The primary unobservable input used in the fair value measurement of the split interest agreements is the discount rate. Significant fluctuation in the discount rates utilized in this calculation could result in a material change in fair value.

As noted above, UPHS participates in the Associated Investment Fund (A.I.F). At June 30, 2014 and June 30, 2013, UPHS held 16.465% and 17.0% of the total investment fund respectively. The asset classification for the A.I.F. is as follows:

Assets	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total 2014
Cash and Cash Equivalents	\$ 624,379	\$ -	\$ -	\$ 624,379
Equity investments				
US equities	959,195	451,428	313,465	1,724,088
International equities	442,956	658,309	178,891	1,280,156
Emerging market equities	113,801	485,870	284,068	883,739
Debt securities				
US Treasuries	680,876	-	-	680,876
Corporate Bonds	-	40,523	-	40,523
High Yield	-	-	1,225	1,225
Absolute return	-	905,494	1,541,251	2,446,745
Real estate	-	45,169	410,214	455,383
Private equity	-	-	845,444	845,444
Natural resources	73,680	76,033	189,665	339,378
Derivative instruments	776	4,048	-	4,824
Less: Liabilities	131,595	15,009	-	146,604
	<u>\$ 2,764,068</u>	<u>\$ 2,651,865</u>	<u>\$ 3,764,223</u>	<u>\$ 9,180,156</u>

Assets	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total 2013
Cash and Cash Equivalents	\$ 389,722	\$ -	\$ -	\$ 389,722
Equity investments				
US equities	1,081,089	218,695	224,440	1,524,224
International equities	324,845	716,858	135,138	1,176,841
Emerging market equities	111,698	338,487	73,132	523,317
Debt securities				
US Treasuries	563,866	-	-	563,866
Corporate Bonds	-	42,477	1	42,478
High Yield	-	29,422	1,947	31,369
Absolute return	-	563,548	1,585,102	2,148,650
Real estate	-	40,924	410,649	451,573
Private equity	-	-	674,556	674,556
Natural resources	63,213	55,805	173,653	292,671
Derivative instruments	8,206	3,702	-	11,908
Less: Liabilities	29,595	381	-	29,976
	<u>\$ 2,513,044</u>	<u>\$ 2,009,537</u>	<u>\$ 3,278,618</u>	<u>\$ 7,801,199</u>



## 5. Fair Value Measurement (continue)

	June 30, 2013	Net Realized gains/(losses)	Net Unrealized gains/(losses)	Purchases	Sales	Transfers In	Transfers Out	June 30, 2014
Equity investments								
- US equities	224,440	-	37,860	151,670	-	50,724	(151,229)	313,465
- International equities	135,139	10,702	43,884	-	-	-	-	189,725
- Emerging market equities	73,132	-	71,061	166,700	(10,833)	-	(26,825)	273,235
Debt investments								
- Corporate bonds	1	(1)	1	-	(1)	-	-	-
- High yield	1,947	-	562	-	(1,284)	-	-	1,225
Absolute return	1,585,101	60,402	117,862	267,069	(193,947)	25,028	(320,265)	1,541,250
Real estate	410,649	35,404	22,126	76,474	(134,439)	-	-	410,214
Private equity	674,556	74,975	99,393	136,900	(140,380)	-	-	845,444
Natural resources	173,653	16,717	19,118	26,383	(46,206)	-	-	189,665
	<u>\$ 3,278,618</u>	<u>\$ 198,199</u>	<u>\$ 411,867</u>	<u>\$ 825,196</u>	<u>\$ (527,090)</u>	<u>\$ 75,752</u>	<u>\$ (498,319)</u>	<u>\$ 3,764,223</u>

	June 30, 2012	Net Realized gains/(losses)	Net Unrealized gains/(losses)	Purchases	Sales	Transfers In	Transfers Out	June 30, 2013
Equity investments								
- US equities	-	-	4,440	220,000	-	-	-	224,440
- International equities	111,912	-	23,227	-	-	-	-	135,139
- Emerging market equities	94,068	-	(3,544)	27,601	(74)	-	(44,919)	73,132
Debt investments								
- Corporate bonds	3	-	-	-	(2)	-	-	1
- High yield	3,323	-	785	-	(2,161)	-	-	1,947
Absolute return	910,636	10,637	177,480	458,561	(155,537)	183,324	-	1,585,101
Real estate	362,872	16,292	15,026	74,109	(57,650)	-	-	410,649
Private equity	601,908	62,059	5,763	110,602	(105,776)	-	-	674,556
Natural resources	199,537	34,220	(27,708)	22,599	(54,995)	-	-	173,653
	<u>\$ 2,284,259</u>	<u>\$ 123,208</u>	<u>\$ 195,469</u>	<u>\$ 913,472</u>	<u>\$ (376,195)</u>	<u>\$ 183,324</u>	<u>\$ (44,919)</u>	<u>\$ 3,278,618</u>

## 6. Other Assets

Other assets at June 30, 2014 and 2013 are set forth in the following table (in thousands):

	2014	2013
Goodwill, net	\$ 24,888	\$ 24,888
Non-patient related receivables	28,127	27,080
Malpractice receivable	99,106	72,445
Inventory	28,829	22,015
Prepaid expenses	43,418	30,731
Interest in partnerships	21,080	2,512
Net deferred financing fees and other	18,639	16,064
	<u>264,087</u>	<u>195,735</u>
Less current portion	<u>(100,624)</u>	<u>(80,094)</u>
	<u>\$ 163,463</u>	<u>\$ 115,641</u>

Amortization expense charged to operations totaled \$622,000 and \$581,000 in 2014 and 2013, respectively.

## 7. Property, Equipment and Accumulated Depreciation

Property, equipment and accumulated depreciation at June 30, 2014 and 2013 are set forth in the following table (in thousands):

	<u>2014</u>	<u>2013</u>
Land and improvements	\$ 45,553	\$ 40,062
Building and improvements	1,952,744	1,712,235
Fixed and movable equipment	<u>1,260,170</u>	<u>1,038,125</u>
	3,258,467	2,790,422
Accumulated depreciation	<u>(1,812,893)</u>	<u>(1,536,331)</u>
	1,445,574	1,254,091
Construction in progress	<u>406,516</u>	<u>217,888</u>
	<u>\$ 1,852,090</u>	<u>\$ 1,471,979</u>

Depreciation expense for fiscal year 2014 was \$157,214,000 and \$138,970,000 in fiscal year 2013.

In accordance with ASC 840-40-55, for build-to-suit lease arrangements where we are involved in the construction of structural improvements prior to the commencement of the lease or take some level of construction risk, we are considered the owner of the assets during the construction period under U.S. GAAP. Accordingly, as the landlord incurs the construction project costs, the assets and corresponding financial obligation are recorded in "Property and equipment, net" and "Other liabilities" on our combined balance sheet. UPHS had recorded a construction in progress asset and other liability of \$47,447,000 and \$24,409,000 at the years ended June 30, 2014 and June 30, 2013, respectively, related to Penn Presbyterian Medical Center lease arrangements. During FY 14, the Pennsylvania Hospital project was completed, which resulted in the recording of \$47,598,000 in "Property and equipment, net" and "Long-term debt", as UPHS continued to demonstrate "significant involvement" after the completion of the project. Similar accounting treatment is also expected upon the completion of the Penn Presbyterian Medical Center project.

## 8. Long-Term Debt and Notes Payable

Debt obligations comprised of long-term debt at June 30, 2014 and 2013, is set forth in the following table (in thousands):

	<u>2014</u>	<u>2013</u>
Pennsylvania Higher Education Facilities Authority (PHEFA) Revenue Bonds:		
UPHS Series A of 2014:		
Principal amount outstanding	\$ 100,000	\$ -
UPHS Series A of 2012:		
Principal amount outstanding	136,950	136,950
Unamortized bond premium	<u>11,546</u>	<u>12,202</u>
	148,496	149,152
UPHS Series A of 2011:		
Principal amount outstanding	150,000	150,000
Unamortized bond discount	<u>(972)</u>	<u>(1,029)</u>
	149,028	148,971
UPHS Series A of 2009:		
Principal amount outstanding	77,645	80,370
Unamortized bond premium	<u>1,006</u>	<u>1,166</u>
	78,651	81,536
UPHS Series A of 2008:		
Principal amount outstanding	81,210	86,510
UPHS Series B of 2008:		
Principal amount outstanding	149,230	201,230
Unamortized bond discount	<u>(1,562)</u>	<u>(1,795)</u>
	147,668	199,435
UPHS Series A of 2005:		
Principal amount outstanding	152,570	170,375
Unamortized bond premium	<u>2,942</u>	<u>4,036</u>
	155,512	174,411
UPHS Series B of 2005:		
Principal amount outstanding	33,030	40,600
Unamortized bond premium	<u>302</u>	<u>472</u>
	33,332	41,072
Pennsylvania Economic Development Financing Authority Taxable Development Revenue Bonds	<u>1,200</u>	<u>2,300</u>
Mortgages	16,774	-
Built-to-Suite lease	<u>47,598</u>	<u>-</u>
	959,469	883,387
Current portion of debt obligations	<u>(42,044)</u>	<u>(86,500)</u>
	<u>\$ 917,425</u>	<u>\$ 796,887</u>

8. Long-Term Debt and Notes Payable (continued)

Pennsylvania Higher Education Facilities Authority Revenue Bonds

UPHS Series A of 2014 Bonds were issued on June 12, 2014 for the purpose of funding various UPHS capital expenditures. The bonds mature in varying amounts from \$1,430,000 to \$27,120,000 with a final maturity of \$27,120,000 in 2045. Interest on the bonds is reset weekly through a remarketing process (0.47% at June 30, 2014). The holder of the bonds will have the option to put the Bonds on June 12, 2021, as described in a Continuing Covenant Agreement between UPHS and TD Bank. The bonds are subject to optional redemption by the University, the obligated group agent, at any time.

UPHS Series A of 2012 Bonds were issued on May 2, 2012 for the purpose of funding various UPHS capital expenditures. The bonds mature in varying amounts from \$525,000 to \$9,750,000 with a final maturity of \$3,970,000 in 2032. The bonds have stated interest rates that range from 3.00% to 5.00%. The bonds are subject to optional redemption by the University, the obligated group agent, on or after August 15, 2022 at a redemption price of 100% plus accrued interest.

UPHS Series A of 2011 Bonds were issued on March 2, 2011 for the purpose of funding various UPHS capital expenditures. The bonds mature in varying amounts from \$3,200,000 to \$26,600,000 with a final maturity of \$17,810,000 in 2042. The bonds have stated interest rates that range from 4.75% to 5.875%. The bonds are subject to optional redemption by the University, the obligated group agent, on or after August 15, 2021 at a redemption price of 100% plus accrued interest.

On July 1, 2009, UPHS issued the Series A of 2009 Bonds for the purpose of redeeming all maturities of the Pennsylvania Hospital Series of 2004 bonds. The bonds mature in varying amounts ranging from \$390,000 to \$12,110,000 with a final maturity of \$9,320,000 in 2024. The bonds have stated interest rates that range from 3.0% to 5.25%. The bonds maturing on and after August 15, 2020 are subject to optional redemption by the University, the obligated group agent, on or after August 15, 2019 at the redemption price of 100% plus accrued interest. On July 15, 2009, UPHS entered into a \$30,000,000 interest rate exchange agreement (the "Agreement") with Merrill Lynch Capital Services. On January 7, 2010, UPHS entered into a second \$30,000,000 interest rate exchange agreement, also with Merrill Lynch Capital Services. Under the terms of the Agreement, which became effective on January 1, 2010 and January 7, 2010, UPHS pays a floating rate based on a Securities Industry and Financial Markets Association ("SIFMA") index and receives a fixed rate of 3.184% and 2.902%, respectively. The Agreement was not entered into for trading or speculative purposes.

UPHS Series B of 2008 Bonds were issued on November 12, 2008 for the purpose of redeeming the UPHS Series C of 2005 and UPHS Series D of 2005. The bonds mature in varying amounts ranging from \$9,825,000 to \$52,000,000 with a final maturity of \$14,770,000 in 2027. The bonds have stated interest rates that range from 5.5% to 6.0%. The bonds maturing on and after August 15, 2022 are subject to optional redemption by the University, the obligated group agent, on or after August 15, 2018 at the redemption price of 100% plus accrued interest.

UPHS Series A of 2008 Bonds were issued on April 21, 2008 for the purpose of legally defeasing the non-current maturities of the Series 2002 Pennsylvania Hospital Revenue Bonds and funding of various UPHS capital expenditures. The bonds mature in varying amounts ranging from \$5,300,000 to \$7,655,000, with a final maturity of \$7,655,000 in 2038.

## 8. Long-Term Debt and Notes Payable (continued)

Interest on the bonds is reset weekly through a remarketing process (0.06% at June 30, 2014). On October 24, 2007, UPHS entered into an interest rate exchange agreement (the "Agreement") with Merrill Lynch Capital Services to effectively fix the interest rate. Under the terms of the Agreement, which became effective on December 11, 2007, UPHS pays a fixed rate of 3.755% and receives a floating rate based on a percentage of the one-month London Inter-Bank Offered Rate ("LIBOR"). The Agreement was not entered into for trading or speculative purposes. UPHS has the option under the Agreement to terminate the Agreement at zero on January 1, 2018 and every 6 months thereafter. The bonds are subject to optional redemption by the University, the obligated group agent, on any scheduled Interest Payment Date at a Redemption Price equal to 100% of the principal amount plus accrued interest and option tender by the Holders upon seven days notice. The bonds are enhanced by a renewable direct pay letter of credit issued by Bank of America with an expiration date of April 15, 2018 and UPHS self liquidity policy.

UPHS Series A of 2005 Bonds were issued on February 16, 2005 for the purpose of legally defeasing the non-current maturities of the Health Services Series A of 1996 Bonds. The bonds mature in varying amounts ranging from \$6,000,000 to \$22,855,000, with a final maturity of \$6,000,000 in 2023. The bonds have stated interest rates that range from 4.25% to 5.00%. The bonds are subject to optional redemption by the University, the obligated group agent, on or after August 15, 2015 at a redemption price of 100% plus accrued interest. Payment of principal and interest on the 2009-2022 bond maturities is insured by a bond insurer.

UPHS Series B of 2005 Bonds were issued on February 16, 2005 for the purpose of funding various UPHS capital expenditures. The bonds mature in varying amounts ranging from \$4,000,000 to \$13,000,000, with a final maturity of \$4,000,000 in 2018. The bonds have stated interest rates that range from 3.625% to 5.00%. The bonds are subject to optional redemption by the University, the obligated group agent, on or after August 15, 2015 at a redemption price of 100% plus accrued interest. Payment of principal and interest on the 2009-2017 bond maturities is insured by a bond insurer.

The PHEFA Revenue Bonds are collateralized by master notes issued under the UPHS Master Trust Indenture (MTI). The MTI and related agreements contain certain restrictive covenants which limit the issuance of additional indebtedness and among other things, require UPHS to meet an annual debt service coverage requirement of "income available for debt service" (excess of revenue over expenses plus depreciation, amortization, interest expense and extraordinary items) at an amount equal to 110% of the annual debt service requirements. If the coverage requirement for a particular year is not met, within six months of the close of that fiscal year, UPHS must retain the services of a consultant, to make recommendations to improve the coverage requirement. UPHS must also implement the recommendations of the consultant to the extent that they can be feasibly implemented. UPHS will not be considered to be in default of the provisions of the MTI, so long as UPHS has sufficient cash flow to pay total operating expenses and to pay debt service for the fiscal year. The debt service coverage requirement for 2014 and 2013 was met by UPHS. Additionally, UPHS has pledged its gross revenues to collateralize its obligation under the MTI.

UPHS has various mortgage payables with monthly installments ranging from \$29,000 to \$4,194,000, including interest. The mortgages have interest rates between 4.875% and 6.25%. The mortgages will fully amortize on or before April 1, 2022 and are collateralized by land and buildings of approximately \$20,000,000.

8. Long-Term Debt and Notes Payable (continued)

Pennsylvania Economic Development Financing Authority Taxable Development Revenue Bonds

Pennsylvania Economic Development Financing Authority Taxable Development Revenue Bonds Series 1994 C Bonds were issued on behalf of Delancy Corporation, a wholly owned subsidiary of PAH-UPHS. The bonds are dated September 14, 1994 and mature in the amount of \$1,200,000 in September 2014. The bonds have a variable interest rate (0.17% at June 30, 2014) that is based on market conditions as determined by the remarketing agent. The bonds are subject to optional redemption on any interest payment date, at a redemption price equal to 100% of the principal amount thereof to be redeemed, plus accrued interest to the redemption date. The bonds are collateralized by a letter of credit, issued by PNC Bank with an expiration date of September 14, 2014.

In April 2013 and subsequently amended in July 2013, UPHS extended for three years, ending April 2016, the agreement with a financial institution, whereby the institution has agreed to provide a line of credit in the amount of \$100,000,000 in order to supplement liquidity for general purposes of the Health System. UPHS paid an upfront facility fee and a fee on the unused amount of the line of credit. As of June 30, 2014, there are no draws under the agreement.

A summary of maturities of long-term debt and build-to-suite lease payments for the next five years is as follows (in thousands):

Fiscal Year	PHEFA	Other	Total
2015	35,335	6,709	42,044
2016	33,970	1,306	35,276
2017	34,085	894	34,979
2018	35,850	874	36,724
2019	85,670	920	86,590
Thereafter	655,725	7,271	662,996
Total Principal	880,635	17,974	898,609
Unamortized Original Issue Premium	13,262	-	13,262
Total Debt	<u>\$ 893,897</u>	<u>\$ 17,974</u>	<u>\$ 911,871</u>

Fiscal Year	Build-to-Suite Lease
2015	3,583
2016	3,668
2017	3,755
2018	3,844
2019	3,935
Thereafter	66,585
Total lease payments	<u>85,370</u>
Less: Amounts representing interest	<u>(37,772)</u>
Present value of future lease payments	<u>\$ 47,598</u>

Based on the borrowing rates currently available to UPHS for debt and capital leases with similar terms and average maturities, the fair value of long-term debt is \$1,017,505,000 and \$929,863,000 at June 30, 2014 and 2013, respectively. UPHS considers this to be a level 2 measurement.

## 9. Transactions with the University of Pennsylvania

UPHS transferred \$110,926,000 and \$87,351,000 in 2014 and 2013, respectively, to further the research and educational activities of the PSOM. In addition, PSOM support totaling \$21,411,000 and \$21,966,000, which represents academic operating support to the clinical departments of the PSOM, has been recognized as operating expenses in 2014 and 2013, respectively. These activities are integral to the overall Penn Medicine mission and are reported as expenses and transfers in the combined financial statements.

Certain University expenses, such as a portion of the salaries of the PSOM faculty, qualify for reimbursement by third-party payers. Reimbursement for these costs is claimed by UPHS, and recognized as other operating revenue by CPUP and the PSOM.

Due to/(from) the University of Pennsylvania reflects the net balance resulting from transactions conducted between UPHS and the University (primarily inter-entity billings for allocation of common costs, physician salaries and benefits, certain purchased services, and support for the PSOM). UPHS transferred \$2,601,000 and \$3,576,000 in 2014 and 2013, respectively to the University. The amounts outstanding at June 30, 2014 and 2013 represented normal current inter-entity activity.

## 10. Net Assets

The major components of net assets at June 30, 2014 and 2013 are as follows (in thousands):

	2014			Total
	Unrestricted	Temporary Restricted	Permanently Restricted	
General Operating	\$ 916,152	\$ 28,910	\$ -	\$ 945,062
Capital	-	30,145	-	30,145
Endowment:				
Quasi	1,141,225	-	-	1,141,225
Donor restricted	-	321,782	165,043	486,825
Total	<u>\$ 2,057,377</u>	<u>\$ 380,837</u>	<u>\$ 165,043</u>	<u>\$ 2,603,257</u>

	2013			Total
	Unrestricted	Temporary Restricted	Permanently Restricted	
General Operating	\$ 608,010	\$ 24,000	\$ -	\$ 632,010
Capital	-	22,418	-	22,418
Endowment:				
Quasi	973,315	-	-	973,315
Donor restricted	-	274,952	137,845	412,797
Total	<u>\$ 1,581,325</u>	<u>\$ 321,370</u>	<u>\$ 137,845</u>	<u>\$ 2,040,540</u>

#### 11. Temporarily and Permanently Restricted Net Assets

Temporarily restricted net assets are those whose use by UPHS has been limited by donors for the following purposes (in thousands):

	<u>2014</u>	<u>2013</u>
Specific Purpose (i.e., departmental room funds)	\$ 59,055	\$ 46,418
Endowment - Realized and Unrealized Gains	<u>321,782</u>	<u>274,952</u>
	<u>\$ 380,837</u>	<u>\$ 321,370</u>

Permanently restricted net assets have been restricted by donors to be maintained by UPHS in perpetuity (in thousands):

	<u>2014</u>	<u>2013</u>
Endowment - Original Cost Basis	\$ 73,439	\$ 72,769
Endowment - Funds Held by Others - Fair Market Value	<u>91,604</u>	<u>65,076</u>
	<u>\$ 165,043</u>	<u>\$ 137,845</u>



# 11. Temporarily and Permanently Restricted Net Assets (continued)

Changes to the reported amounts of the UPHS' endowments and split interests as of June 30, 2014 and June 30, 2013 are as follows:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowments & split interests at June 30, 2013	\$ 973,315	\$ 274,952	\$ 137,845	\$ 1,386,112
Investment return:				
Investment Income	4,189	2,927		7,116
Net Appreciation (realized and unrealized)	163,817	57,433	6,423	227,673
Total Investment Return	168,006	60,360	6,423	234,789
New Gifts	-	-	5,665	5,665
Allocation of endowment assets for expenditure	(16,664)	-	-	(16,664)
Chester County Health System membership substitution	-	3,038	15,110	18,148
Released from restriction	16,568	(16,568)	-	-
Endowments and split interests at June 30, 2014	<u>\$ 1,141,225</u>	<u>\$ 321,782</u>	<u>\$ 165,043</u>	<u>\$ 1,628,050</u>

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowments & split interests at June 30, 2012	\$ 853,196	\$ 246,632	\$ 133,620	\$ 1,233,448
Investment return:				
Investment Income	8,537	4,142	-	12,679
Net Appreciation (realized and unrealized)	111,596	40,326	4,081	156,003
Total Investment Return	120,133	44,468	4,081	168,682
New Gifts	-	15	144	159
Allocation of endowment assets for expenditure	(16,177)	-	-	(16,177)
Other transfers				-
Released from restriction	16,163	(16,163)	-	-
Endowments and split interests at June 30, 2013	<u>\$ 973,315</u>	<u>\$ 274,952</u>	<u>\$ 137,845</u>	<u>\$ 1,386,112</u>

At June 30, 2014 and 2013, there were no material donor-restricted endowment funds for which the fair value of assets was less than the level required by donor stipulations or law.

## 12. Pension and Postretirement Benefit Costs

Effective July 1, 2011, retirement benefits were provided to UPHS employees through a new defined contribution plan (UPHS DC). Employer contributions to the defined contribution plan are based on a formula as defined by the plan document. Contributions amounted to \$17,395,000 and \$14,193,000, in 2014 and 2013, respectively.

CCA and certain other UPHS entities have a noncontributory defined contribution retirement plan covering all eligible employees, which was frozen to new entrants effective July 1, 2010. Employees enrolled in this plan were moved into the new UPHS defined contribution plan effective January 1, 2011. CCA also has a non-qualified supplemental retirement plan that provides retirement benefits to a select group of physician employees. Contributions to both of these plans are based upon the annual compensation of the eligible employees. Retirement plan expense for these plans was \$672,000 and \$600,000 for 2014 and 2013, respectively.

Retirement benefits are provided for CPUP physicians and certain administrative personnel through payments to the University of \$25,197,000 and \$23,790,000 in 2014 and 2013, respectively.

TCCHHS has a number of affiliates with either a 403(b) or 401(k) defined contribution savings plans design. All affiliates share the same employer discretionary matching process; each affiliate will match 50% of an employee's contribution (subject to the IRS annual contribution limit) up to a total of 4% of the employee's salary in a given year. Total contributions to the plans were \$1,405,791 from September 1, 2013 through June 30, 2014.

TCCHHS also has a defined contribution profit sharing plan covering all eligible employees, as defined. TCCHHS may choose to contribute a discretionary amount to the plan each year. No amount was funded.

UPHS has a non-contributory defined benefit pension plan which was frozen to new entrants effective July 1, 2010. Effective January 1, 2011, UPHS employees who were enrolled in the UPHS defined benefit plan (UPHS DB) were given a one-time opportunity to transfer from the defined benefit plan into the new defined contribution plan. Benefits under this plan generally are based on the employee's years of service and compensation during the years preceding retirement. Contributions to the plan are made in amounts necessary to at least satisfy the minimum required contributions as specified in the Internal Revenue Service Code and related regulations.

In addition to providing pension benefits, HUP, CPUP, PPMC-UPHS, PAH-UPHS and Corporate Services provide certain healthcare and life insurance benefits (Other Postretirement Employee Benefits or OPEB) for retired employees. Only a limited number of employees may become eligible for such benefits if they reach retirement age while working for the entity. These and similar benefits for active and certain retired employees are provided through insurance contracts. UPHS uses a measurement date of June 30 for their defined benefit and postretirement health care benefit plans.

## 12. Pension and Postretirement Benefit Costs (continued)

The funded status of the plans is measured as the difference between the plan assets at fair value and the projected benefit obligation or accumulated postretirement benefit obligation. The unrecognized differences between actual amounts and estimates based on actuarial assumptions are recognized as Pension and other postretirement plan adjustments in Change in Unrestricted Net Assets in the period that they occur.

### Net Periodic Cost:

The components of the net periodic benefit cost for pension benefits and other postretirement benefits are as follows (in thousands):

	Pension Benefits		Other Postretirement Benefits	
	06/30/2014	06/30/2013	06/30/2014	06/30/2013
Service cost	\$ 56,258	\$ 58,250	\$ 2,648	\$ 2,820
Interest cost	70,355	63,799	7,568	6,933
Expected return on plan assets	(83,742)	(70,297)	-	-
Amortization of:				
net prior service cost/(credit)	210	1,326	(62)	180
net losses/(gains)	18,601	41,667	1,351	2,225
Net periodic benefit cost	<u>\$ 61,682</u>	<u>\$ 94,745</u>	<u>\$ 11,505</u>	<u>\$ 12,158</u>

### Obligations and Funded Status:

The following shows changes in the benefit obligation, plan assets and funded status. Benefit obligation balances presented below reflect the projected benefit obligation (PBO) for pension plans and accumulated postretirement benefit obligations (APBO) for other postretirement benefits plans (in thousands):

	Pension Benefits		Other Postretirement Benefits	
	06/30/2014	06/30/2013	06/30/2014	06/30/2013
<b>Change in Benefit Obligation</b>				
Benefit obligation at end of prior year	\$ 1,423,697	\$ 1,433,865	\$ 163,456	\$ 167,378
Service costs	56,258	58,250	2,648	2,820
Interest costs	70,355	63,799	7,568	6,933
Retiree drug subsidy	N/A	N/A	235	299
Plan participants' contributions	N/A	N/A	395	359
Plan amendments	N/A	N/A	-	(511)
Net actuarial (gain)/loss	133,116	(104,733)	(4,118)	(5,720)
Benefits paid from fund	(31,227)	(27,484)	N/A	N/A
Benefits paid directly by company	N/A	N/A	(7,079)	(8,102)
Benefit obligation at end of year	<u>\$ 1,652,199</u>	<u>\$ 1,423,697</u>	<u>\$ 163,105</u>	<u>\$ 163,456</u>
Accumulated benefit obligation	\$ 1,388,032	\$ 1,192,765	N/A	N/A

## 12. Pension and Postretirement Benefit Costs (continued)

	Pension Benefits		Other Postretirement Benefits	
	06/30/2014	06/30/2013	06/30/2014	06/30/2013
<b>Change in Plan Assets</b>				
Fair value of plan assets at beginning of year	\$ 1,040,251	\$ 859,282	\$ -	\$ -
Actual return on assets	154,707	113,705	-	-
Company contributions	61,680	94,748	6,449	7,444
Retiree drug subsidy	N/A	N/A	235	299
Plan participants' contributions	N/A	N/A	395	359
Benefits paid from fund	(31,227)	(27,484)	-	-
Benefits paid directly by company	-	-	(7,079)	(8,102)
Fair value of plan assets at end of year	<u>\$ 1,225,411</u>	<u>\$ 1,040,251</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Funded Status</b>				
Projected benefit obligation/accumulated postretirement benefit obligation	\$ (1,652,199)	\$ (1,423,697)	\$ (163,105)	\$ (163,456)
Plan assets at fair value	1,225,411	1,040,251	-	-
Funded status at end of year	<u>\$ (426,788)</u>	<u>\$ (383,446)</u>	<u>\$ (163,105)</u>	<u>\$ (163,456)</u>

### Net Amounts Recognized in the Statement of Financial Position at June 30, 2014 and June 30, 2013 (in thousands):

	Pension Benefits		Other Postretirement Benefits	
	06/30/2014	06/30/2013	06/30/2014	06/30/2013
<b>Unrestricted Net Assets - Recognized Under ASC 715</b>				
Net actuarial loss	\$ 408,384	\$ 364,833	\$ 30,064	\$ 35,534
Net prior service cost / (credit)	-	210	(448)	(511)
Accumulated unrestricted net assets	408,384	365,043	29,616	35,023
Adjustment to unrestricted net assets	\$ 43,342	\$ (191,135)	\$ (5,407)	\$ (8,636)

The estimated amounts that will be amortized from accumulated other comprehensive income over the next fiscal year are as follows (in thousands):

	Pension Benefits	Other Postretirement Benefits
Amortization of prior service cost/(credit)	\$ -	\$ (62)
Amortization of net losses/(gains)	\$ 20,766	\$ 973

12. Pension and Postretirement Benefit Costs (continued)

**Information for Plans with PBO/APBO in Excess of Plan Assets (in thousands):**

	<u>Pension Benefits</u>		<u>Other Postretirement Benefits</u>	
	<u>06/30/2014</u>	<u>06/30/2013</u>	<u>06/30/2014</u>	<u>06/30/2013</u>
Projected Benefit Obligation/Accumulated				
Postretirement Benefit Obligation	\$ 1,652,199	\$ 1,423,697	\$ 163,105	\$ 163,456
Accumulated Benefit Obligation	1,388,032	1,192,765	N/A	N/A
Fair Value of Plan Assets	1,225,411	1,040,251	N/A	N/A

**Actuarial Assumptions:**

The expected long-term rate of return of plan assets is management's best estimate of the average investment return expected to be received on the assets invested in the plan over the benefit period. The expected long-term rate of return on plan assets has been established by considering historical and future expected returns of the asset classes invested in by the pension trust, and the allocation strategy currently in place among those classes.

## 12. Pension and Postretirement Benefit Costs (continued)

	Pension Benefits		Other Postretirement Benefits	
	2014	2013	2014	2013
<b>Weighted-Average Assumptions Used to Determine Benefit Obligation at Year End</b>				
Discount rate	4.50%	5.00%	4.25%	4.75%
Rate of compensation increase	4.00%	4.00%	4.00%	4.00%
<b>Weighted-Average Assumptions for Net Periodic Benefit Cost</b>				
Discount rate	5.00%	4.50%	4.75%	4.25%
Expected long-term return on plan assets	8.000%	8.000%	N/A	N/A
Rate of compensation increase	4.00%	4.00%	4.00%	4.00%
<b>Assumed Health Care Trend Rates</b>				
Health care cost trend rate assumed for next fiscal year			6.50%	6.75%
Rate to which the cost trend rate is assumed to decline (the Ultimate Trend Rate)			5.00%	5.00%
Ultimate Trend Rate is reached in fiscal year			2021	2021
Medicare Part B trend rate assumed for next fiscal year			5.78%	5.91%
Ultimate Trend Rate			5.00%	5.00%
Ultimate Trend Rate is reached in fiscal year			2021	2021
<b>Assumed Prescription Drug Trend Rates at June 30</b>				
Health care cost trend rate assumed for next fiscal year			6.85%	7.15%
Rate to which the cost trend rate is assumed to decline (the Ultimate Trend Rate)			5.00%	5.00%
Ultimate Trend Rate is reached in fiscal year			2021	2021

Assumed health care cost trend rates have significant effect on the amounts reported for the other postretirement benefits. A one-percentage-point change in assumed health care trend rates would have the following effects on other postretirement benefits (in thousands):

	One-Percentage Point Increase		One-Percentage Point Decrease	
	2014	2013	2014	2013
Effect on total service and interest cost	\$ 757	\$ 751	\$ (641)	\$ (632)
Effect on accumulated postretirement benefit obligation	\$ 13,355	\$ 14,016	\$ (11,428)	\$ (11,988)

## 12. Pension and Postretirement Benefit Costs (continued)

### **Plan Assets:**

UPHS adopted the disclosure provisions of the FASB revised standard on Employers' Disclosures about Pensions and Other Postretirement Benefits in Fiscal Year 2010. This revised standard provides guidance on employer's disclosures about plan assets of a defined benefit pension or other postretirement plan. The purpose of this revised standard is to provide users with more transparency surrounding plan assets and associated risks. The impact of adopting this standard did not materially affect UPHS' consolidated financial statements.

The principal investment objectives for the pension and other postretirement benefits plans are: to ensure the availability of funds to pay pension benefits as they become due under a broad range of future economic scenarios; to maximize long-term investment returns with an acceptable level of risk based on the pension obligations; and to invest the pension trust in a diversified manner across equity and debt investments. The equity investments are diversified, and comprised predominantly of developed market liquid assets, across a range of investment styles.

### **Short-Term Investments**

Short-term investments in the plan assets include cash equivalents and fixed income investments with maturities of less than one year. Short-term investments are valued using observable market data and are categorized as Level 1 in the fair value hierarchy to the degree that they can be valued based on quoted market prices in active markets. The majority of these short-term investments are held in a US Treasury money market account.

### **Equity Investments**

Equity investments in the plan assets consist of direct holdings of public securities in managed accounts, mutual funds, exchange traded funds, commingled funds and limited partnerships. The securities held in managed accounts, mutual funds and exchange traded funds are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1 in the fair value hierarchy. Commingled funds are valued at NAV and are categorized as Level 2 in the fair value hierarchy. Limited partnership interests are valued at NAV and are categorized in accordance with the Fair Value Measurement standard. If UPHS has the ability to redeem from the limited partnership up to 180 days beyond the measurement date, the investment would be classified as a Level 2 in the fair value hierarchy. Alternatively, if UPHS does not have the ability to redeem from the investment at the measurement date or is restricted from redeeming for an uncertain or extended period of time from the measurement date, the investment would be classified as a Level 3 in the fair value hierarchy.

## 12. Pension and Postretirement Benefit Costs (continued)

### Debt

Debt investments consist of direct holdings of securities in managed accounts and commingled funds. Securities such as US Treasuries, which are held in managed accounts, are valued based on quoted market prices in active markets and are categorized as Level 1. Securities such as corporate and high yield bonds, also held in managed accounts, are valued based on quoted market prices or dealer or broker quotations and are categorized as Level 2 or in the cases where they trade infrequently as Level 3. Comingled funds are valued at NAV and are categorized as Level 2.

### Absolute Return

Absolute return investments are made up of limited partnership. The fund managers invest in a variety of securities based on the strategy of fund which may or may not be quoted in an active market. Illiquid investments, if any, are generally designated as a side pocket by hedge fund managers and may be valued based on an appraised value, discounted cash flow, industry comparables or some other method. Limited partnership interests are valued at NAV and are categorized in accordance with the Fair Value Measurement standard. A limited partnership interest may be categorized as a Level 2 or Level 3 in the fair value hierarchy based on the UPHS' ability to redeem at the measurement date as described above. Side pocket investments would be classified as a Level 3 in the fair value hierarchy.

### Real Estate

Investments in real estate include close-ended limited partnership interests and an open-ended real estate investment trust. The fund managers of the close-ended limited partnership primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. This limited partnership investment is valued at NAV, is not redeemable within 180 days and is categorized as Level 3. Real estate investments also include an open-ended real estate investment trust which is categorized as a Level 2 investment given UPHS' ability to redeem from the limited partnership up to 180 days beyond the measurement date at NAV.

### Derivatives

UPHS enters into forward foreign currency contracts for the purchase or sale of a specific foreign currency at a fixed price on a future date as a hedge or cross hedge against either specific non-US dollar denominated transactions or portfolio positions. UPHS purchases or sells futures contracts to manage changes in interest rates, securities prices, currency exchange rates or to seek increase total return. Forward foreign currency contracts are categorized as Level 2. Futures contracts are categorized as Level 1.



## 12. Pension and Postretirement Benefit Costs (continued)

### Private Equity

Investments in private equity are in the form of close-end limited partnership interests. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnerships are valued at NAV, are not redeemable within 180 days and are categorized as Level 3.

### Natural Resources

Investments in natural resources include a limited partnership interest. The limited partnership fund manager primarily invests in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. The limited partnership investment is valued at NAV, is not redeemable within 180 days and is categorized as Level 3.

### Investment Risk

UPHS' investing activities expose it to a variety of risks, including market, credit and liquidity risks and attempts to identify, measure and monitor risk through various mechanisms including risk management strategies and credit policies.

Market risk is the potential for changes in the fair value of UPHS' investment portfolio. Commonly used categories of market risk include currency risk (exposure to exchange rate differences between functional currency relative to other foreign currencies), interest rate risk (changes to prevailing interest rates or changes in expectations of futures rates) and price risk (changes in market value other than those related to currency or interest rate risk, including the use of NAV provided).

Credit risk is the risk that one party to a financial investment will cause a financial loss for the other party by failing to discharge an obligation (counterparty risk).

Liquidity risk is the risk that UPHS will not be able to meet its obligations associated with financial liabilities (restrictions on ability to redeem investments). UPHS has various limited partnerships and, in other cases, has entered into contractual agreements that may limit its ability to initiate redemptions due to notice periods, lock-ups and gates.

### Unfunded Commitments

As of June 30, 2014, UPHS has unfunded commitments to limited partnerships totaling \$60,026,000, which are expected to be called over the next several years.

## 12. Pension and Postretirement Benefit Costs (continued)

A summary of plan assets, measured at fair value in accordance with the Employers' Disclosures about Pensions and Other Postretirement Benefits standard, on a recurring basis, as of June 30, 2014 and 2013 is as follows (in thousands):

<u>Assets</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>2014</u>
Short-term investments	\$ 66,528	\$ -	\$ -	\$ 66,528
Equity investments				
- Domestic equities	291,483	12,246	38,979	342,708
- International equities	29,525	195,991	17,575	243,091
- Emerging markets equities	31,325	45,267	27,941	104,533
Debt investments				
- US Treasuries	110,531	-	-	110,531
- Corporate bonds	-	47,468	-	47,468
- High yield bonds	-	9,639	-	9,639
Absolute return	-	173,719	109,527	283,246
Real estate	-	11,292	431	11,723
Private equity	-	-	4,284	4,284
Natural resources	-	-	1,786	1,786
Derivative instruments				
- Forward currency contracts	-	-	-	-
Total	<u>\$ 529,392</u>	<u>\$ 495,622</u>	<u>\$ 200,523</u>	<u>\$ 1,225,537</u>
 <u>Liabilities</u>				
Derivative instruments				
- Forward currency contracts	<u>\$ -</u>	<u>\$ 129</u>	<u>\$ -</u>	<u>\$ 129</u>
Total	<u>\$ -</u>	<u>\$ 129</u>	<u>\$ -</u>	<u>\$ 129</u>

## 12. Pension and Postretirement Benefit Costs (continued)

<u>Assets</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>2013</u>
Short-term investments	\$ 79,520	\$ -	\$ -	\$ 79,520
Equity investments				
- Domestic equities	272,953	-	17,522	290,475
- International equities	89,575	109,461	-	199,036
- Emerging markets equities	25,353	35,343	-	60,696
Debt investments				
- US Treasuries	111,960	-	-	111,960
- Corporate bonds	-	39,014	-	39,014
- High yield bonds	-	8,750	-	8,750
Absolute return	-	112,111	128,421	240,532
Real estate	-	10,231	-	10,231
Private equity	-	-	-	-
Natural resources	-	-	-	-
Derivative instruments				
- Forward currency contracts	-	38	-	38
Total	<u>\$ 579,361</u>	<u>\$ 314,948</u>	<u>\$ 145,943</u>	<u>\$ 1,040,252</u>
 <u>Liabilities</u>				
Derivative instruments				
- Forward currency contracts	\$ -	\$ 1	\$ -	\$ 1
Total	<u>\$ -</u>	<u>\$ 1</u>	<u>\$ -</u>	<u>\$ 1</u>

## 12. Pension and Postretirement Benefit Costs (continued)

Changes to the reported amounts of plan assets measured at fair value on a recurring basis using unobservable (Level 3) inputs as of June 30, 2014 and 2013 are as follows (in thousands):

	June 30, 2013	Net realized gains/(losses)	Net unrealized gains/(losses)	Purchases	Sales	Transfers in	Transfers out	June 30, 2014
Domestic equities	\$ 17,522	\$ -	\$ 3,867	\$ 26,529	\$ -	\$ -	\$ (8,939)	\$ 38,979
International equities	-	-	49	17,526	-	-	-	17,575
Emerging market equities	-	-	7,177	20,764	-	-	-	27,941
Absolute return	128,421	1,854	10,702	29,951	(8,378)	16,969	(69,992)	109,527
Real estate	-	-	(131)	562	-	-	-	431
Private equity	-	-	(69)	4,353	-	-	-	4,284
Natural resources	-	-	-	1,786	-	-	-	1,786
Total	<u>\$ 145,943</u>	<u>\$ 1,854</u>	<u>\$ 21,595</u>	<u>\$ 101,471</u>	<u>\$ (8,378)</u>	<u>\$ 16,969</u>	<u>\$ (78,931)</u>	<u>\$ 200,523</u>

	June 30, 2012	Net realized gains/(losses)	Net unrealized gains/(losses)	Purchases	Sales	Transfers in	Transfers out	June 30, 2013
Domestic equities	\$ -	\$ -	\$ 186	\$ 17,336	\$ -	\$ -	\$ -	\$ 17,522
Absolute return	<u>58,086</u>	<u>885</u>	<u>13,299</u>	<u>44,276</u>	<u>(7,552)</u>	<u>37,646</u>	<u>(18,219)</u>	<u>128,421</u>
Total	<u>\$ 58,086</u>	<u>\$ 885</u>	<u>\$ 13,485</u>	<u>\$ 61,612</u>	<u>\$ (7,552)</u>	<u>\$ 37,646</u>	<u>\$ (18,219)</u>	<u>\$ 145,943</u>

Transfers between leveled assets are based on the actual date of the event which caused the transfer. As of June 30, 2014 and 2013 there were no transfers between Level 1 and 2. Transfers between Level 3 and Level 2 as of June 30, 2014 and 2013 were due to redemption period changes at the underlying commingled funds and partnerships as well as side pocket activity in Absolute Return investments.

## 12. Pension and Postretirement Benefit Costs (continued)

### Allocation of Plan Assets:

	<u>Target</u>	<u>2014</u>	<u>2013</u>
Short-term investments	0.0%	5.4%	7.6%
Equity investments			
- Domestic equities	34.3%	28.0%	28.0%
- International equities	19.3%	19.8%	19.1%
- Emerging markets equities	5.0%	8.5%	5.8%
Debt investments			
- US Treasuries	20.0%	9.0%	10.8%
- Corporate bonds	0.0%	3.9%	3.8%
- High yield bonds	0.0%	0.8%	0.8%
Absolute return	20.0%	23.1%	23.1%
Real estate	1.0%	1.0%	1.0%
Private equity	0.3%	0.4%	0.0%
Natural resources	<u>0.1%</u>	<u>0.1%</u>	<u>0.0%</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

The average quality of debt investments at June 30, 2014 was Aa1/AA with an effective duration of 2.76 years.

### Cash Flows & Estimated Future Benefit Payments (in thousands):

	<u>Pension Benefits</u>	<u>Other Postretirement Benefits</u>
<b>UPHS Contributions For the Year Ending:</b>		
June 30, 2013	\$ 94,748	\$ 7,444
June 30, 2014	61,680	6,449
June 30, 2015	58,100	8,117
<b>Benefits Paid Directly by UPHS For the Year Ending:</b>		
June 30, 2013	\$ -	\$ 8,102
June 30, 2014	-	7,079
June 30, 2015	-	8,879
<b>Plan Participants' Contributions For the Year Ending:</b>		
June 30, 2013	\$ -	\$ 359
June 30, 2014	-	395
June 30, 2015	-	415

12. Pension and Postretirement Benefit Costs (continued)

**Expected Benefits Payments in Total (in thousands):**

	Pension Benefits	Other PostRetirement Benefit Before Medicare Part D Subsidy	Medicare Part D Subsidy
<b>Actual For the Year Ending:</b>			
June 30, 2013	\$ 27,484	\$ 8,102	\$ (299)
June 30, 2014	31,227	7,079	(235)
<b>Expected For the Year Ending:</b>			
June 30, 2015	37,262	8,879	(347)
June 30, 2016	41,223	9,499	(367)
June 30, 2017	45,344	9,880	(383)
June 30, 2018	50,557	10,446	(398)
June 30, 2019	55,892	10,813	(414)
June 30, 2020 to June 30, 2024	380,551	59,858	(2,239)

13. Net Patient Revenue by Payor

	2014	2013
Medicare (including Managed Medicare)	26%	26%
Medicaid (including Managed Medicaid)	14%	15%
Managed Care	33%	33%
Blue Cross	17%	17%
Commercial	4%	4%
Self Pay	6%	5%
	<u>100%</u>	<u>100%</u>

(in thousands)	Third Party Payors	Self-Pay	Total All Payors
Patient Service Revenue (net of contractual allowances and discounts)	\$3,714,037	\$ 237,066	\$3,951,103

#### 14. Concentrations of Credit Risk

UPHS grants credit without collateral to its patients, most of whom are local residents and are insured under third-party payer agreements. The mix of receivables from patients and third-party payers prior to the allowance for uncollectible accounts at June 30, 2014 and 2013, respectively, is as follows:

	2014	2013
Medicare	14%	15%
Medicaid	6%	5%
Managed Care (including Managed Medicare & Medicaid)	43%	43%
Blue Cross	15%	15%
Commercial	5%	6%
Patients	17%	16%
	<u>100%</u>	<u>100%</u>

#### 15. Lease Commitments

Expenses for equipment and office space under operating leases during 2014 and 2013 were \$43,576,000 and \$40,576,000, respectively, and are included in the accompanying combined financial statements.

A summary of future minimum payments under operating leases at June 30, 2014, is as follows (in thousands):

2015	\$	37,404
2016		31,256
2017		28,891
2018		23,287
2019		19,154
Thereafter		<u>80,013</u>
Total	\$	<u>220,005</u>

#### 16. Medical Professional Liability Claims

UPHS is insured for medical professional liability claims through the combination of the Medical Care Availability and Reduction of Error Fund (Mcare - formally the Medical Professional Liability Catastrophe Loss Fund of the Commonwealth of Pennsylvania - CAT Fund), various commercial insurance companies, and a risk retention program.

Mcare levies health care provider surcharges, as a percentage of the Pennsylvania Joint Underwriters Association (JUA) rates for basic coverage, to pay claims and pay administrative expenses of the Mcare participants. These surcharges are recognized as expenses in the period incurred. In March 2002, the Pennsylvania General Assembly approved reforming the Commonwealth's medical malpractice insurance system. Mcare operates on a pay-as-you-go basis and no provision has been made for any future Mcare assessments in the accompanying combined financial statements, as UPHS' portion of the unfunded Mcare liability cannot be estimated.

#### 16. Medical Professional Liability Claims (continue)

UPHS retains insurance for primary and excess coverage, in addition to the self-insured amounts. The coverage provided by the captive is done through its purchase of commercial insurance. The excess professional liability coverage is provided on a claim-made basis.

Effective July 1, 2001, UPHS funded RRG/Captive, for purposes of administering its risk retention program and covering its primary layer exposures. The assets and respective liabilities of RRG/Captive are included in the accompanying combined financial statements.

UPHS accrues for estimated retained risks arising from both asserted and unasserted medical professional liability claims. UPHS has employed independent actuaries to estimate the ultimate costs, if any, of the settlement of these claims. The estimate of the gross liability and corresponding receivable for unasserted claims arising from unreported incidents is based on analysis of historical claims data by an independent actuary, which is recorded utilizing a 2.25% discount rate at June 30, 2014 and June 30, 2013. Total liability under this program is approximately \$626,482,000 and \$591,118,000 with a corresponding receivable of \$99,106,000 and \$72,445,000 at June 30, 2014 and 2013, respectively.

#### 17. Charity, Uncompensated and Under-Compensated Care

UPHS accepts patients in serious need of professional medical care, independent of their financial status. This definition includes those patients suffering from a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in (1) placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy, or (2) serious impairment to bodily functions. Accordingly, UPHS provides services to patients, who meet certain criteria under its charity care policy, without charge or at amounts less than UPHS' established rates. Because UPHS does not pursue collections, such amounts have been excluded from net patient service revenue. UPHS estimated \$10,680,000 and \$8,530,000 arose during 2014 and 2013, respectively, from providing services to charity patients. The estimated costs of providing charity services are based on data derived from a combination of the UPHS' cost accounting system and the ratio of costs to charges.

UPHS also provides care to patients who do not have health insurance or meet the criteria to qualify for its charity care policy. UPHS pursues collection of these amounts, however certain amounts are deemed to be uncollectible. These amounts are classified in the provision for bad debts in the accompanying combined statements of operations. UPHS' provision for bad debts totaled \$239,649,000 and \$191,479,000 for 2014 and 2013, respectively.

Additionally, the costs of providing services to eligible welfare recipients, who participate in the Pennsylvania Medical Assistance and local Managed Medicaid programs exceeded reimbursement by \$120,414,000 and \$111,179,000 in 2014 and 2013, respectively.



17. Charity, Uncompensated and Under-Compensated Care (continue)

In addition to providing direct patient charity care and in furtherance of its exempt purpose to benefit the community, UPHS operates emergency rooms open to the public 24-hours per day, 7 days per week; maintains research facilities for the study of disease and injuries; provides facilities for teaching and training various medical personnel; facilitates the advancement of medical and surgical education; and provides various community services such as screenings for the detection of breast, colorectal and skin cancer, cancer support groups, a toll free number for cancer information, free immunization shots, training programs for the City Fire and Police Departments, health education classes, speeches and regularly provides health related information to television and radio news programs and to reporters at newspapers and magazines.

18. Contingencies and Commitments

UPHS is subject to litigation and regulatory investigations that arise in the ordinary course of its business. To cover claims arising out of its operations, UPHS maintains various levels of insurance coverage with deductibles that UPHS believes to be sufficient. UPHS cannot assure that professional liability insurance will cover all claims or continue to be available at reasonable costs for UPHS to maintain adequate levels of insurance.

At June 30, 2014, construction contract commitments are estimated to total \$103,345,000.

19. Subsequent Event

UPHS has evaluated subsequent events through September 19, 2014, which is the date the combined financial statements were widely distributed.

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Balance Sheets at June 30, 2014  
(thousands of dollars)

ASSETS	CPUP	CCA	HUP	Penn Presbyterian	TCHS	Pennsylvania	Wissahickon Hospice/ Homecare	Corporate	RRG/ Captive	Total
Current:										
Cash and cash equivalents	\$ -	\$ -	\$ -	\$ -	\$ 29,215	\$ -	\$ 2,097	\$ 665,952	\$ -	\$ 697,264
Due from (to) UPHS central treasury	149,285	(624)	770,342	(28,215)	(37,691)	50,462	31,623	(935,182)	-	-
Short-term investments										
Patient receivables, net of reserve for uncollectible accounts	50,614	4,104	198,404	49,557	29,664	51,136	16,342	-	-	399,821
Third party payer receivables	-	-	780	-	-	889	-	-	-	1,669
Due from the University of Pennsylvania	-	-	-	-	-	-	-	1,008	-	1,008
Other current assets	10,529	3,329	34,352	10,633	11,946	9,065	2,419	18,351	-	100,624
Total current assets	210,428	6,809	1,003,878	31,975	33,134	111,552	52,481	(249,871)	-	1,200,386
Assets whose use is limited:										
Held by trustee	-	-	504	-	-	2,240	-	5,802	-	8,546
RRG/Captive	-	-	-	-	-	-	-	-	120,181	120,181
Designated	1,026	-	452,180	-	5,311	46,076	-	642,969	-	1,147,562
Donor-restricted	-	-	128,681	133,266	31,737	247,128	690	298	-	541,800
	1,026	-	581,365	133,266	37,048	295,444	690	649,069	120,181	1,818,089
Long-term investments	-	-	-	-	-	141	-	456,266	-	456,407
Property and equipment, net	21,101	37,151	862,514	290,481	137,487	256,453	4,779	242,124	-	1,852,090
Other assets	554	296	4,380	26,857	17,858	1,243	-	112,275	-	163,463
Total assets	<u>\$ 233,109</u>	<u>\$ 44,256</u>	<u>\$ 2,452,137</u>	<u>\$ 482,579</u>	<u>\$ 225,527</u>	<u>\$ 664,833</u>	<u>\$ 57,950</u>	<u>\$ 1,209,863</u>	<u>\$ 120,181</u>	<u>\$ 5,490,435</u>
LIABILITIES AND NET ASSETS										
Current:										
Accounts payable	\$ -	\$ -	\$ 165	\$ -	\$ 10,407	\$ 699	\$ -	\$ 118,774	\$ -	\$ 130,045
Accrued expenses	76,305	12,570	83,995	29,424	15,955	21,240	4,404	155,329	1,896	401,118
Current portion of long-term debt	-	-	28,027	2,817	5,398	5,802	-	-	-	42,044
Due to the University of Pennsylvania	-	-	-	-	-	-	-	-	-	-
Third party payer settlements	-	-	16,694	11,070	-	14,083	-	4,501	-	46,348
Total current liabilities	76,305	12,570	128,881	43,311	31,760	41,824	4,404	278,604	1,896	619,555
Long-term debt, net of current portion	-	-	595,071	72,765	61,376	188,213	-	-	-	917,425
Third party payer settlements, net of current	-	-	-	-	4,951	-	71	-	-	5,022
Other liabilities	-	-	20,356	52,626	14,764	1,581	-	565,709	108,362	763,398
Pension and post retirement benefit liability	-	-	-	-	-	-	-	581,778	-	581,778
Total liabilities	76,305	12,570	744,308	168,702	112,851	231,618	4,475	1,426,091	110,258	2,887,178
Net assets:										
Unrestricted	156,804	31,686	1,577,540	180,471	82,083	186,087	52,790	(220,007)	9,923	2,057,377
Temporarily restricted	-	-	93,585	97,415	15,347	170,187	524	3,779	-	380,837
Permanently restricted	-	-	36,704	35,991	15,246	76,941	161	-	-	165,043
Total net assets	156,804	31,686	1,707,829	313,877	112,676	433,215	53,475	(216,228)	9,923	2,603,257
Total liabilities and net assets	<u>\$ 233,109</u>	<u>\$ 44,256</u>	<u>\$ 2,452,137</u>	<u>\$ 482,579</u>	<u>\$ 225,527</u>	<u>\$ 664,833</u>	<u>\$ 57,950</u>	<u>\$ 1,209,863</u>	<u>\$ 120,181</u>	<u>\$ 5,490,435</u>

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Balance Sheets at June 30, 2013  
(thousands of dollars)

ASSETS	CPUP	CCA	HUP	Penn Presbyterian	Pennsylvania	Wissahickon Hospice/ Homecare	Corporate	RRG/ Captive	Total
Current:									
Cash and cash equivalents	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,069	\$ 736,702	\$ -	\$ 738,771
Due from (to) UPHS central treasury	106,869	1,476	656,896	35,677	89,919	33,848	(924,685)	-	-
Patient receivables, net of reserve for uncollectible accounts	48,192	3,763	193,028	37,539	36,150	12,296	-	-	330,968
Third party payer receivables	-	-	6,073	623	2,080	-	-	-	8,776
Other current assets	11,705	1,252	28,029	9,885	7,405	2,270	19,548	-	80,094
Total current assets	166,766	6,491	884,026	83,724	135,554	50,483	(168,435)	-	1,158,609
Assets whose use is limited:									
Held by trustee	-	-	492	-	2,142	-	10,952	-	13,586
RRG/Captive	-	-	-	-	-	-	-	114,569	114,569
Designated	2,370	-	383,719	-	39,100	-	550,495	-	975,684
Donor-restricted	-	-	113,387	120,009	219,386	635	157	-	453,574
	2,370	-	497,598	120,009	260,628	635	561,604	114,569	1,557,413
Long-term investments	-	-	-	-	141	-	436,326	-	436,467
Property and equipment, net	21,135	38,622	806,966	165,858	239,136	5,447	194,815	-	1,471,979
Other assets	648	296	4,928	26,877	1,311	-	81,581	-	115,641
Total assets	\$ 190,919	\$ 45,409	\$ 2,193,518	\$ 396,468	\$ 636,770	\$ 56,565	\$ 1,105,891	\$ 114,569	\$ 4,740,109
LIABILITIES AND NET ASSETS									
Current:									
Accounts payable	\$ -	\$ -	\$ 43	\$ -	\$ 426	\$ 349	\$ 106,875	\$ -	\$ 107,693
Accrued expenses	68,557	11,495	72,202	17,430	24,945	2,746	184,252	2,005	383,632
Current portion of long-term debt	-	-	78,823	2,680	4,997	-	-	-	86,500
Due to the University of Pennsylvania	-	-	-	-	-	-	119	-	119
Third party payer settlements	-	-	21,943	6,433	6,894	-	-	-	35,270
Total current liabilities	68,557	11,495	173,011	26,543	37,262	3,095	291,246	2,005	613,214
Long-term debt, net of current portion	-	-	593,346	60,839	142,702	-	-	-	796,887
Third party payer settlements, net of current	-	-	-	-	-	209	-	-	209
Other liabilities	-	-	22,455	29,640	46,270	-	549,593	102,671	750,629
Pension and post retirement benefit liability	-	-	-	-	-	-	538,630	-	538,630
Total liabilities	68,557	11,495	788,812	117,022	226,234	3,304	1,379,469	104,676	2,699,569
Net assets:									
Unrestricted	122,362	33,914	1,288,923	159,681	191,153	52,599	(277,200)	9,893	1,581,325
Temporarily restricted	-	-	82,031	84,297	150,889	531	3,622	-	321,370
Permanently restricted	-	-	33,752	35,468	68,494	131	-	-	137,845
Total net assets	122,362	33,914	1,404,706	279,446	410,536	53,261	(273,578)	9,893	2,040,540
Total liabilities and net assets	\$ 190,919	\$ 45,409	\$ 2,193,518	\$ 396,468	\$ 636,770	\$ 56,565	\$ 1,105,891	\$ 114,569	\$ 4,740,109

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Statements of Operations  
for the year ended June 30, 2014  
(thousands of dollars)

	CPUP	CCA	HUP	Penn Presbyterian	TCHS	Pennsylvania	Wissahickon Hospice/ Homecare	Corporate	RRG/ Captive	Eliminations	Total
Revenues:											
Net patient service revenue	\$ 473,619	\$ 106,006	\$ 2,039,618	\$ 483,454	\$ 233,468	\$ 532,854	\$ 86,360	\$ (4,276)	\$ -	\$ -	\$ 3,951,103
Provision for bad debts	(16,656)	(3,945)	(116,685)	(38,747)	(13,085)	(47,071)	(3,460)	-	-	-	(239,649)
Net patient service revenue less provision for bad debts	456,963	102,061	1,922,933	444,707	220,383	485,783	82,900	(4,276)	-	-	3,711,454
Other revenue	93,968	9,127	77,607	31,954	15,035	33,359	463	43,661	43,768	(121,170)	227,772
Total revenues:	550,931	111,188	2,000,540	476,661	235,418	519,142	83,363	39,385	43,768	(121,170)	3,939,226
Expenses:											
Salaries and wages	475,998	64,470	500,761	162,713	113,554	172,217	40,340	128,181	-	-	1,658,234
Employee benefits	94,621	17,270	168,492	50,514	26,165	55,863	11,260	37,986	-	-	462,171
Supplies and expenses	80,641	20,508	527,431	143,100	88,925	177,362	27,447	154,836	996	(15,416)	1,205,830
Corporate services / Inter-Entity Support	(201,010)	1,302	392,576	77,926	1,171	93,097	4,851	(307,927)	-	(61,986)	-
Depreciation and amortization	3,262	1,809	78,964	15,857	10,872	21,937	695	24,440	-	-	157,836
Malpractice	47,205	8,195	28,793	4,707	697	14,387	-	2,635	42,772	(43,768)	105,623
Interest	-	-	27,271	1,204	1,229	8,020	-	(993)	-	-	36,731
SOM support	3,535	-	11,200	2,357	-	-	-	4,319	-	-	21,411
Total expenses	504,252	113,554	1,735,488	458,378	242,613	542,883	84,593	43,477	43,768	(121,170)	3,647,836
Excess/(deficit) of revenue over expenses from operations	46,679	(2,366)	265,052	18,283	(7,195)	(23,741)	(1,230)	(4,092)	-	-	291,390
Non-Operating Gains/(Loss):											
Interest and dividends	3,112	14	9,281	2,086	361	7,227	205	464	30	-	22,780
Net realized gain/(loss), contributions and other support	304	124	53,935	421	-	6,904	1,227	11,554	-	-	74,469
Change in unrealized gain/(loss) on alternative investments	(371)	-	17,813	-	-	2,133	(5)	30,356	-	-	49,926
Excess (deficit) of revenue over expenses	49,724	(2,228)	346,081	20,790	(6,834)	(7,477)	197	38,282	30	-	438,565
Change in unrealized gain/(loss) on other investments	(431)	-	20,663	-	-	2,474	(6)	35,211	-	-	57,911
Transfers and net assets released from restrictions for capital	(14,851)	-	(78,127)	-	-	(63)	-	(19,756)	-	-	(112,797)
Chester County Health System membership substitution					88,917			41,391			130,308
Pension and other postretirement plan adjustments	-	-	-	-	-	-	-	(37,935)	-	-	(37,935)
Increase/(decrease) in unrestricted net assets	\$ 34,442	\$ (2,228)	\$ 288,617	\$ 20,790	\$ 82,083	\$ (5,066)	\$ 191	\$ 57,193	\$ 30	\$ -	\$ 476,052

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Statements of Operations  
for the year ended June 30, 2013  
(thousands of dollars)

	CPUP	CCA	HUP	Penn Presbyterian	Pennsylvania	Wissahickon Hospice/ Homecare	Corporate	RRG/ Captive	Eliminations	Total
Revenues:										
Net patient service revenue	\$ 428,077	\$ 115,397	\$ 1,920,723	\$ 463,024	\$ 479,832	\$ 80,394	\$ 204	\$ -	\$ -	\$ 3,487,651
Provision for bad debts	(11,737)	(4,141)	(102,333)	(35,821)	(34,750)	(2,697)	-	-	-	(191,479)
Net patient service revenue less provision for bad debts	416,340	111,256	1,818,390	427,203	445,082	77,697	204	-	-	3,296,172
Other revenue	95,153	9,563	56,941	31,548	33,716	543	52,586	44,600	(119,844)	204,806
Total revenues:	511,493	120,819	1,875,331	458,751	478,798	78,240	52,790	44,600	(119,844)	3,500,978
Expenses:										
Salaries and wages	447,289	59,376	490,142	160,702	168,535	38,569	119,134	-	-	1,483,747
Employee benefits	94,472	16,603	179,347	54,341	60,423	12,053	39,567	-	-	456,806
Supplies and expenses	82,702	38,627	488,655	139,293	150,270	26,477	157,712	996	(16,808)	1,067,924
Corporate services / Inter-Entity Support	(184,111)	1,905	369,450	75,581	83,124	4,107	(291,620)	-	(58,436)	-
Depreciation and amortization	2,951	2,101	78,197	15,434	17,585	713	22,570	-	-	139,551
Malpractice	48,441	8,343	29,949	4,854	14,923	-	2,601	43,604	(44,600)	108,115
Interest	-	-	31,895	2,671	4,726	-	(1,555)	-	-	37,737
SOM support	3,886	-	11,200	2,561	-	-	4,319	-	-	21,966
Total expenses	495,630	126,955	1,678,835	455,437	499,586	81,919	52,728	44,600	(119,844)	3,315,846
Excess/(deficit) of revenue over expenses from operations	15,863	(6,136)	196,496	3,314	(20,788)	(3,679)	62	-	-	185,132
Non-Operating Gains/(Loss):										
Investment income	2,160	(2)	11,564	2,248	7,090	274	1,023	184	-	24,541
Net realized gain/(loss), contributions and other support	163	257	38,672	1,127	5,399	931	10,107	-	-	56,656
Change in unrealized gain/(loss) on alternative investments	(344)	-	9,634	-	1,099	(3)	19,623	-	-	30,009
Excess/(deficit) of revenue over expenses	17,842	(5,881)	256,366	6,689	(7,200)	(2,477)	30,815	184	-	296,338
Change in unrealized gain/(loss) on other investments	(416)	-	11,620	-	1,325	(3)	23,666	-	-	36,192
Transfers and net assets released from restrictions for capital	(12,735)	10,364	(69,451)	(1,965)	(2,312)	(1,126)	(13,180)	-	-	(90,405)
Pension and other postretirement plan adjustments	-	-	-	-	-	-	199,771	-	-	199,771
Increase/(decrease) in unrestricted net assets	\$ 4,691	\$ 4,483	\$ 198,535	\$ 4,724	\$ (8,187)	\$ (3,606)	\$ 241,072	\$ 184	\$ -	\$ 441,896

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Statements of Changes in Net Assets  
for the year ended June 30, 2014  
(thousands of dollars)

	CPUP	CCA	HUP	Penn Presbyterian	TCHS	Pennsylvania	Hospice/ Homecare	Corporate	RRG	Total
Unrestricted net assets, June 30, 2013	\$ 122,362	\$ 33,914	\$ 1,288,923	\$ 159,681	\$ -	\$ 191,153	\$ 52,599	\$ (277,200)	\$ 9,893	\$ 1,581,325
Excess/(deficit) of revenue over expenses	49,724	(2,228)	346,081	20,790	(6,834)	(7,477)	197	38,282	30	438,565
Change in unrealized gain/(loss) on other investments	(431)	-	20,663	-	-	2,474	(6)	35,211	-	57,911
Net assets released from restrictions	-	-	250	-	-	480	-	-	-	730
Pension and other postretirement plan adjustments	-	-	-	-	-	-	-	(37,935)	-	(37,935)
Transfer to the Other Health Entities	15,554	-	(769)	-	-	-	-	(14,785)	-	-
Transfer to the academic accounts at the School of Medicine and University, net	(30,405)	-	(77,608)	-	-	(543)	-	(4,971)	-	(113,527)
Chester County Health System membership substitution					88,917			41,391		130,308
Increase/(decrease) in unrestricted net assets	34,442	(2,228)	288,617	20,790	82,083	(5,066)	191	57,193	30	476,052
Unrestricted net assets/(deficit), June 30, 2014	\$ 156,804	\$ 31,686	\$ 1,577,540	\$ 180,471	\$ 82,083	\$ 186,087	\$ 52,790	\$ (220,007)	\$ 9,923	\$ 2,057,377
Temporarily restricted net assets, June 30, 2013	\$ -	\$ -	\$ 82,031	\$ 84,297	\$ -	\$ 150,889	\$ 531	\$ 3,622	\$ -	\$ 321,370
Contributions and investment income	-	-	1,067	3,702	3,093	4,763	219	157	-	13,001
Net assets released from restrictions	-	-	(1,142)	(4,041)	-	(4,865)	(226)	-	-	(10,274)
Chester County Health System membership substitution	-	-	-	-	12,254	-	-	-	-	12,254
Realized and unrealized gain/(loss) on endowment funds, net	-	-	11,629	13,457	-	19,400	-	-	-	44,486
Increase/(decrease) in temporarily restricted net assets	-	-	11,554	13,118	15,347	19,298	(7)	157	-	59,467
Temporarily restricted net assets, June 30, 2014	\$ -	\$ -	\$ 93,585	\$ 97,415	\$ 15,347	\$ 170,187	\$ 524	\$ 3,779	\$ -	\$ 380,837
Permanently restricted net assets, June 30, 2013	\$ -	\$ -	\$ 33,752	\$ 35,468	\$ -	\$ 68,494	\$ 131	\$ -	\$ -	\$ 137,845
Contributions and investment income	-	-	-	-	1,508	4,661	30	-	-	6,199
Realized and unrealized gain/(loss) on endowment funds, net	-	-	2,952	523	-	3,786	-	-	-	7,261
Chester County Health System membership substitution	-	-	-	-	13,738	-	-	-	-	13,738
Increase/(decrease) in permanently restricted net assets	-	-	2,952	523	15,246	8,447	30	-	-	27,198
Permanently restricted net assets, June 30, 2014	\$ -	\$ -	\$ 36,704	\$ 35,991	\$ 15,246	\$ 76,941	\$ 161	\$ -	\$ -	\$ 165,043

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Statements of Changes in Net Assets  
for the year ended June 30, 2013  
(thousands of dollars)

	CPUP	CCA	HUP	Penn Presbyterian	Pennsylvania	Wissahickon Hospice	Corporate	RRG	Total
Unrestricted net assets, June 30, 2012	\$ 117,671	\$ 29,431	\$ 1,090,388	\$ 154,957	\$ 199,340	\$ 56,205	\$ (518,272)	\$ 9,709	\$ 1,139,429
Excess (deficit) of revenue over expenses	17,842	(5,881)	256,366	6,689	(7,200)	(2,477)	30,815	184	296,338
Change in unrealized gain/(loss) on other investments	(416)	-	11,620	-	1,325	(3)	23,666	-	36,192
Net assets released from restrictions	-	-	-	-	525	-	-	-	525
Pension and other postretirement plan adjustments	-	-	-	-	-	-	199,771	-	199,771
Transfer to the Other Health Entities	5,617	10,364	(5,001)	(1,965)	(2,837)	(1,126)	(5,052)	-	-
Transfer to the academic accounts at the School of Medicine and University, net	(18,352)	-	(64,450)	-	-	-	(8,128)	-	(90,930)
Increase/(decrease) in unrestricted net assets	4,691	4,483	198,535	4,724	(8,187)	(3,606)	241,072	184	441,896
Unrestricted net assets, June 30, 2013	<u>\$ 122,362</u>	<u>\$ 33,914</u>	<u>\$ 1,288,923</u>	<u>\$ 159,681</u>	<u>\$ 191,153</u>	<u>\$ 52,599</u>	<u>\$ (277,200)</u>	<u>\$ 9,893</u>	<u>\$ 1,581,325</u>
Temporarily restricted net assets, June 30, 2012	\$ -	\$ -	\$ 75,690	\$ 77,915	\$ 135,294	\$ 444	\$ 3,796	\$ -	\$ 293,139
Contributions and investment income	-	-	2,651	3,895	5,924	295	(174)	-	12,591
Net assets released from restrictions	-	-	(779)	(5,172)	(5,321)	(208)	-	-	(11,480)
Realized and unrealized gain/(loss) on endowment funds, net	-	-	4,469	7,659	14,992	-	-	-	27,120
Increase/(decrease) in temporarily restricted net assets	-	-	6,341	6,382	15,595	87	(174)	-	28,231
Temporarily restricted net assets, June 30, 2013	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 82,031</u>	<u>\$ 84,297</u>	<u>\$ 150,889</u>	<u>\$ 531</u>	<u>\$ 3,622</u>	<u>\$ -</u>	<u>\$ 321,370</u>
Permanently restricted net assets, June 30, 2012	\$ -	\$ -	\$ 32,120	\$ 35,099	\$ 66,309	\$ 92	\$ -	\$ -	\$ 133,620
Contributions and investment income	-	-	-	100	78	39	-	-	217
Realized and unrealized gain/(loss) on endowment funds, net	-	-	1,632	269	2,107	-	-	-	4,008
Increase/(decrease) in permanently restricted net assets	-	-	1,632	369	2,185	39	-	-	4,225
Permanently restricted net assets, June 30, 2013	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 33,752</u>	<u>\$ 35,468</u>	<u>\$ 68,494</u>	<u>\$ 131</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 137,845</u>

UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Statements of Cash Flows  
for the year ended June 30, 2014  
(thousands of dollars)

	CPUP	CCA	HUP	Penn Presbyterian	TCCHS	Pennsylvania	Wissahickon Hospice/ Homecare	Corporate	RRG	Total
Cash flows from operating activities:										
Increase (decrease) in net assets	\$ 34,442	\$ (2,228)	\$ 303,123	\$ 34,431	\$ 112,676	\$ 22,679	\$ 214	\$ 57,350	\$ 30	\$ 562,717
to net cash provided (used) by operating activities:										
Depreciation and amortization	3,262	1,809	78,964	15,857	10,872	21,937	695	24,440	-	157,836
Provision for bad debts	16,656	3,945	116,685	38,747	13,085	47,071	3,460	-	-	239,649
Increase/(decrease) from changes in:										
Patient receivables	(19,078)	(4,286)	(122,061)	(50,765)	(11,684)	(62,057)	(7,506)	-	-	(277,437)
Other current assets	1,176	(2,077)	(6,323)	(748)	665	(1,660)	(149)	1,197	-	(7,919)
Other assets	94	-	293	40	(3,779)	(47)	-	(18,628)	-	(22,027)
Accounts payable and accrued expenses	7,751	1,073	(3,463)	1,395	(1,031)	2,306	1,303	(22,469)	(109)	(13,244)
Estimated third party payer settlements	-	-	44	5,260	1,427	8,380	(138)	4,501	-	19,474
Due to University of Pennsylvania	-	-	-	-	-	-	-	(1,127)	-	(1,127)
Other liabilities	-	-	(3,347)	(308)	7,270	(320)	-	16,116	5,691	25,102
Pension and post-retirement benefit liability	-	-	-	-	-	-	-	5,213	-	5,213
Net realized and unrealized (gain) loss on investments	493	(123)	(105,567)	(14,353)	-	(34,712)	(1,215)	(77,040)	-	(232,517)
Transfers, restricted contributions and pension adjustment	14,851	-	75,905	(3,750)	(106,223)	(8,867)	(249)	16,143	-	(12,190)
Net cash provided by/used for operating activities	59,647	(1,887)	334,253	25,806	23,278	(5,290)	(3,585)	5,696	5,612	443,530
Cash flows from investing activities:										
Purchases of property and equipment	(3,227)	(336)	(118,760)	(106,804)	(26,809)	(42,039)	(21)	(36,973)	-	(334,969)
Net (purchase)/sale of assets whose use is limited and investments	847	123	22,840	3,735	(7,962)	2,345	1,160	(30,365)	(5,612)	(12,889)
Chester County Health System membership substitution					15,397					15,397
Net cash provided (used) by investing activities from continuing operations	(2,380)	(213)	(95,920)	(103,069)	(19,374)	(39,694)	1,139	(67,338)	(5,612)	(332,461)
Sale of Phoenixville property and equipment					-					-
Net cash used for investing activities	(2,380)	(213)	(95,920)	(103,069)	(19,374)	(39,694)	1,139	(67,338)	(5,612)	(332,461)
Cash flows from financing activities:										
Repayment of long-term debt and notes payable	-	-	(78,823)	(2,680)	(63,687)	(4,886)	-	-	-	(150,076)
Cost of issuance of debt	-	-	(119)	(60)	(200)	(5)	-	-	-	(384)
Proceeds from restricted contributions	-	-	1,432	1,111	1,507	6,961	249	151	-	11,411
Proceeds from issuance of long-term debt	-	-	31,000	15,000	50,000	4,000	-	-	-	100,000
Due from/to HSC central treasury	(42,416)	2,100	(113,446)	63,892	37,691	39,457	2,225	10,497	-	-
Transfers and other	(14,851)	-	(78,377)	-	-	(543)	-	(19,756)	-	(113,527)
Net cash provided by/used for financing activities	(57,267)	2,100	(238,333)	77,263	25,311	44,984	2,474	(9,108)	-	(152,576)
Net increase (decrease) in cash and cash equivalents	-	-	-	-	29,215	-	28	(70,750)	-	(41,507)
Cash and cash equivalents, beginning of year	-	-	-	-	-	-	2,069	736,702	-	738,771
Cash and cash equivalents, end of year	\$ -	\$ -	\$ -	\$ -	\$ 29,215	\$ -	\$ 2,097	\$ 665,952	\$ -	\$ 697,264
Supplemental disclosure of cash flow information:										
Cash paid for interest	\$ -	\$ -	\$ 31,825	\$ 2,985	\$ 502	\$ 4,987	\$ -	\$ -	\$ -	\$ 40,299



UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM  
Combining Statements of Cash Flows  
for the year ended June 30, 2013  
(thousands of dollars)

	CPUP	CCA	HUP	Penn Presbyterian	Pennsylvania	Wissahickon Hospice	Corporate	RRG	Total
Cash flows from operating activities:									
Increase (decrease) in net assets	\$ 4,691	\$ 4,483	\$ 206,508	\$ 11,475	\$ 9,593	\$ (3,480)	\$ 240,898	\$ 184	\$ 474,352
Adjustments to reconcile change in net assets to net cash provided (used) by operating activities:									
Depreciation and amortization	2,951	2,101	78,197	15,434	17,585	713	22,570	-	139,551
Provision for bad debts	11,737	4,141	102,333	35,821	34,750	2,697	-	-	191,479
Increase/(decrease) from changes in:									
Patient receivables	312	(3,344)	(114,617)	(37,840)	(26,497)	(1,923)	-	-	(183,909)
Other current assets	(612)	2,988	22,732	403	3,515	(667)	46,668	-	75,027
Other assets	(648)	-	367	50	225	-	14,723	-	14,717
Accounts payable and accrued expenses	3,871	932	(322)	(2,068)	(1,814)	(80)	3,016	(166)	3,369
Estimated third party payer settlements	-	-	3,598	590	5,108	209	(2,800)	-	6,705
Due to University of Pennsylvania	-	-	-	-	-	-	1,049	-	1,049
Other liabilities	-	-	(2,173)	24,250	44,673	-	(62,878)	14,489	18,361
Pension and post-retirement benefit liability	-	-	-	-	-	-	4,931	-	4,931
Net realized and unrealized (gain) loss on investments	597	(27)	(65,648)	(8,970)	(24,771)	(925)	(53,104)	-	(152,848)
Transfers, restricted contributions and pension adjustment	12,735	(10,594)	66,440	(2,114)	(3,317)	792	(186,628)	-	(122,686)
Net cash provided (used) by operating activities	35,634	680	297,415	37,031	59,050	(2,664)	28,445	14,507	470,098
Cash flows from investing activities:									
Purchases of property and equipment	(3,949)	526	(116,153)	(45,931)	(88,175)	(259)	52,142	-	(201,799)
Net (purchase)/sale of assets whose use is limited and investments	744	257	13,855	5,120	4,808	1,026	12,398	(14,507)	23,701
Net cash provided (used) by investing activities	(3,205)	783	(102,298)	(40,811)	(83,367)	767	64,540	(14,507)	(178,098)
Cash flows from financing activities:									
Repayment of long-term debt and notes payable	-	-	(25,664)	(2,548)	(5,049)	-	-	-	(33,261)
Cost of issuance of debt	-	-	-	-	-	-	-	-	-
Proceeds from restricted contributions	-	-	2,996	1,441	3,832	327	(180)	-	8,416
Proceeds from issuance of long-term debt	-	-	-	-	-	-	-	-	-
Due from/to HSC central treasury	(19,694)	(11,827)	(102,998)	6,852	28,371	2,844	96,452	-	-
Transfers and other	(12,735)	10,364	(69,451)	(1,965)	(2,837)	(1,126)	(13,180)	-	(90,930)
Net cash provided (used) for financing activities	(32,429)	(1,463)	(195,117)	3,780	24,317	2,045	83,092	-	(115,775)
Net increase (decrease) in cash and cash equivalents	-	-	-	-	-	148	176,077	-	176,225
Cash and cash equivalents, beginning of year	-	-	-	-	-	1,921	560,625	-	562,546
Cash and cash equivalents, end of year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,069	\$ 736,702	\$ -	\$ 738,771
Supplemental disclosure of cash flow information:									
Cash paid for interest	\$ -	\$ -	\$ 33,363	\$ 2,910	\$ 4,881	\$ -	\$ -	\$ -	\$ 41,154

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**APPENDIX C**

**CERTAIN INFORMATION REGARDING  
THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA**

## TABLE OF CONTENTS

	<u>Page</u>
THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA .....	1
General.....	1
Governance .....	2
Transactions Between the University and Members of its Board of Trustees .....	4
Officers of the University .....	5
PROGRAMS .....	5
Academic .....	5
Faculty .....	6
Undergraduate Student Applications and Enrollment.....	6
Tuition, Fees and Other Charges .....	7
Student Financial Aid .....	8
The Penn Plan (Tuition Stabilizer Plan) and Penn Guaranteed Loan Program.....	8
UNIVERSITY FINANCIAL DATA.....	9
General.....	9
Operating Budget.....	10
Commonwealth Appropriations.....	10
Contributions .....	10
Sponsored Research.....	11
Endowment .....	12
Endowment Spending Policy.....	12
Investment Policy .....	13
Investment Performance .....	13
Plant Assets of the University.....	13
Indebtedness of the University's Academic Component .....	14
Capital Expenditures.....	15
Future Borrowing.....	15
ADDITIONAL UNIVERSITY INFORMATION.....	15
Employee Relations .....	15
Retirement Plan .....	16
Insurance.....	16
Malpractice Insurance.....	17
Litigation .....	17

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### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements included or incorporated by reference in this Appendix C constitute projections or estimates of future events, generally known as forward-looking statements. These statements are generally identifiable by the terminology used such as “plan,” “expect,” “estimate,” “budget” or other similar words. These forward-looking statements include, among others, the information under the caption “UNIVERSITY FINANCIAL DATA” in this Appendix C.

The achievement of certain results or other expectations in these forward-looking statements involves known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. The University does not plan to issue any updates or revisions to those forward-looking statements if or when changes in its expectations, or events, conditions or circumstances on which these statements are based occur.

## THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA

*The information set forth in this APPENDIX C is intended to provide certain limited information regarding The Trustees of the University of Pennsylvania (the “University”). The obligation of the University to make payments under the Loan Agreement and the 2015 Master Note is a limited obligation of the University to make payments solely from the Property of HUP and CPUP (or any additional Designated Units established as provided in the Master Indenture). There is no assurance, however, that the property of the University comprising HUP and CPUP would not be attached by general creditors of the University in the event that the University becomes unable to pay its obligations as they become due. Accordingly, the ability of the University to pay its limited obligations as a Member of the Obligated Group with respect to the Loan Agreement and the 2015 Master Note would be adversely affected if the University were to become unable to pay its obligations generally as they become due.*

Information with respect to the University of Pennsylvania Health System is separately set forth in APPENDIX A to this Official Statement.

### General

The Trustees of the University of Pennsylvania (the “University” or “Penn”) is an independent non-sectarian research institution of higher education chartered under the laws of the Commonwealth of Pennsylvania (the “Commonwealth”). One of only nine colleges and universities established during the colonial period, the University is the third oldest Ivy League school. It is a privately endowed, gift-supported non-profit corporation, and is exempt from federal income taxes as an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the “Code”).

The University has a long history of innovation. Unique among its colonial peers in its radical departure from the traditional ecclesiastical curriculum, the University established the first liberal arts curriculum, combining for the first time a scientific and classical education and offering such new fields of study as modern languages, physics, mathematics, history, and economics. As the nation’s first university, it introduced the concept of a multi-disciplinary education. It founded the nation’s first School of Medicine in 1765, marking the beginning of formal medical education in North America, and the nation’s first hospital established by a medical school.

The first professorships in botany and chemistry in the United States were established at the University. Benjamin Rush, a chemistry professor, joined the medical faculty in 1769 and published the first book on insanity in the United States, pioneering the study of mental disease. The Wharton School of Finance and Commerce, the first collegiate school of business, opened in 1881. In 1896, the world’s first psychology clinic opened at the University. During World War II, ENIAC, the original large-scale, all-electronic digital computer, which was the forerunner of the computer industry, was designed and built at the Moore School of Electrical Engineering. The Piersol Rehabilitation Center, founded in 1959, was the first rehabilitation center in the City of Philadelphia (the “City”).

The University continues this pioneering tradition today in fields as diverse as cancer research, genomics, gene therapy, digital media design, cognitive science, materials science, aging, biotechnology, bioethics, neuroscience, demography, management and technology, bioinformatics and computational biology, nanotechnology, translational research and public policy. For a decade, the Penn Compact has propelled the University from excellence to eminence by advancing its core endeavors of teaching, research and service. The Making History Campaign met with remarkable success, engaging the entire Penn community on an unprecedented level. Penn Compact 2020 renews Penn’s fundamental priorities with intense focus on increasing access to the University’s exceptional intellectual resources; integrating knowledge across academic disciplines with emphasis on innovative understanding and discovery; and engaging locally, nationally, and globally to bring the benefits of Penn’s research, teaching, and service to

individuals and communities at home and around the world. This vision will guide the University in strengthening three core values that make it unique: inclusion, innovation, and impact.

The University has a full-time student body of over 22,000 and a 280-acre campus in West Philadelphia (excluding the Hospital of the University of Pennsylvania) on which over 150 University buildings are situated. In addition, the University owns two properties that are not adjacent to the campus. The Morris Arboretum, located in Chestnut Hill, Pennsylvania, encompasses 92 acres with 30 buildings. The Morris Arboretum conducts four major activities: education, research, outreach and horticultural display. As the official Arboretum of the Commonwealth, it provides research and outreach services to state agencies, community institutions and to citizens of Pennsylvania and beyond. The New Bolton Center, in Kennett Square, Pennsylvania, consists of 600 acres with 77 buildings. Opened in 1954, the New Bolton Center comprises the George D. Widener Hospital for Large Animals, the University of Pennsylvania School of Veterinary Medicine's teaching hospital for large animals, featuring one of the world's largest equine surgical facilities, the Marshak Dairy, the Laboratory of Aquatic Animal Medicine and Pathology and one of Pennsylvania's three Animal Diagnostic Laboratories.

In July 2007, the University acquired from the United States Postal Service two properties adjacent to the eastern edge of the University's main campus for \$21.5 million. These properties include 2.5 acres of land and associated buildings which the University has leased for redevelopment to a private developer under a long term ground lease, and 14 acres of property which the University developed, together with adjacent property of the University, to form a 24-acre urban park now known as Penn Park. Penn Park is the centerpiece of "Penn Connects," the University's long-term master land use and urban design campus plan. Penn Park brings 20% more green space to the urban campus of the University and creates a new gateway uniting University City with Center City in Philadelphia.

In September 2010, the University acquired, for \$13.0 million, 23 acres of land and facilities located across the Schuylkill River from the University's main campus in Philadelphia. More than 250,000 square feet of laboratory, office and warehouse space remains on the property that formerly comprised the DuPont Marshall Laboratory. The site is intended to be repurposed with light industrial, flex-use, and buildings scaled to fit the need for practical commercialization and business opportunities in the region. The site has also been designated as the home for the Penn Center for Innovation, a new initiative that will provide the infrastructure, leadership and resources needed to transfer promising Penn inventions, know-how and related assets into the marketplace for the public good. As of December 31, 2014, nearly 80,000 square feet of space was leased to University tenants, small research and technology businesses, and for storage for the University and other entities.

The University is comprised of an academic component (see "Programs- Academic" below) and a Health System component (see APPENDIX A to this Official Statement).

## **Governance**

The University is governed by its Board of Trustees (the "University Trustees"). The Executive Committee of the University Trustees (the "Executive Committee") is elected annually and can act on behalf of the full University Trustees in most matters. Under the bylaws of the University, the University Trustees may consist of a maximum of ten Charter Trustees, thirty Term Trustees, fourteen Alumni Trustees, including the President of the Alumni Society, four Commonwealth Trustees and two Special Trustees. The Governor of the Commonwealth and the President of the University are Ex-Officio Trustees. Charter Trustees are elected by the University Trustees from among persons who have served as University Trustees for a period of not less than five years. Term Trustees are elected by the University Trustees for terms of five years. Alumni Trustees are elected by Penn Alumni for terms of five years from among those persons who have received degrees from the University. The Commonwealth Trustees are each appointed by one of the following members of the Pennsylvania legislature: the President Pro Tempore of the Senate, the Minority Leader of the Senate, the Speaker of

the House of Representatives, and the Minority Leader of the House of Representatives. The Special Trustees are elected by the University Trustees as University Trustees whose services are in the best interest of the University to meet a particular need or purpose and have a term of service determined by the Chair and approved by the Executive Committee. Under normal circumstances, Charter, Term and Alumni Trustees must retire at the age of 70, at which time Charter Trustees are designated by the University Trustees as Trustees Emeriti. Term and Alumni Trustees who have been elected to two five-year terms in any class are eligible for election by the University Trustees as Trustees Emeriti. Trustees Emeriti and Ex-Officio Trustees are non-voting University Trustees.

In addition, the University has an Investment Board, which can include members who are not University Trustees. The Investment Board oversees the investment of endowment and similar funds, and all other investment funds of the University.

The members of the University Trustees as of January 20, 2015 are listed below:

**Ex-Officio Trustees:**

Dr. Amy Gutmann  
Hon. Thomas W. Wolf

**Executive Committee:**

David L. Cohen, Esq., *Chair*  
Mrs. Lee Spelman Doty  
Mr. Jay S. Fishman  
Dr. Amy Gutmann  
Dr. Janet F. Haas  
Mr. Andrew R. Heyer  
Mr. Robert M. Levy  
Ms. Andrea Mitchell, *Vice Chair*  
Mr. Egbert L. J. Perry  
Mrs. Julie Beren Platt  
Mr. Andrew S. Rachleff  
Mr. David M. Silfen, *Vice Chair*  
Mr. Mark O. Winkelman

**Charter Trustees:**

Gilbert F. Casellas, Esq.  
David L. Cohen, Esq., *Chair*  
Mrs. Lee Spelman Doty  
Mr. Jay S. Fishman  
Mr. Andrew R. Heyer  
Mr. William P. Lauder\*  
Mr. Robert M. Levy  
Dr. Deborah Marrow\*  
Ms. Andrea Mitchell, *Vice Chair*  
Mr. Egbert L. J. Perry  
Mr. David M. Silfen, *Vice Chair*  
Mr. Mark O. Winkelman

**Commonwealth Trustees:**

Mr. Robert A. Gleason, Jr.  
Mr. Vahan H. Gureghian  
Mr. Marshall H. Mitchell  
Mr. John P. Shoemaker

*\*Special Trustee*

**Term Trustees:**

Scott L. Bok, Esq.  
Mrs. Judith Bollinger  
Mr. David Brush  
Dr. Raymond K.F. Ch'ien  
William W.M. Cheung, DMD  
Susan F. Danilow, Esq.  
Mr. James G. Dinan  
Mr. David Ertel  
Ms. Susan Fuller  
Perry Golkin, Esq.  
Mr. Joel M. Greenblatt  
Mr. James H. Greene, Jr.  
Dr. Janet F. Haas  
Gov. Jon M. Huntsman, Jr.  
Mr. Robert S. Kapito  
Mr. Michael J. Kowalski  
Mrs. Andrea Berry Laporte  
M. Claire Lomax, Esq.  
Mr. Marc F. McMorris  
Mr. Kenneth D. Moelis  
Mr. Daniel S. Och  
Mr. Simon D. Palley  
Mr. Richard C. Perry  
Mrs. Julie Beren Platt  
Mr. Andrew S. Rachleff  
Mrs. Julie Breier Seaman  
Dr. Krishna P. Singh  
Ms. Carol Elizabeth Ware

**Alumni Trustees:**

Mrs. Bonnie Miao Bandeen  
Allan C. Bell, Esq.  
Mr. Alberto J. Chamorro  
Mrs. Connie K. Duckworth  
Osagie O. Imasogie, Esq.  
James C. Johnson, Esq.  
Susanna E. Lachs, Esq.  
Mr. Charles B. Leitner III  
Mr. Ofer Nemirovsky  
Mr. Ramanan Raghavendran  
Mrs. Ann Nolan Reese  
Mr. Mark B. Werner  
Mrs. Ehsan El Tahry Zayan

**Trustees Emeriti:**

Mrs. Madlyn K. Abramson  
Hon. Arlin M. Adams  
Robert S. Blank, Esq.  
Richard P. Brown, Jr., Esq.  
Mrs. Susan W. Catherwood  
Dr. Gloria Twine Chisum  
Mr. L. John Clark  
Mr. Jerome Fisher  
Mr. Robert A. Fox  
Mr. Stephen J. Heyman  
Mr. Jon M. Huntsman  
Mr. Paul K. Kelly  
Mr. James J. Kim  
Mr. Leonard A. Lauder  
Mr. Robert P. Levy  
Paul S. Levy, Esq.  
Mr. William L. Mack  
Mr. A. Bruce Mainwaring  
Mr. Howard S. Marks  
Mr. Edward J. Mathias  
Mr. Paul F. Miller, Jr.  
Mr. John B. Neff  
Mr. Russell E. Palmer  
Mr. Ronald O. Perelman  
Mr. James S. Riepe  
Mrs. Katherine Stein Sachs  
Mrs. Adele K. Schaeffer  
Mr. Alvin V. Shoemaker  
Dr. P. Roy Vagelos  
Mr. George A. Weiss  
Mr. Raymond H. Welsh  
Dr. Charles K. Williams II  
Mr. Paul Williams

**Transactions Between the University and Members of its Board of Trustees**

The University has a comprehensive conflict-of-interest policy that was formally adopted by the University Trustees in June 2000. The policy applies to University Trustees, officers and members of the Investment Board ("Covered Persons"), and is intended to address any real, potential, or apparent conflicts of interest that might call into question a person's duty of undivided loyalty to the University. The policy, which is in conformity with the Intermediate Sanctions regulations of the Internal Revenue Service ("IRS") applicable to tax-exempt organizations, adopts the IRS standard for approval of a transaction between a Covered Person and the University. The standard requires that a Covered Person seeking to enter into a transaction with the University recuse himself or herself from the decision-making process, that any payments made are at fair market value, and that the transaction, as a whole, is fair, reasonable and in the best interests of the University.



The relationships of certain Trustees of the University with certain Underwriters in connection with the offering of the Bonds are described under the “CERTAIN RELATIONSHIPS” in the forepart of the Official Statement.

## Officers of the University

The officers of the University are the President, the Provost, the Executive Vice Presidents, the Senior Vice President, the Vice Presidents, the Secretary, the Treasurer, the Comptroller and the General Counsel. Subject to the policies of the University, all officers except the President are elected by the University Trustees upon nomination by the President. The President is elected by the University Trustees upon nomination by the Executive Committee. The principal officers of the University are as follows:

Dr. Amy Gutmann	<i>President</i>
Dr. Vincent Price	<i>Provost</i>
Mr. Craig R. Carnaroli	<i>Executive Vice President</i>
Dr. J. Larry Jameson	<i>Executive Vice President for the Health System and Dean of the Perelman School of Medicine</i>
Wendy S. White, Esquire	<i>Senior Vice President and General Counsel of the University and Health System</i>
Mr. Stephen D. Golding	<i>Vice President for Finance and Treasurer</i>
Ms. Anne Papageorge	<i>Vice President for Facilities and Real Estate Services</i>
Mr. John H. Zeller	<i>Vice President for Development and Alumni Relations</i>
Ms. Leslie Laird Kruhly	<i>Vice President and University Secretary</i>
Mr. John F. Horn	<i>Comptroller</i>

## PROGRAMS

### Academic

The University is comprised of the twelve schools listed below, four of which, marked by an asterisk (\*), offer undergraduate degrees. Graduate and professional degrees are offered by all twelve schools:

School of Arts and Sciences *	School of Design
School of Engineering and Applied Science *	School of Dental Medicine
School of Nursing *	School of Law
Wharton School *	Perelman School of Medicine <sup>1</sup>
Annenberg School for Communication	School of Social Policy and Practice
Graduate School of Education	School of Veterinary Medicine

<sup>1</sup> The Perelman School of Medicine also operates as part of PENN Medicine. For a description of the Perelman School of Medicine, see “THE PERELMAN SCHOOL OF MEDICINE” in APPENDIX A to this Official Statement.

The quality and success of the programs offered by the University have been consistently recognized around the world. The University was ranked eighth in the 2015 *U.S. News and World Report* National Universities Ranking and also named one of the ten Best Values Schools. In these same rankings, the University’s Wharton School was ranked first for both graduate and undergraduate business students, and the Law School and the School of Graduate Education – as well as departments across the School of Arts and Sciences, the School of Design, and the Perelman School of Medicine – were all ranked in the top ten among the survey’s wide range of specific academic areas. From a global

perspective, the University is ranked among the top 16 institutions around the world in all three of the major international university rankings: the Academic Ranking of World Universities of the Center for World-Class Universities at the Shanghai Jiao Tong University, the QS World University Rankings, and the *Times Higher Education* World University Rankings. In 2014, the Middle States Commission on Higher Education reaffirmed the University's accreditation, following a rigorous, two-year process in which the University first prepared an in-depth, campus-wide Self-Study Report and was then reviewed by an external evaluation team of faculty members and senior administrators from peer institutions.

The proximity of all twelve of the University's schools on a single campus has stimulated a number of renowned multi-disciplinary enterprises aimed at solutions to major problems of global society. Among them are: the Center for Public Health Initiatives, Penn Institute for Urban Research, Leonard Davis Institute of Health Economics, Laboratory for Research on the Structure of Matter, David Mahoney Institute for Neurological Sciences, Lauder Institute, Abramson Family Cancer Research Institute, and Institute for Regenerative Medicine, as well as new globally-focused initiatives such as the Perry World House and the Penn Wharton China Center.

The twelve schools also combine their expertise in campus-wide academic theme years, which bring together a wide range of perspectives to illuminate critical global issues such as health, food, evolution, water, and the role of art in urban settings.

## Faculty

For the 2015 Academic Year, there are 2,569 standing faculty at the University, approximately one for every four full-time undergraduates on campus. Approximately 79% of the faculty, excluding clinician educators in the Perelman School of Medicine, is tenured. All of the University's full-time faculty has earned a doctorate and/or other terminal professional degree.

The faculty of the University is actively engaged in teaching and research. Honors and awards received by members of the faculty include the Nobel Prize, Pulitzer Prize, Bancroft Prize, Guggenheim Fellowship, National Medal of Science, MacArthur Foundation Fellowship, Sloan Research Fellowship, Wolf Prize in Medicine, and Presidential Early Career Award for Scientists and Engineers.

Members of the faculty hold memberships and leadership positions in such prestigious professional and learned societies as the American Academy of Arts and Sciences, American Association for the Advancement of Science, American Philosophical Society, Institute of Medicine, National Academy of Engineering, National Academy of Science, and Royal Society of London.

## Undergraduate Student Applications and Enrollment

The following table sets forth certain information regarding undergraduate applicants, acceptances and matriculants for the academic years indicated:

Academic Year	Applicants	Acceptances	Acceptance Percentage	Matriculants	Matriculation Percentage
2010-2011	26,941	3,841	14.3%	2,412	62.8%
2011-2012	31,633	3,935	12.4%	2,467	62.7%
2012-2013	31,218	3,935	12.6%	2,461	62.5%
2013-2014	31,282	3,830	12.2%	2,421	63.2%
2014-2015	35,866	3,718	10.4%	2,425	65.2%

The Admissions Office received 37,266 applications for the entering class for fall of 2015. This is an increase of 3.9 percent from the number for the 2014-2015 academic year.

The following is a five year analysis of the mean college entrance examination scores achieved by entering freshmen:

Mean SAT Scores			
Academic Year	SAT 1 Critical Reading	SAT 1 Writing	SAT 1 Math
2010-2011	703	717	728
2011-2012	704	717	726
2012-2013	707	720	728
2013-2014	710	725	728
2014-2015	715	733	733

The full-time equivalent enrollment at the University for the academic years indicated is as follows:

Full-Time Equivalent Enrollment					
Academic Year	Undergraduate	Graduate	Professional	Full-Time Equivalent Enrollment	Total Degrees Awarded
2010-2011	10,911	3,172	8,388	22,471	7,828
2011-2012	10,790	3,145	8,562	22,497	7,847
2012-2013	10,775	3,238	8,505	22,518	8,003
2013-2014	10,721	3,220	8,498	22,439	7,812
2014-2015	10,787	3,209	8,567	22,563	N/A

*Notes:*

1. Graduate and Professional student numbers have been restated for prior years in accordance with the University's current methodology which reports students with degrees pursued in Research Masters (AM, MS), PhD, or dual PhD degrees (PhD and MD/VMD/DMD/JD) as Graduate students, and all other students enrolled above the undergraduate level as Professional students. For year 2014-2015 and going forward, this will be the methodology for differentiating between Graduate and Professional students

2. Standard Part-time = 1/3 FTE is applied.

## Tuition, Fees and Other Charges

The cost of education at the University is covered by tuition and fees, gifts, grants, income derived from investments and other sources. The University believes that its tuition, fees and other related student expenses are competitive with other major private institutions.

The University's total undergraduate tuition and fees and the standard undergraduate room and board charges are in the table below. Graduate and professional schools set their own tuition rates and fees annually. Tuition and fees for full-time programs range from \$27,012 to \$93,910 per year. The University offers substantial financial assistance to both residential and non-residential students.

<b>Undergraduate Tuition, Fees and Other Charges</b>		
	<b>2013-14 Academic Year</b>	<b>2014-15 Academic Year</b>
Academic Year Tuition & Fees for a Full-Time Undergraduate (excluding room & board)	\$ 45,890	\$ 47,668
Academic Year Room & Board Charges	12,922	13,464
Total	<u>\$ 58,812</u>	<u>\$ 61,132</u>

## Student Financial Aid

The University's undergraduate admissions policy reflects the philosophy that admission is need-blind. For the 2013-2014 academic years, approximately 75% of all University students received some type of financial assistance.

For the fiscal years listed below, the components of student financial aid were as follows:

<b>Scholarships, Grants and Institutional Loans</b>					
	<b>Fiscal Year Ended June 30,</b>				
	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Grants and Loans - Unrestricted revenues	\$107,490,000	\$121,763,000	\$131,869,000	\$142,785,000	\$148,734,000
Grants- Endowment income	39,305,000	43,261,000	47,004,000	52,232,000	59,529,000
Endowed & University Admin. Fed. Loans <sup>(1)</sup>	10,821,000	13,197,000	10,502,000	13,953,000	15,657,000
Federal, State & private grants <sup>(2)</sup>	39,911,000	43,192,000	44,017,000	47,927,000	50,292,000
Tuition remission <sup>(3)</sup>	113,838,000	119,247,000	125,480,000	131,402,000	132,613,000
Total	<u>\$311,365,000</u>	<u>\$340,660,000</u>	<u>\$358,872,000</u>	<u>\$388,299,000</u>	<u>\$406,825,000</u>

<sup>(1)</sup> Includes Federal Perkins, Nursing and Health Profession Loans, University endowed loans and private loans for undergraduates administered by the University.

<sup>(2)</sup> Includes gifts and payments from third parties.

<sup>(3)</sup> Includes tuition remission for faculty/staff attending the University as well as research fellowships, research assistantships, teaching fellowships, and departmental grants. Does not include stipends.

Commencing with the 2009-2010 academic year, the University implemented a policy of meeting dependent undergraduate students' needs without expecting them to take out student loans. Under this policy, a student from a typical family with an income of less than \$90,000 will not pay tuition, and a student from a typical family with income less than \$40,000 will not be expected to pay tuition, room, or board.

## The Penn Plan (Tuition Stabilizer Plan) and Penn Guaranteed Loan Program

The University has long been a leader in financing higher education for students and parents. The Penn Plan, a program of alternative payment options, was initiated in 1984. The program is made available to families of undergraduates, graduate degree candidates and students in the professional schools. The program is a partnership among the student, the student's family and the University to assure that students can manage more effectively the cost of attendance. As of June 30, 2014, 403 graduate, professional and undergraduate students and their families were participating in the Penn Plan.

In 1997, the University established the Penn Guaranteed Loan Program whereby the University guarantees loan obligations incurred by students attending the University. The program provides lower cost alternative loans to graduate and professional students attending the University. Loans issued by

private lending institutions are guaranteed by the University under the Penn Guaranteed Loan Program. As of June 30, 2014, the amount of the loans outstanding for which the University is the guarantor was \$61,100,679. The reserve established to support this contingent liability was \$6,164,419.

## UNIVERSITY FINANCIAL DATA

### General

The financial statements of the University have been prepared on an accrual basis and include the accounts of the University and its related entities, including the Health System. All material transactions between the University and its related entities have been eliminated.

The selected financial data and other information below have been derived by management from the audited financial statements of the University prepared in accordance with generally accepted accounting principles. The University currently makes certain annual operating and financial information, including its audited annual financial statement, available through the Municipal Securities Rulemaking Board -- Electronic Municipal Market Access (<http://emma.msrb.org>) as required in accordance with Rule 15c2-12 promulgated under the Securities Exchange Act of 1934, as amended.

Summarized Statement of Financial Position (in thousands)					
	Fiscal Year Ended June 30				
	2010	2011	2012	2013	2014
Total Assets	\$12,054,088	\$13,944,362	\$14,702,600	\$16,048,432	\$18,002,615
Total Liabilities	\$3,824,982	\$4,114,567	\$5,008,974	\$4,754,306	\$5,030,778
Net Assets:					
Unrestricted	4,258,474	5,102,726	4,913,911	5,933,126	6,869,201
Temporarily restricted	1,515,660	2,107,041	2,017,544	2,433,998	2,960,272
Permanently restricted	2,454,972	2,620,028	2,762,171	2,927,002	3,142,364
Total Liabilities and Net Assets	<u>\$12,054,088</u>	<u>\$13,944,362</u>	<u>\$14,702,600</u>	<u>\$16,048,432</u>	<u>\$18,002,615</u>

Summarized Statement of Activities (in thousands)					
	Fiscal Year Ended June 30				
	2010	2011	2012	2013	2014
Revenue and other support	\$5,545,065	\$5,889,519	\$5,932,563	\$6,191,033	\$6,610,522
Expenses	(5,263,101)	(5,557,232)	(5,683,003)	(5,896,431)	(6,348,798)
Increase in net assets from operations	281,964	332,287	249,560	294,602	261,724
Increase(decrease) in net assets from non-operating activities	386,409	1,268,402	(385,729)	1,305,898	1,415,987
Increase (decrease) in total net assets	\$668,373	\$1,600,689	(\$136,169)	\$1,600,500	\$1,677,711
Net assets, beginning of year	7,560,733	8,229,106	9,829,795	9,693,626	11,294,126
Net assets, end of year	<u>\$8,229,106</u>	<u>\$9,829,795</u>	<u>\$9,693,626</u>	<u>\$11,294,126</u>	<u>\$12,971,837</u>

## Operating Budget

The University operates in a decentralized budget management structure, termed “responsibility center management (RCM).” The system holds each school and resource center responsible, as the revenue-producing entities of the University, for balancing expenditures to income. The University promotes a disciplined budget process whereby each responsibility center submits a high level five year all-funds budget during the fall and a detailed annual all-funds budget during the spring. Key central budget planning parameters, including undergraduate total charges, the salary pool, the employee benefit rate, and income growth under the endowment spending rule, form the common basis for all budgets. Budgets are reviewed by the University Office of Budget and Management Analysis and discussed in detail in meetings with the Provost (schools and resource centers) or the Executive Vice President (administrative and auxiliary centers). The full University budget in both an RCM and Generally Accepted Accounting Principles (GAAP) format is presented to the Trustees for approval in June. The University monitors budget performance during the course of the year, and requires that each responsibility center provide an updated forecast each quarter. The University reports GAAP performance against both the prior year actual results and the current year budget to the Trustees on a quarterly basis.

## Commonwealth Appropriations

Although the University has no legal relationship with the Commonwealth, it has, pursuant to specific legislative appropriations, received sums from the Commonwealth for its support and maintenance and for other specific purposes in each year since 1903. Approximately \$31,617,000 of the total unrestricted revenue of the University for Fiscal Year 2014 was provided from Commonwealth appropriations. The Pennsylvania legislature has appropriated \$31,764,000 to the University for Fiscal Year 2015, most of which is targeted to support the School of Veterinary Medicine. Once an appropriation is made, it may be reduced administratively, usually because of Commonwealth budgetary constraints. There is no assurance that the Commonwealth will not reduce the University’s appropriation for Fiscal Year 2015 or thereafter.

## Contributions

Since 1984, the University has consistently ranked among the top 15 private universities in America in philanthropic support. Following the December 2012 conclusion of a comprehensive campaign which reached \$4.3 billion, the University created the Penn Compact 2020 University Initiatives to build on what was accomplished during the campaign and continue the momentum through 2020. With shared University objectives, including other key priorities defined by the University’s Schools and Centers, the University’s goals are to raise an additional \$350 million for undergraduate, graduate, and professional student aid, and if successful would bring the total raised for such purposes to over \$1 billion during a 15-year period; and raise an additional \$300 million for faculty support, bringing the total raised for such purpose to over \$900 million during that same period.

The University's accounting policy is to record contributions as revenue when pledged at net present value. For the years listed below, contribution revenue was as follows (in thousands):

<b>Fiscal Year Ended June 30</b>	<b>Endowment</b>	<b>Facilities</b>	<b>Operations</b>	<b>Total</b>
2010	\$113,760	\$15,888	\$101,809	\$231,457
2011	135,500	55,355	306,770	497,625
2012	153,791	44,172	189,681	387,644
2013	149,136	100,013	199,606	448,755
2014	162,171	35,567	168,935	366,673

## Sponsored Research

The University has long been a center for programs of research and training, and a significant portion of its research and graduate education programs are supported by research grants and contracts. The aggregate dollar amount of grants and contracts awarded to the University for sponsored research and training from governmental and private agencies during the years listed below were as follows (in thousands):

<b>Fiscal Year Ended June 30</b>	<b>Total Grants and Contracts Awarded</b>
2010 <sup>(1)</sup>	\$1,007,209
2011 <sup>(1)</sup>	924,529
2012	872,603
2013	838,901
2014	935,213

<sup>1</sup> The research awards for Fiscal Years 2010 and 2011 include funding made available through programs authorized pursuant to The American Recovery and Reinvestment Act of 2009.

For the last decade, the University has consistently ranked in the top 20 universities performing sponsored research as tabulated by the National Science Foundation, based on obligations for research and development. Forecasts of future years' growth rates in externally reimbursed expenditures under sponsored research and instruction agreements are complicated by the uncertainty of future national policy decisions and budget priorities.

Sponsored programs and research projects are funded as to both direct and indirect costs. Indirect costs are costs actually incurred, but differ from direct costs in that they have been incurred for purposes common to a number of projects, programs or activities of the University, and cannot be identified and charged directly to such specific projects, programs or activities with any reasonable degree of accuracy or without an inordinate amount of bookkeeping. Examples include utilities, maintenance, janitorial services and interest on debt issued to support research facilities, and such administrative services as accounting, purchasing, personnel and library.

Both direct and indirect cost activities are essential for the operation of the University. Without reimbursement for indirect costs, sponsored programs and research in the University would require additional institutional support of indirect services, to the detriment of other University activities. For most federal awards, the items included in each indirect cost category, the indirect cost rate and the appropriate base to be used in allocating such costs are reached through negotiation with the federal government.

In Fiscal Year 2014, the University received expendable grant and contract awards from the federal government (principally the Department of Health and Human Services) in the amount of \$756.6 million, \$210.5 million of which was awarded for indirect costs. Actual indirect cost revenues received, totaling \$188.7 million for Fiscal Year 2014, represented approximately 2.9% of total unrestricted revenue. In Fiscal Year 2011, the University's Federal Indirect Cost Rate ("ICR") for research was 60% of modified total direct costs. Modified total direct costs requires that equipment, capital expenditures, charges for patient care, tuition remission, rental costs of off-site facilities, scholarships, and fellowships as well as the portion of each subgrant and subaward in excess of \$25,000 are excluded from the calculation of ICR. The current rate agreement was negotiated in May, 2009 and ran through Fiscal Year 2014. The University is currently in negotiation with the Department of Health and Human Services for a

new rate agreement. Certain types of federal awards include indirect costs at rates less than the research rate, such as training grants that are awarded at an 8% rate.

Some federal grants, especially for sponsored instructional and educational services, carry a stipulated limit on ICRs. Federal research grants and contracts are only infrequently subject to such limits.

Private foundations, corporations and other state and local agencies may also allow indirect costs as part of the sponsored program, contract or grant. In Fiscal Year 2014, the University received non-federal contracts and grants of \$178.6 million, of which \$33.4 million represented indirect cost recovery.

## Endowment

As of June 30, 2014, the market value of the endowment totaled approximately \$9.6 billion, an increase of \$1.4 billion over the prior fiscal year, due to realized and unrealized gains from investments of \$1.4 billion and new endowment gifts of \$185.6 million, and \$140 million of investments from unrestricted funds, which was offset by a spending rule distribution (as further described below) of \$289.1 million to provide budgetary support for endowed programs. Investment income comprised approximately 5.7% of the University's total operating revenues for the fiscal year ended June 30, 2014.

<b>Endowment Funds of University</b> <i>(in millions)</i>	
<b>Fiscal Year ended June 30</b>	<b>Market Value</b>
2010	\$5,987
2011	6,956
2012	7,134
2013	8,174
2014	9,582

As indicated above, at June 30, 2014, the aggregate market value of the University's endowment funds was approximately \$9.6 billion. This valuation includes certain non-marketable real estate, private equity and natural resources investments, totaling approximately 18.0% of the portfolio, which are valued based on the most recent net asset value reported to the endowment, adjusted for cash flows where applicable.

The University is obligated under certain limited partnership agreements to advance additional funding periodically up to committed levels. At June 30, 2014, the University had unfunded commitments of \$1.5 billion to a variety of private equity, real estate, natural resources and other commitment funds. Based upon past experience, the University expects these commitments to be funded over the next five years depending on market conditions.

## Endowment Spending Policy

In 1981, the University Trustees adopted an endowment spending policy governing the expenditure of funds invested in the University's Associated Investments Fund ("AIF"). The spending policy is designed: (i) to smooth the impact of short-term market moves that may affect the endowment's value; (ii) to make endowment distributions more predictable for purposes of managing and planning the University's operating budget; and (iii) to protect the real value of the endowment over time.

Under the current spending policy, the distribution in each fiscal year is the sum of: (i) 70% of the prior fiscal year distribution adjusted by an inflation factor; and (ii) 30% of the prior fiscal year-end



fair value of the AIF, lagged one year, multiplied by 6.5% for financial aid funds and 4.7% for all other funds. The higher target spending rate for financial aid endowments, scheduled to gradually decrease to 4.7% from the Fiscal Year 2016 to Fiscal Year 2018, is dedicated to supporting the University's no-loan financial aid initiative for undergraduates (see "Student Financial Aid" above) and to enhancing graduate and professional student aid.

## Investment Policy

The investment objectives of the University's endowment and similar funds are the preservation and growth of principal in constant dollars so as to provide, under a prudent spending rule policy, a consistent level of real growth of budgetary support from such funds. Approximately 95.8% of the University's endowment funds are invested in the AIF, an open-ended, pooled investment vehicle that had a market value of approximately \$9.2 billion as of June 30, 2014. The AIF asset allocation as of June 30, 2014 is shown below.

Associated Investment Fund Asset Allocation Fiscal Year ended June 30, 2014	
Domestic Equity	17.3%
International Equity	18.1%
Emerging Market Equity	8.6%
Absolute Return	29.1%
Real Estate	5.0%
Private Equity	9.2%
Natural Resources	3.8%
Investment Grade Bonds	8.9%
Total	<u>100.0%</u>

## Investment Performance

For Fiscal Year 2014, the AIF achieved a total return of 17.5%. Longer measurement periods and comparisons with certain indices are reflected in the chart below.

Associated Investment Fund Annualized Returns for Periods ending June 30, 2014				
	1-Year	3-Year	5-Year	10-Year
AIF (University Investment Pool)	17.50%	10.90%	12.80%	8.00%
Composite Benchmark*	17.30%	10.60%	12.50%	7.60%

*\* The Composite Benchmark is a weighted average of the individual asset classes in the AIF, where the weights are set forth in accordance with AIF's strategic asset allocation.*

## Plant Assets of the University

The book value of the University's investment in plant assets for the two fiscal years ended June 30, 2014 and 2013 are shown below (in thousands):

	<b>Plant, net of depreciation</b>	
	<b>(in thousands)</b>	
	<b>Fiscal Year Ended June 30,</b>	
	<b>2013</b>	<b>2014</b>
Land	\$ 225,619	\$ 249,231
Buildings	5,893,038	6,295,973
Contents	1,369,647	1,594,993
Construction-in-progress	<u>330,829</u>	<u>518,071</u>
Total plant	7,819,133	8,658,268
Less accumulated depreciation	(3,449,760)	(3,876,707)
Plant, net of depreciation	<u>\$4,369,373</u>	<u>\$4,781,561</u>

Plant, net of depreciation, included \$3,209,000 of land and \$8,146,000 of completed facilities at June 30, 2013 which served as collateral for a debt obligation. This debt obligation was satisfied during Fiscal Year 2014.

The University recorded \$342,451,000 and \$313,947,000 of depreciation expense for the years ended June 30, 2014 and 2013, respectively. Rare books and other collectibles, which are not depreciated, aggregate \$50,530,000 at June 30, 2014 and \$46,396,000 at June 30, 2013.

### **Indebtedness of the University's Academic Component**

As of December 31, 2014, the University was obligated in respect of \$985,023,263 in outstanding principal amount of long-term indebtedness (including current portion) constituting a general obligation of the University payable from the assets and revenues of the University. On April 16, 2015, the University incurred an aggregate of \$378,840,000 of additional long-term general obligation indebtedness in connection with the issuance by the Authority of its \$205,670,000 principal amount of The Trustees of the University of Pennsylvania Refunding Revenue Bonds, Series A of 2015, \$165,150,000 principal amount of The Trustees of the University of Pennsylvania Refunding Revenue Bonds, Series B of 2015, and \$8,020,000 principal amount of The Trustees of the University of Pennsylvania Refunding Revenue Bonds, Series C of 2015 (Federally Taxable) (collectively, the "2015 University Bonds") to refund certain prior bonds of the Authority issued on behalf of the University. The following table summarizes the outstanding long-term debt of the University, excluding any debt of the Health System, at December 31, 2014, together with the *pro forma* long-term debt of the University, excluding any debt of the Health System, following the issuance of the 2015 University Bonds on April 16, 2015 (in each case, including current portion):

Description	Outstanding Principal Amount at December 31, 2014	Pro Forma Outstanding Principal Amount*
PHEFA The Trustees of the University of Pennsylvania, Series of 1990.....	\$ 6,500,000	\$ 6,500,000
Washington County Authority .....	56,500,000	56,500,000
PHEFA The Trustees of the University of Pennsylvania, Series A of 2005 .....	9,075,000	3,920,000
PHEFA The Trustees of the University of Pennsylvania, Series B of 2005 .....	8,495,000	8,495,000
PHEFA The Trustees of the University of Pennsylvania, Series C of 2005 .....	114,600,000	5,255,000
PHEFA The Trustees of the University of Pennsylvania, Series A of 2009 .....	204,750,000	--
PHEFA The Trustees of the University of Pennsylvania, Series B of 2009 .....	34,145,000	20,075,000
PHEFA The Trustees of the University of Pennsylvania, Series C of 2009 .....	28,755,000	15,105,000
PHEFA The Trustees of the University of Pennsylvania, Series 2010 .....	71,410,000	50,045,000
PHEFA The Trustees of the University of Pennsylvania, Series 2011 .....	150,000,000	131,805,000
The Trustees of the University of Pennsylvania Taxable Bonds, Series 2012.....	300,000,000	300,000,000
PHEFA The Trustees of the University of Pennsylvania, Series A of 2015 .....	--	205,670,000
PHEFA The Trustees of the University of Pennsylvania, Series B of 2015 .....	--	165,150,000
PHEFA The Trustees of the University of Pennsylvania, Series C of 2015 .....	--	8,020,000
Other Loans .....	<u>793,263</u>	<u>793,263</u>
Total Long-Term Debt (including current portion) .....	\$ <u>985,023,263</u>	\$ <u>977,333,263</u>

\* Reflects the issuance of the 2015 University Bonds and the completion of the refunding program associated therewith.

The limited obligation debt of the Health System is more particularly described under “CERTAIN FINANCIAL INFORMATION – Long Term Debt of the Health System” in APPENDIX A to this Official Statement.

## Capital Expenditures

As a large and complex institution with substantial capital facilities, the University regularly invests in maintaining, updating and expanding its facilities to meet its operating needs. Capital expenditures of the University are funded from available resources of the University, which may include future fundraising activities or future capital borrowings.

## Future Borrowing

Depending on market conditions, the University may incur additional indebtedness, which may include additional bonds issued under the Indenture, to refinance certain currently outstanding indebtedness of the University, convert interest rate modes to take advantage of market conditions or to finance future capital projects.

## ADDITIONAL UNIVERSITY INFORMATION

### Employee Relations

As of December 31, 2014, the Academic Component presently has an academic staff of approximately 11,731 (standing faculty, associated faculty and academic support staff) and 10,380 full-time administrative and support employees. Of these, 1,127 are covered by six collective bargaining agreements in the following general categories: housekeeping employees (521); groundskeepers (28); truck drivers (5); parking (11); mail (8); police officers (89); skilled trades (212); library workers (137);

stage hands (4) and dining services (112). No other employees of the University are covered by collective bargaining agreements.

Collective bargaining agreements with respect to all unionized employees are in full force and effect. These contracts expire as follows: the dining services contract, in July 2017; the police officers' contract, in August, 2017; the skilled trades contract, in June 2015; the library contract, in July 2017 and the housekeeping staff contract, in July 2018. Currently, the stage hands contract is being negotiated with an anticipated new expiration date to be in September 2017.

At December 31, 2014, the Health System had 18,705 employees. Employees of certain components of the Health System are covered by three collective bargaining agreements representing employees at certain facilities as follows (numbers of employees are at December 31, 2014): 95 physical plant employees at HUP are represented by the International Union of Operating Engineers, Local 835 (AFL-CIO) under a collective bargaining agreement that expires on June 30, 2016; 12 physical plant employees at Penn Medicine at Rittenhouse are represented by the International Union of Operating Engineers, Local 835 (AFL-CIO) under a collective bargaining agreement that expires on September 30, 2016; and 20 licensed practical nurses and 62 certified nursing assistants employed by the Penn Center for Rehabilitation and Care, a wholly-owned subsidiary of PPMC, are represented by the National Union of Hospital and Healthcare Employees, Local 1199C, under collective bargaining agreements that expire on June 30, 2018.

### **Retirement Plan**

Retirement benefits are principally provided to exempt full-time academic employees, certain administrative personnel and Health System employees through contributory defined contribution plans. The University's policy with respect to its contribution is to provide up to 9% of eligible employees' salaries, while the Health System's contribution can be up to 6.5%. The University's contributions to these plans amounted to \$119,386,000 and \$110,692,000 as of June 30, 2014 and 2013, respectively.

The University has a non-contributory defined benefit pension plan which was frozen to new full-time entrants effective July 1, 2000. Benefits under these plans generally are based on the employee's years of service and compensation during the years preceding retirement. Contributions to the plans are made in amounts necessary to at least satisfy the minimum required contributions as specified in the Internal Revenue Code and related regulations.

For a description of certain retirement benefit plans covering employees of the Health System, see "ADDITIONAL HEALTH SYSTEM INFORMATION - Retirement Plans" in APPENDIX A to this Official Statement.

### **Insurance**

The assets of the University, including assets of the Health System, are protected by a comprehensive program of insurance. The general liability coverage is placed with a reciprocal risk retention group known as "Pinnacle," which is owned by seventeen universities, and is reinsured through a captive known as "Genesis," which is owned by those same seventeen universities. The general liability limit in the amount of \$2,000,000 is subject to a \$500,000 deductible, with the reciprocal risk retention group and the captive covering the next \$1,500,000 of exposure on a quota share basis. The University maintains all-risk property liability coverage with a commercial insurance carrier at a limit of \$2.0 billion for property, plant and equipment, with a \$500,000 deductible per incident for University owned and leased properties and a \$100,000 deductible per incident for the Health System owned and leased properties. In addition to Genesis and Pinnacle, the University's present coverage includes automobile liability insurance, professional liability, excess liability insurance, fine arts insurance, environmental impairment liability, surety bonds, workers' compensation, crime insurance, directors and officers

insurance, fiduciary liability, and cyber liability. The University conducts periodic reviews of its insurance needs in an effort to maintain adequate coverage at reasonable cost.

### **Malpractice Insurance**

For a description of certain malpractice insurance of the Health System, see "ADDITIONAL HEALTH SYSTEM INFORMATION - Malpractice Insurance" in APPENDIX A to this Official Statement.

### **Litigation**

The University is a party in various legal proceedings arising in the ordinary course of its operations. In the opinion of management, the University has adequate insurance to cover the estimated potential liability for damages in these cases, and, to the extent such liability is not covered by insurance, any adverse decision would not have a material adverse effect on the University's financial position.

Additional legal matters are pending and may arise in the future against the Health System. See "ADDITIONAL HEALTH SYSTEM INFORMATION - Litigation" in APPENDIX A to this Official Statement.

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## **APPENDIX D**

### **DEFINITIONS OF CERTAIN TERMS AND SUMMARY OF CERTAIN PROVISIONS OF THE BOND INDENTURE AND THE LOAN AGREEMENT**

## TABLE OF CONTENTS

	Page
DEFINITIONS OF CERTAIN TERMS .....	1
THE BOND INDENTURE.....	7
Pledge and Assignment.....	7
Issuance of 2015 Bonds .....	7
Additional Bonds .....	7
Construction Fund.....	7
Special Clearing Fund.....	7
Debt Service Fund .....	8
Redemption Fund.....	8
Funds Held for All Bondholders; Certain Exceptions .....	8
Investment or Deposit of Funds .....	8
Covenants of the Authority .....	9
Events of Default and Remedies .....	9
Actions by Bondholders.....	11
Application of Moneys Upon Default.....	11
Employment and Duties of the Bond Trustee .....	11
Removal and Resignation of the Bond Trustee .....	11
Amendments to Bond Indenture .....	12
Amendments to Loan Agreement .....	12
Defeasance .....	13
Unclaimed Moneys .....	13
THE LOAN AGREEMENT .....	13
The Loan .....	13
Repayment of Loan.....	13
Additional Payments.....	14
Nature of Obligations.....	14
Termination of PPMC's, Pennsylvania Hospital's and TCCHHS's Obligations under the Loan Agreement .....	15
Insurance Proceeds and Condemnation Awards .....	15
Additional Covenants.....	15
Events of Default and Remedies .....	15
Amendments .....	16



## **SUMMARY OF CERTAIN PROVISIONS OF THE BOND INDENTURE AND THE LOAN AGREEMENT**

The following are definitions of certain terms used in, and summaries of certain provisions of, the Bond Indenture and the Loan Agreement. The summaries set forth below should not be regarded as full statements of the documents themselves, or of the portions summarized. Reference is made to the documents in their entireties for the complete statements of the provisions thereof. Copies of the Bond Indenture and the Loan Agreement will be on file at the principal office of the Authority and the principal corporate trust office of the Bond Trustee. All capitalized terms used herein but not otherwise defined shall have the meanings given to them in the Bond Indenture.

### **DEFINITIONS OF CERTAIN TERMS**

**“2005 Bonds”** shall mean the Authority’s The University of Pennsylvania Health System Revenue Bonds, Series A and B of 2005.

**“2008 Bonds”** shall mean collectively, the Authority’s The University of Pennsylvania Health System Variable Rate Revenue Bonds, Series A of 2008 and the Authority’s The University of Pennsylvania Health System Revenue Bonds, Series B of 2008.

**“2009 Bonds”** shall mean the Authority’s The University of Pennsylvania Health System Revenue Bonds, Series A of 2009.

**“2011 Bonds”** shall mean the Authority’s University of Pennsylvania Health System Revenue Bonds, Series A of 2011.

**“2012 Bonds”** shall mean the Authority’s University of Pennsylvania Health System Revenue Bonds, Series A of 2012.

**“2014 Bonds”** shall mean the Authority’s University of Pennsylvania Health System Variable Rate Revenue Bonds, Series A of 2014.

**“2015 Bonds”** shall mean the Authority’s University of Pennsylvania Health System Revenue Bonds, Series of 2015.

**“2015 Master Note”** shall mean the promissory note issued by the University, PPMC, Pennsylvania Hospital, CCA, TCCHHS and Wissahickon Hospice to secure the 2015 Bonds under the Master Indenture.

**“Additional Bonds”** shall mean any bonds or series of bonds issued under the Bond Indenture subsequent to the issuance of the 2005 Bonds, the 2008 Bonds, the 2009 Bonds, the 2011 Bonds, the 2012 Bonds, the 2014 Bonds and the 2015 Bonds.

**“Administrative Expenses”** shall mean the reasonable fees and expenses of the Authority and the Bond Trustee, including reasonable legal fees and expenses, in connection with any Bonds or the administration of the Bond Indenture or the Loan Agreement.

**“Authority Representative”** shall mean the President, Vice President, Secretary, any Assistant Secretary, the Treasurer, any Assistant Treasurer, the Executive Director, any Assistant Executive Director, the Controller or any Assistant Controller of the Authority or any other officer, member or other person designated by a Certified Resolution of the Authority to act for any of the foregoing, either

generally or with respect to the execution of any particular document or other specific matter, a copy of which shall be on file with the Bond Trustee.

**“Bond Indenture” or “Indenture”** shall mean the Trust Indenture dated as of May 1, 1994 between the Authority and the Bond Trustee, as amended and supplemented by a First Supplemental Trust Indenture dated as of March 15, 1996, and amended and restated as of August 2, 1999, as amended and supplemented by a Second Supplemental Trust Indenture dated as of July 15, 1998, and amended and restated as of August 2, 1999, as amended and supplemented by a Third Supplemental Trust Indenture dated as of August 2, 1999, as amended and supplemented by a Fourth Supplemental Trust Indenture dated as of November 1, 2004, as amended and supplemented by a Fifth Supplemental Trust Indenture dated as of January 1, 2005, as amended and supplemented by a Sixth Supplemental Trust Indenture dated as of March 1, 2005, as amended and supplemented by a Seventh Supplemental Trust Indenture dated as of April 1, 2008, as amended and supplemented by an Eighth Supplemental Trust Indenture dated as of November 1, 2008, as amended and supplemented by a Ninth Supplemental Trust Indenture dated as of July 1, 2009, as amended and supplemented by a Tenth Supplemental Trust Indenture dated as of February 1, 2011, as amended and supplemented by an Eleventh Supplemental Trust Indenture dated as of April 1, 2012, as amended and supplemented by a Twelfth Supplemental Trust Indenture dated as of June 1, 2014 and as further amended and supplemented by a Thirteenth Supplemental Trust Indenture dated as of May 1, 2015, as the same may be further amended or supplemented from time to time.

**“Bond Trustee”** shall mean U.S. Bank National Association, acting as successor Trustee under the Bond Indenture, and all successors and assigns.

**“Bondholder”, “holder” or “owner”** shall mean, when used with respect to Bonds, the Person in whose name any Bond is registered in the registration books kept pursuant to the Bond Indenture.

**“Bonds”** shall mean the 2005 Bonds, the 2008 Bonds, the 2009 Bonds, the 2011 Bonds, the 2012 Bonds, the 2014 Bonds, the 2015 Bonds and any Additional Bonds authenticated and delivered pursuant to the Bond Indenture.

**“Business Day”** means a day which is not (a) a Saturday, Sunday or legal holiday on which banking organizations in the State of New York or the city in which the Principal Office of the Trustee is located, (b) a day on which the New York Stock Exchange is closed or (c) a day on which the payment system of the Federal Reserve System is not operational.

**“CCA”** shall mean the Clinical Care Associates of the University of Pennsylvania Health System.

**“Certificate”** shall mean a certificate or report, in form and substance satisfactory to the Authority and not unsatisfactory to the Bond Trustee, executed: (a) in the case of an Authority Certificate, by an Authority Representative; (b) in the case of a University Certificate, by a University Representative; and (c) in the case of a Certificate of any other Person, by such Person, if an individual, and otherwise by an officer, partner or other authorized representative of such Person.

**“Certified Resolution”** shall mean, as the context requires: (a) one or more resolutions or ordinances of the governing body of the Authority, certified by the Secretary or Assistant Secretary of the Authority, under its seal, to have been duly adopted or enacted and to be in full force and effect as of the date of certification; or (b) one or more resolutions of the governing body of the University, PPMC, Pennsylvania Hospital or TCCHHS, as applicable, or a duly authorized committee thereof, certified by the Secretary or Assistant Secretary of the University, PPMC, Pennsylvania Hospital or TCCHHS, as applicable, or other officer serving in a similar capacity, under its corporate seal, to have been duly adopted and to be in full force and effect as of the date of certification.

**“Code”** shall mean the Internal Revenue Code of 1986, as amended, and the applicable Treasury regulations thereunder, as the same may be amended from time to time. Reference herein to any specific provision of the Code shall be deemed to refer to any successor provision of the Code.

**“Counsel”** shall mean an attorney-at-law or law firm (which may be counsel to the Authority or the University) not unsatisfactory to the Authority or the Bond Trustee.

**“Event of Default”** shall mean any of the events described as an event of default under the headings “THE BOND INDENTURE - Events of Default and Remedies” and “THE LOAN AGREEMENT - Events of Default and Remedies” in this Appendix D.

**“Facilities”** shall mean any or all of the University’s, PPMC’s, Pennsylvania Hospital’s or TCCHHS’s land, buildings, fixtures, equipment, furnishings and other physical assets and facilities including any of the foregoing which is owned by the University, PPMC, Pennsylvania Hospital or TCCHHS or which is otherwise operated by the University, PPMC, Pennsylvania Hospital or TCCHHS under a lease, license, operating agreement or other comparable contractual arrangement, but only to the extent (in the case of the University) that the foregoing is attributable to the Designated Units.

**“Government Obligations”** shall mean:

(a) direct obligations of, or obligations the timely payment of the principal of and interest on which is guaranteed by, the United States of America;

(b) evidences of ownership of a proportionate interest in specified direct obligations of, or specified obligations the timely payment of the principal of and the interest on which are unconditionally and fully guaranteed by, the United States of America, which obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity of custodian;

(c) obligations issued by the Resolution Funding Corporation pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (the “FIRRE Act”), (A) the principal of which obligations is payable when due from payments of the maturing principal of non-interest bearing direct obligations of the United States of America which are issued by the Secretary of the Treasury and deposited in the Funding Corporation Principal Fund established pursuant to the FIRRE Act, and (B) the interest on which obligations, to the extent not paid from other specified sources, is payable when due by the Secretary of the Treasury pursuant to the FIRRE Act; and

(d) obligations which are (A) issued by any state or political subdivision thereof or any agency or instrumentality of such a state or political subdivision, (B) fully secured as to principal and interest by obligations described in clause (a), (b) or (c) above and (C) rated at the time of purchase by a Rating Agency in its highest Rating Category.

**“Loan Agreement”** shall mean the Loan Agreement dated as of May 1, 1994 between the Authority and the University, as amended and supplemented by a First Supplemental Loan Agreement dated as of March 15, 1996 among the Authority, the University and PPMC, as amended and supplemented by a Second Supplemental Loan Agreement dated as of July 15, 1998 among the Authority and the University, PPMC, Pennsylvania Hospital and Phoenixville Hospital, as amended and Supplemented by a Third Supplemental Loan Agreement dated as of November 1, 2004, among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by a Fourth Supplemental Loan Agreement dated as of January 1, 2005 among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by a Fifth Supplemental Loan Agreement dated as of March 1, 2005 among the Authority, the University, PPMC and Pennsylvania Hospital, as

amended and supplemented by a Sixth Supplemental Loan Agreement dated as of April 1, 2008 among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by a Seventh Supplemental Loan Agreement dated as of November 1, 2008 among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by an Eighth Supplemental Loan Agreement dated as of July 1, 2009 among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by a Ninth Supplemental Loan Agreement dated as of February 1, 2011 among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by a Tenth Supplemental Loan Agreement dated as of April 1, 2012 among the Authority, the University, PPMC and Pennsylvania Hospital, as amended and supplemented by an Eleventh Supplemental Loan Agreement dated as of June 1, 2014 among the Authority, the University, PPMC, Pennsylvania Hospital and TCCHHS and as further amended and supplemented by a Twelfth Supplemental Loan Agreement dated as of May 1, 2015 among the Authority, the University, PPMC, Pennsylvania Hospital and TCCHHS as the same may be further amended or supplemented from time to time.

**“Master Indenture”** shall mean the Master Trust Indenture, as supplemented by a First Supplemental Master Trust Indenture, each dated as of May 1, 1994, between the University and the Master Trustee, as supplemented by a Second Supplemental Master Trust Indenture dated as of March 15, 1996, among the University, PPMC and the Master Trustee, as amended and supplemented by a Third Supplemental Master Trust Indenture dated as of July 15, 1998 among the University, PPMC, Pennsylvania Hospital and Phoenixville Hospital and the Master Trustee, as amended and supplemented by a Fourth Supplemental Master Trust Indenture dated as of November 1, 2004 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Fifth Supplemental Master Trust Indenture dated as of January 1, 2005 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Sixth Supplemental Master Trust Indenture dated as of March 1, 2005, as amended and supplemented by a Seventh Supplemental Master Trust Indenture dated as of February 1, 2008 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by an Eighth Supplemental Master Trust Indenture dated as of April 1, 2008 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Ninth Supplemental Master Trust Indenture dated as of April 1, 2008 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Tenth Supplemental Master Trust Indenture dated as of July 1, 2009 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by an Eleventh Supplemental Master Trust Indenture dated as of August 1, 2009 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Twelfth Supplemental Master Trust Indenture dated as of February 1, 2011 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Thirteenth Supplemental Master Trust Indenture dated as of April 1, 2011 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Fourteenth Supplemental Master Trust Indenture dated as of April 1, 2012 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and the Master Trustee, as amended and supplemented by a Fifteenth Supplemental Master Trust Indenture dated as of June 1, 2014 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice, TCCHHS and the Master Trustee and as further amended and supplemented by a Sixteenth Supplemental Master Trust Indenture dated as of May 1, 2015 among the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice, TCCHHS and the Master Trustee.

**“Master Note”** or **“Note”** shall mean any Note (including the 2015 Master Note) issued, authenticated and delivered under the Master Indenture.

**“Master Trustee”** shall mean U.S. Bank National Association, acting as successor Trustee under the Master Indenture, and all successors and assigns.

**“Outstanding”** shall mean all Bonds authenticated and delivered under the Bond Indenture as of the time in question, except:

(a) all Bonds theretofore cancelled or required to be cancelled pursuant to the Bond Indenture;

(b) Bonds for the payment or redemption of which provision has been made in accordance with the Bond Indenture; provided that, if such Bonds are being redeemed, the required notice of redemption shall have been given or provision satisfactory to the Bond Trustee shall have been made therefor, and that if such Bonds are being purchased, there shall be a firm commitment for the purchase and sale thereof; and

(c) Bonds in substitution for which other Bonds have been authenticated and delivered pursuant to the Bond Indenture.

**“Permitted Investments”** shall mean and include any of the following, to the extent permitted under the applicable laws of the Commonwealth:

(a) Government Obligations;

(b) Debt Obligations which are (i) issued by any state or political subdivision thereof or any agency or instrumentality of such a state or political subdivision, and (ii) at the time of purchase, rated by a Rating Agency in either of its two highest Rating Categories;

(c) any bond, debenture, note, participation certificate or other similar obligation which is either (i) issued by the Federal National Mortgage Association, the Federal Home Loan Bank System, the Federal Home Loan Mortgage Corporation or the Student Loan Marketing Association, or (ii) backed by the full faith and credit of the United States of America;

(d) certificates of deposit, whether negotiable or nonnegotiable, issued by any bank, trust company or national banking association (including the Bond Trustee), provided that, unless issued by a Qualified Financial Institution, such certificates of deposit must be (i) continuously and fully insured by the Federal Deposit Insurance Corporation and (ii) continuously and fully secured, to the extent not insured by the Federal Deposit Insurance Corporation, by Government Obligations having a market value (exclusive of accrued interest, other than accrued interest paid in connection with the purchase of such securities) at all times at least equal to the principal amount of such certificates of deposit (or portion thereof not insured as aforesaid), which securities shall be lodged with the Bond Trustee, or any Federal Reserve Bank or Depositary, as custodian, by the issuer of such certificates of deposit;

(e) bonds, notes, debentures, investment agreements or other evidences of indebtedness issued or guaranteed by a corporation which are, at the time of purchase, rated by a Rating Agency in any of its three highest Rating Categories;

(f) investments in money market funds which are registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933 and which, at the time of purchase, are rated by a Rating Agency in either of its two highest Rating Categories, including money market funds for which the Bond Trustee is an advisor, provided that sums not in excess of specified limits may be invested in money market instruments which do not satisfy the foregoing requirements for periods of up to six months; and

(g) repurchase agreements with respect to and secured by Government Obligations, which agreements may be entered into with any Qualified Financial Institution or with primary government securities dealers which report to, trade with and are recognized as primary dealers by a Federal Reserve Bank and are members of the Securities Investors Protection Corporation, provided the Bond Trustee has a perfected first security interest in the collateral, that the Bond Trustee or an agent has possession of the collateral and that the collateral is, to the knowledge of the Bond Trustee, based upon an opinion of counsel, free and clear of third party claims.

**“Person”** shall mean an individual, a corporation, a partnership, an association, a joint stock company, a trust, any unincorporated organization, a governmental body or a political subdivision, a municipality, a municipal authority or any other group or organization of individuals.

**“Pledged Revenues”** shall mean (a) the loan payments received or receivable by the Authority from the University, PPMC, Pennsylvania Hospital and TCCHHS under the Loan Agreement (or under any Master Note relating thereto), except for certain payments reserved to the Authority in respect of its Administrative Expenses and indemnification rights, (b) any and all other amounts payable to the Bond Trustee as specified in the Bond Indenture, and (c) all income and receipts on the funds held by the Bond Trustee under the Bond Indenture.

**“Qualified Financial Institution”** shall mean a bank, trust company, national banking association, insurance company or other financial services company whose unsecured long term debt obligations or insurance claims paying abilities (as applicable) at the time of purchase of an investment are rated by a Rating Agency in either of its two highest rating categories.

**“Rating Agency”** shall mean any of the following organizations (or their respective successor organizations, if applicable) if such organization maintains a rating on any series of Bonds at the time in question: (a) Moody’s Investors Service, Inc.; (b) Standard & Poor’s Ratings Service, a Division of The McGraw-Hill Companies, Inc.; (c) Fitch Ratings, Inc.; or (d) such other nationally recognized credit rating organization as may be designated by the University.

**“Rating Category”** shall mean, with respect to a particular investment or the provider thereof, any of the principal rating categories which are assigned by a Rating Agency to investments or providers of the type in question; provided that distinctions within any such principal rating category (including distinctions identified by numerical symbols or symbols such as “+” or “-”) shall be disregarded for purposes of any specific Rating Category or minimum Rating Category required under the Bond Indenture.

**“Regulatory Body”** shall mean any federal, state or local government, department, agency, authority or instrumentality (other than the Authority acting in its capacity as lender pursuant to the Loan Agreement) and any other public or private body, including accrediting organizations, having regulatory jurisdiction and authority over the University, PPMC, Pennsylvania Hospital or TCCHHS, as applicable, or their respective properties or operations.

**“Scheduled Interest Payment Date”** shall mean when used with respect to the 2015 Bonds, shall mean February 15 and August 15 of each year, commencing August 15, 2015.

**“Supplemental Indenture”** or **“indenture supplemental thereto”** shall mean any indenture amending or supplementing the Bond Indenture which may be entered into in accordance with the provisions of the Bond Indenture.

**“University Representative”** means the person or persons at the time authorized to act on behalf of the University, either generally or with respect to the execution of any particular document or other

specific matter, as set forth in By-Laws of the University or a Certified Resolution of the University, copies of which shall be on file with the Authority and the Bond Trustee.

## **THE BOND INDENTURE**

### **Pledge and Assignment**

Under the Bond Indenture, the Authority pledges to the Bond Trustee all of its right, title and interest in and to the Pledged Revenues, the Loan Agreement (except for certain rights to receive payment of its Administrative Expenses and indemnification against liabilities) and the Master Notes (which shall be issued directly in favor of the Bond Trustee, as the Authority's assignee), all funds held in trust pursuant to the Bond Indenture and all of the rights and interest of the Authority in and to any additional property subsequently acquired as security for the obligations of the University, PPMC, Pennsylvania Hospital and TCCHHS under the Loan Agreement and the Master Notes. Except as otherwise provided in the Bond Indenture, the foregoing shall be held by the Bond Trustee for the equal and ratable benefit of all Bondholders.

### **Issuance of 2015 Bonds**

Upon the issuance of the 2015 Bonds, the Bond Trustee shall apply the proceeds thereof, together with other available funds, to pay the costs of the Project.

### **Additional Bonds**

The Authority may issue one or more series of Additional Bonds from time to time and lend the proceeds thereof to the University, PPMC, Pennsylvania Hospital and/or TCCHHS pursuant to the Loan Agreement to provide funds for any purpose permitted under the Act. Such Additional Bonds may be issued upon compliance with all applicable requirements under the Master Indenture for the incurrence by the University, PPMC, Pennsylvania Hospital and TCCHHS of the indebtedness represented by the Additional Bonds. In addition, the Bond Indenture requires (a) the delivery of certain opinions of Counsel pertaining to the Additional Bonds; (b) the execution of such amendments or supplements to the Bond Indenture or Loan Agreement and such other financing documents as may be necessary; (c) the issuance of a Master Note under the Master Indenture to evidence and secure the payment obligations of the University, PPMC, Pennsylvania Hospital and TCCHHS in respect of the Additional Bonds; and (d) the adoption of certain Certified Resolutions of the Authority, the University, PPMC, Pennsylvania Hospital and TCCHHS pertaining to the Additional Bonds.

### **Construction Fund**

The Bond Trustee shall establish and maintain within the Construction Fund, a 2015 Bonds Account, into which it shall deposit the amounts specified in the Tenth Supplemental Trust Indenture and any additional amounts required to be deposited therein by the University, PPMC, Pennsylvania Hospital and TCCHHS. Upon completion of the Project, any excess moneys remaining in the 2015 Bonds Account within the Construction Fund shall be transferred to the appropriate Account within the Redemption Fund or Debt Service Fund as directed by the University in writing.

### **Special Clearing Fund**

The Bond Trustee shall establish and maintain within the Special Clearing Fund a 2015 Bonds Special Clearing Fund into which it shall deposit a portion of the proceeds of the 2015 Bonds for the payment of certain costs associated with the issuance thereof. Any moneys remaining in the 2015 Bonds

Special Clearing Fund as of the initial Scheduled Interest Payment Date shall be transferred to the 2015 Bonds Account of the Debt Service Fund.

### **Debt Service Fund**

The Bond Trustee shall establish and maintain within the Debt Service Fund, a 2015 Bonds Account into which it shall deposit (i) all payments made by the University, PPMC, Pennsylvania Hospital and TCCHHS for deposit in the 2015 Bonds Account of the Debt Service Fund pursuant to the Loan Agreement, and (ii) all other amounts required or permitted under the Bond Indenture to be deposited in the Debt Service Fund with respect to the 2015 Bonds. Moneys so deposited shall be used to pay the principal of the 2015 Bonds coming due at maturity or upon mandatory sinking fund redemption and to pay the interest coming due on the 2015 Bonds from time to time.

### **Redemption Fund**

The Bond Trustee shall establish an account within the Redemption Fund into which it shall deposit any moneys provided by the University, PPMC, Pennsylvania Hospital and TCCHHS for optional or extraordinary redemptions of Bonds. The moneys so deposited shall be used to pay the redemption price of Bonds called for any such optional or extraordinary redemption.

### **Funds Held for All Bondholders; Certain Exceptions**

The moneys and investments held in the foregoing Funds established under the Bond Indenture shall be held in trust for the equal and ratable benefit of the holders of all Outstanding Bonds, except that: (a) on and after the date on which the interest on or principal or redemption price of any particular Bond or Bonds is due and payable from the Debt Service Fund or Redemption Fund, the unexpended balance of the amount deposited or reserved in either or both of such Funds for the making of such payments shall, to the extent necessary therefor, be held for the benefit of the Bondholder or Bondholders entitled thereto; (b) any special redemption fund established in connection with the issuance of any Additional Bonds for a refunding shall be held for the benefit of the holders of Bonds being refunded; and (c) the rights of any Bondholders with respect to principal or interest payments extended beyond their due dates by such holders shall be subordinate to the rights of Bondholders with respect to payments not so extended.

The Bond Indenture also permits the establishment of additional Funds (other than those referred to above) in connection with the issuance of any future series of Bonds, if so provided in the applicable Supplemental Indenture for such series of Bonds. Such Funds (which may include a debt service reserve fund for a particular series of Bonds or a purchase fund for Bonds which are subject to tender for purchase) may be held solely for the benefit and security of the series of Bonds for which they are established.

### **Investment or Deposit of Funds**

All moneys on deposit in any Fund established under the Bond Indenture shall be considered trust funds, shall not be subject to lien or attachment and shall, except as provided in the Bond Indenture, be deposited in the commercial department of the Bond Trustee, until or unless invested or deposited as provided below. All deposits in the commercial department of the Bond Trustee shall, to the extent not insured, be fully secured as to principal by Government Obligations.

All investments shall be made at the direction of a University Representative or, in the absence of a specific direction, in the investments described in paragraph (f) under the definition of Permitted Investments. No investments shall be made which would cause the Bonds to become "arbitrage bonds" within the meaning of Section 148 of the Code.



The principal of the Permitted Investments and the interest, income and gains received in respect thereof shall be applied as follows: (a) unless otherwise provided in an applicable Supplemental Indenture, all interest, income and profits received in respect of the Permitted Investments or upon the sale or other disposition thereof shall (after deduction of any losses) be retained in or transferred to the Debt Service Fund and credited against subsequent deposit requirements as provided in the Bond Indenture; and (b) whenever any other transfer or payment is required to be made from any particular Fund, such transfer or payment shall be made from such combination of maturing principal, redemption or repurchase prices, liquidation proceeds and withdrawals of principal as the Bond Trustee deems appropriate for such purpose.

Neither the Authority nor the Bond Trustee shall be accountable for any depreciation in the value of the Permitted Investments or any losses incurred upon any authorized disposition thereof.

The Bond Trustee shall determine the value of the assets in each of the Funds established under the Bond Indenture quarterly. As soon as practicable after each such valuation date, the Bond Trustee shall furnish to the Authority and the University a report of the status of each Fund as of such date. The Bond Trustee shall also advise the University at such time of the amount then available in the Debt Service Fund as a credit against future deposits prior to the next valuation date in direct order of the due dates of such deposits. In computing the value of assets in any Fund or Account, investments shall be valued at the market value thereof, and all investments and accrued interest thereon shall be deemed a part of such funds and accounts.

### **Covenants of the Authority**

The Authority covenants, among other things, promptly to pay, but only from Pledged Revenues, the principal of and interest on all Bonds. The Authority shall enforce all of its rights and privileges under the Loan Agreement, and honor all of its obligations thereunder. The Authority shall not make any investment or other use of the proceeds of any series of Bonds issued under the Bond Indenture which would cause such series of Bonds to be "arbitrage bonds" as that term is defined in Section 148(a) of the Code.

### **Events of Default and Remedies**

Each of the following is an Event of Default under the Bond Indenture:

(a) If the principal, purchase price or redemption price of any Bond is not paid when the same shall become due and payable at maturity, upon redemption or otherwise; or

(b) If an installment of interest on any Bond is not paid when the same shall become due and payable; or

(c) If the University, PPMC, Pennsylvania Hospital and TCCHHS shall fail to pay, when due and payable, any sum due pursuant to the provisions of the Loan Agreement and such failure continues to exist as of the expiration of any grace period provided in the Loan Agreement; or

(d) If the Bond Trustee receives notice from the Master Trustee that an event of default under the Master Indenture has occurred and is continuing; or

(e) If any event of default under the Loan Agreement shall occur and be continuing (other than an event of default resulting from an occurrence described in paragraph (c) or (d) above); or

(f) If the Authority fails to comply with any provision of the Act which renders it incapable of fulfilling its obligations thereunder or under the Bond Indenture; or

(g) If the Authority fails to perform any of its covenants, conditions, agreements and provisions contained in the Bonds or in the Bond Indenture (other than as specified in paragraphs (a) and (b) above);

provided, however, that no default under paragraph (e), (f) or (g) above shall constitute an Event of Default until actual notice of such default by registered or certified mail shall be given to the Authority and the University by the Bond Trustee or by the holders of not less than 25% in aggregate principal amount of all Bonds Outstanding and until the Authority and the University shall have had 30 days after receipt of such notice to correct such default, and shall not have corrected it; provided, further that, if the default is such that it cannot be corrected within such 30 day period, it shall not constitute an Event of Default if corrective action is instituted by the Authority or the University within such 30 day period and is diligently pursued to completion by the Authority or the University.

Should any Event of Default occur and be continuing, then the Bond Trustee may, by notice in writing delivered to the Authority, the University and the Bondholders, declare the principal of all Bonds then Outstanding to be due and payable immediately, and upon such declaration the said principal, together with interest accrued thereon, shall become due and payable immediately; provided, however, that no such declaration shall be made if the University cures such Event of Default prior to the date of the declaration. The Bond Trustee shall be required to take the foregoing actions if requested in writing to do so by the holders of at least 25% in aggregate principal amount of all Outstanding Bonds. The Bond Trustee may annul any such declaration and its consequences if all Events of Default are cured after the declaration is made. Any such annulment shall be binding upon the Bond Trustee and upon all holders of Outstanding Bonds; but no such annulment shall extend to or affect any subsequent default.

The above provisions are subject to the further condition that the Bonds shall be accelerated only if and to the extent that the Master Note or Notes issued to secure the same have been accelerated pursuant to the Master Indenture, and that any such acceleration of Bonds shall be annulled if and to the extent that the acceleration of the Master Note or Notes securing the same has been annulled.

Upon the happening and continuance of any Event of Default, the Bond Trustee may, and upon the written request of the holders of not less than a majority in aggregate principal amount of the Bonds then Outstanding under the Bond Indenture shall: (i) proceed to protect and enforce its rights and the rights of the Bondholders under the laws of the Commonwealth of Pennsylvania and under the Loan Agreement and the Bond Indenture by such suits, actions or special proceedings in equity or at law, or by proceedings in the office of any board or officer having jurisdiction, either for the specific performance of any covenant, condition or agreement contained herein or in aid of execution of any power granted to the Bond Trustee or for the enforcement of any proper legal or equitable remedy, as the Bond Trustee, being advised by Counsel, shall deem most effectual to protect and enforce such rights; and (ii) proceed to protect and enforce its rights as a Master Noteholder, on behalf of the Bondholders, in accordance with the Master Indenture.

Upon the occurrence and continuance of an Event of Default and upon the filing of a suit or other commencement of judicial proceedings to enforce the rights of the Bond Trustee and of the Bondholders under the Bond Indenture, the Bond Trustee shall be entitled, as a matter of right, to the appointment of a receiver or receivers with respect to the University, PPMC, Pennsylvania Hospital and TCCHHS, their respective Facilities and the rents, revenues, issues, earnings, income, products and profits thereof, pending such proceedings, with such powers as the court making such appointment shall confer.

If any proceeding taken by the Bond Trustee on account of any Event of Default is discontinued or abandoned for any reason, or determined adversely to the Bond Trustee, then and in every case the Authority, the Bond Trustee and the Bondholders shall be restored to their former positions and rights under the Bond Indenture.

### **Actions by Bondholders**

The holders of a majority in principal amount of the Outstanding Bonds under the Bond Indenture shall have the right to direct the method and place of conducting all remedial proceedings by the Bond Trustee. No Bondholder shall have any right to pursue any remedy under the Bond Indenture unless (a) the Bond Trustee shall have been given written notice of an Event of Default, (b) the holders of at least 25% in principal amount of the Outstanding Bonds shall have requested the Bond Trustee, in writing, to exercise the powers granted under the Bond Indenture or to pursue such remedy in its or their name or names, (c) the Bond Trustee shall have been offered security and indemnity satisfactory to it against costs, expenses and liabilities, and (d) the Bond Trustee shall have failed to comply with such request within a reasonable time.

### **Application of Moneys Upon Default**

Following an Event of Default, any moneys on deposit in any Fund established under the Bond Indenture and any moneys received by the Bond Trustee upon the exercise of remedies under the Bond Indenture shall be applied:

First: to the payment of the costs of the Bond Trustee, including counsel fees, any disbursements of the Bond Trustee with interest thereon and its reasonable compensation;

Second: subject to the provisions described under “Funds Held for all Bondholders; Certain Exceptions” above to the payment of all interest then due or overdue on Outstanding Bonds or, if the amount available before the payment of interest is insufficient for such purpose, to the payment of interest ratably in accordance with the amount due in respect of each Bond; and

Third: subject to the provisions described under “Funds Held for all Bondholders; Certain Exceptions” above to the payment of the outstanding principal amount due or overdue, by acceleration or otherwise, with respect to all Bonds or, if the amount available for the payment of principal is insufficient for such purpose, to the payment of principal ratably in accordance with the amount due in respect of each Bond.

### **Employment and Duties of the Bond Trustee**

The Bond Trustee accepts the trusts imposed upon it by the Bond Indenture, and agrees to observe and perform those trusts; all in the manner provided therein and subject to the conditions and terms thereof.

### **Removal and Resignation of the Bond Trustee**

The Bond Trustee may resign by notifying the Authority and the University. The Authority or the Authority, at the request of the University Representative, or the holders of at least 25 percent in principal amount of the Outstanding Bonds may remove the Bond Trustee by notifying the Bond Trustee, and may appoint a successor Bond Trustee. Upon any such removal or resignation, the Authority shall promptly appoint a successor Bond Trustee by an instrument in writing, which successor Bond Trustee shall give notice of such appointment to all Bondholders as soon as practicable; provided, that in the event the Authority does not appoint a successor Bond Trustee prior to the date specified in the notice of

resignation as the date when such resignation shall take effect, the resigning Bond Trustee or any Bondholder may petition any appropriate court having jurisdiction to appoint a successor Bond Trustee.

### **Amendments to Bond Indenture**

The Bond Indenture may be amended or supplemented from time to time, without the consent of the Bondholders, for one or more of the following purposes: (a) in connection with the issuance of Additional Bonds, to set forth matters which are specifically required or permitted by the Bond Indenture or other matters which will not adversely affect the holders of the Bonds then Outstanding; (b) to add additional covenants of the Authority or to surrender any right or power conferred upon the Authority; (c) to add, revise or remove provisions relating to the payment of arbitrage rebate to the United States, provided that the Bond Trustee receives a written opinion of nationally recognized bond counsel to the effect that the amendment will not adversely affect the exclusion from federal income taxation of the interest on any Bonds then Outstanding; (d) to authorize the issuance of unregistered Bonds bearing coupons, provided that the Bond Trustee receives a written opinion of nationally recognized bond counsel that the amendment will not adversely affect the exemption from federal income taxation of the interest on any Bonds then Outstanding; (e) to make conforming changes in connection with any amendment of the Loan Agreement; (f) to add provisions for the delivery and utilization of a liquidity facility for the payment of the purchase price of Bonds to be purchased in accordance with the Bond Indenture; and (g) to cure any ambiguity or to cure, correct or supplement any defective (whether because of any inconsistency with any other provision of the Bond Indenture or otherwise) provision of the Bond Indenture or make any other amendments, provided that, in either case, the amendment in question does not materially impair the security of the Bond Indenture or materially adversely affect the Bondholders.

The Bond Indenture may be amended or supplemented from time to time with the approval of the holders of at least 51% in aggregate principal amount of the Outstanding Bonds; provided, that (a) no amendment shall be made which adversely affects one or more but less than all series of Bonds without the consent of the holders of at least 51% of the then Outstanding Bonds of each series so affected, (b) no amendment shall be made which affects the rights of some but less than all the Outstanding Bonds of any one series without the consent of the holders of 51% of the Bonds so affected, and (c) no amendment which alters the interest rates on any Bonds, the maturities, interest payment dates or redemption provisions of any Bonds or the security provisions of the Bond Indenture may be made without the consent of the holders of all Outstanding Bonds adversely affected thereby.

### **Amendments to Loan Agreement**

The Loan Agreement may be amended without the consent of the Bondholders (a) to cure any ambiguity, inconsistency or formal defect or omission in the Loan Agreement, (b) in connection with the issuance of Additional Bonds, to set forth such matters as are permitted or required under the Bond Indenture in connection with such issuance or to set forth such other matters as will not adversely affect the holders of the Bonds then Outstanding, or (c) to make any other change in the Loan Agreement which, in the judgment of the Bond Trustee, does not materially adversely affect the rights of the holders of any Bonds. No prior notice of any amendments described in this paragraph shall be required.

Except for amendments, changes or modifications described above, neither the Authority nor the Bond Trustee shall consent to any amendment, change or modification of the Loan Agreement or waive any obligation or duty of the University, PPMC, Pennsylvania Hospital and TCCHHS under the Loan Agreement without the written consent of the holders of not less than 51 percent in aggregate principal amount of the Outstanding Bonds affected thereby; provided, however, that no such waiver, amendment, change or modification shall permit termination or cancellation of the Loan Agreement, reduce the amounts payable by the University, PPMC, Pennsylvania Hospital and TCCHHS under the provisions

described under the heading “THE LOAN AGREEMENT - Repayment of Loan” herein or change the date when such payments are due without the consent of the holders of all the Bonds then Outstanding.

### **Defeasance**

When interest on and principal or redemption price (as the case may be) of all Outstanding Bonds have been paid, or there shall have been deposited with the Bond Trustee an amount, evidenced by moneys or Government Obligations, the principal of and interest on which, when due, will provide sufficient moneys fully to pay the Bonds at the maturity date or date fixed for redemption thereof, as well as all other sums payable under the Bond Indenture by the Authority, the right, title and interest of the Bond Trustee under the Bond Indenture shall thereupon cease and the Bond Trustee, on demand of the Authority, shall release the Bond Indenture and shall execute such documents to evidence such release as may be reasonably required by the Authority and shall turn over to the University or to such person, body or authority as may be entitled to receive the same all balances remaining in any funds established under the Bond Indenture.

### **Unclaimed Moneys**

Moneys deposited with the Bond Trustee for the payment of Bonds which remain unclaimed four (4) years after the date payment thereof becomes due shall, upon written request of the Authority, if the Authority is not at the time to the knowledge of the Bond Trustee in default with respect to any covenant in the Bond Indenture or the Bonds contained, be paid to the Authority or, at the direction of the Authority, to the University; and the holders of the Bonds for which the deposit was made shall thereafter be limited to a claim against the Authority; provided, however, that before making any such payment to the Authority or the University, the Bond Trustee shall mail notice of such payment to the holders of all Bonds for which unclaimed moneys are being held.

## **THE LOAN AGREEMENT**

### **The Loan**

Upon the issuance of the 2015 Bonds, the Authority will lend the proceeds thereof to the University, PPMC, Pennsylvania Hospital and TCCHHS for application toward the costs of the Project. The loan will be made by depositing the proceeds of the 2015 Bonds with the Bond Trustee for application toward the purposes set forth in the Bond Indenture.

Upon compliance with the applicable requirements under the Bond Indenture, the Authority may issue Additional Bonds for the purpose of making additional loans to the University, PPMC, Pennsylvania Hospital and/or TCCHHS. Such additional loans will be made to and repaid by the University, PPMC, Pennsylvania Hospital and TCCHHS under the Loan Agreement.

The Loan Agreement will remain in effect until such time as all Outstanding Bonds and all other expenses payable by the University, PPMC, Pennsylvania Hospital and TCCHHS under the Loan Agreement have been paid or provisions for such payment has been made as described under the heading “THE BOND INDENTURE - Defeasance” herein.

### **Repayment of Loan**

Subject to modification in connection with the issuance of any Additional Bonds, the University, PPMC, Pennsylvania Hospital and TCCHHS will be jointly and severally required to pay to the Bond Trustee, as the assignee of the Authority, or to the tender agent, as applicable, the following sums:

(a) To the Bond Trustee, on or before the 6<sup>th</sup> day preceding each principal maturity date or mandatory sinking fund redemption date for the Bonds, an amount equal to the principal of the Bonds becoming due on the immediately succeeding principal payment date in respect of the principal or redemption price of the Bonds, subject to credit for other available funds in the manner provided in the Bond Indenture.

(b) To the Bond Trustee, (i) on or before the 6<sup>th</sup> day preceding each Scheduled Interest Payment Date for Bonds bearing interest at rates per annum which are fixed or which vary or are subject to change or adjustment no more frequently than semiannually, and (ii) on or before the day preceding each Scheduled Interest Payment Date for Bonds in all other cases, an amount equal to the interest on the Bonds becoming due on the immediately succeeding Scheduled Interest Payment Date, subject to credit for other available funds in the manner provided in the Bond Indenture.

(c) To the Bond Trustee, at the times required under the Bond Indenture, such additional amounts as are required to make up any deficiency which may occur in any of the Funds established under the Bond Indenture, including each Debt Service Reserve Fund established for the Bonds of any series.

(d) To the tender agent at its discretion, such amounts as are required to pay the purchase price of the Bonds bearing interest in certain variable rate modes, which are tendered for purchase, to the extent amounts on deposit in any remarketing account or liquidity facility purchase account of any bond purchase fund established under the Bond Indenture with respect to such Bonds are insufficient therefor.

(e) To the Trustee, on or before the due date therefor, such amounts as are required to pay the special mandatory sinking fund redemption price of Bonds pledged to liquidity providers, and accrued interest thereon.

Payments received under the related Master Notes shall be credited against the foregoing. In addition, if the principal of the Bonds of any series coming due at maturity or upon mandatory redemption has been reduced pursuant to the Bond Indenture, the corresponding payments in respect of such principal under subsection (a) above shall be reduced accordingly.

### **Additional Payments**

The University, PPMC, Pennsylvania Hospital and TCCHHS will be required to pay, upon requisition therefor, all Administrative Expenses of the Authority and the Bond Trustee.

The University shall compute and pay to the United States government all sums representing arbitrage rebate pursuant to Section 148(f) of the Code. Such computations shall be made with respect to the 2015 Bonds on specified dates occurring every five years and upon retirement of the last 2015 Bond.

### **Nature of Obligations**

The obligations of the University under the Loan Agreement are limited as to payment to the assets and revenues of the Designated Units. The obligations of PPMC, Pennsylvania Hospital and TCCHHS under the Loan Agreement are unsecured general obligations of PPMC, Pennsylvania Hospital and TCCHHS. The payment obligations of the University, PPMC, Pennsylvania Hospital and TCCHHS in respect of the 2015 Bonds are evidenced and secured by the 2015 Master Note issued in favor of the Bond Trustee. In connection with the issuance of any Additional Bonds, an additional Master Note will be issued under the Master Indenture to evidence and secure the payment obligations of the University, PPMC, Pennsylvania Hospital and TCCHHS in respect of such Additional Bonds.

## **Termination of PPMC's, Pennsylvania Hospital's and TCCHHS's Obligations under the Loan Agreement**

PPMC, Pennsylvania Hospital and TCCHHS shall be released from their obligations under the Loan Agreement effective upon (i) their withdrawal from the Obligated Group in accordance with the terms of the Master Indenture and (ii) delivery to the Bond Trustee of an opinion of nationally recognized bond counsel to the effect that such release will not adversely affect the validity of the Bonds or the exclusion from gross income for federal income tax purposes of the interest thereon.

## **Insurance Proceeds and Condemnation Awards**

The University shall notify the Authority and the Bond Trustee promptly of the receipt by any Member of the Obligated Group of any insurance proceeds or condemnation awards which are to be applied to the redemption or prepayment of the 2015 Master Note pursuant to the Master Indenture. Any amount so applied shall in turn be used to make a corresponding extraordinary redemption of 2015 Bonds pursuant to the Bond Indenture.

## **Additional Covenants**

In addition to the foregoing, the Loan Agreement contains covenants which will require the University, PPMC, Pennsylvania Hospital and TCCHHS, among other things, to: (a) comply in all material respects with applicable laws affecting the University, PPMC, Pennsylvania Hospital and TCCHHS and the Facilities and operations of the University, PPMC, Pennsylvania Hospital and TCCHHS; (b) perform and observe all of the covenants and agreements under the Master Indenture; (c) deliver to the Bond Trustee annually the audited financial statements for the Designated Units; (d) indemnify the Bond Trustee for certain liabilities arising out of the issuance of Bonds or actions taken or omitted under the Bond Indenture or the Loan Agreement; and (e) neither take or omit to take any action which would cause the Bonds to be "arbitrage bonds" under Section 148 of the Code.

## **Events of Default and Remedies**

Each of the following shall constitute an Event of Default:

(a) If the University, PPMC, Pennsylvania Hospital and TCCHHS fail to make any payment when due pursuant to the Loan Agreement, as described under paragraph (a) or (b) under "Repayment of Loan" above; or

(b) If the University, PPMC, Pennsylvania Hospital and TCCHHS fail to make any payment in respect of the purchase price of Bonds when due under the Loan Agreement; or

(c) If the University, PPMC, Pennsylvania Hospital and TCCHHS fail to make any other payment or to perform any other covenant, condition or agreement to be performed by them under the Loan Agreement; or

(d) If the University, PPMC, Pennsylvania Hospital or TCCHHS proposes or makes an assignment for the benefit of creditors or a composition agreement with all or a material part of its or their creditors, or a trustee, receiver, executor, conservator, liquidator, sequestrator or other judicial representative, similar or dissimilar, is appointed for the University, PPMC, Pennsylvania Hospital or TCCHHS or any of its assets or revenues, or there is commenced any proceeding in liquidation, bankruptcy, reorganization, arrangement of debts, debtor rehabilitation, creditor adjustment or insolvency, local, state or federal, by or against the University, PPMC, Pennsylvania Hospital or TCCHHS and if such is not vacated, dismissed or stayed on appeal within sixty (60) days; or

(e) If the Bond Trustee receives notice from the Master Trustee that an Event of Default under the Master Indenture has occurred and is continuing; or

(f) If for any reason the Bonds are declared due and payable by acceleration in accordance with the Bond Indenture.

provided, however, that no default under paragraph (c) above shall constitute an Event of Default until actual notice of such default by registered or certified mail shall be given to the University by the Authority or the Bond Trustee or any issuer of a bond insurance policy supporting Bonds and the University shall have had 30 days after receipt of such notice to correct the default and shall not have corrected it; and provided further that, if a default cannot be corrected within such 30-day period, it shall not constitute an Event of Default if corrective action is instituted by the University, PPMC, Pennsylvania Hospital or TCCHHS within the period and diligently pursued until the default is corrected.

If any Event of Default occurs and is continuing, the Authority (or the Bond Trustee as its assignee) may at its option exercise any one or more of the following remedies: (a) by mandamus, or other suit, action or proceeding at law or in equity, enforce all rights of the Authority, and require the University, PPMC, Pennsylvania Hospital and TCCHHS to carry out any agreements with or for the benefit of the Bondholders and to perform its duties under the Act or the Loan Agreement; or (b) by action or suit in equity require the University, PPMC, Pennsylvania Hospital and TCCHHS to account as if it were the trustee of an express trust for the Authority; or (c) by action or suit in equity enjoin any acts or things which may be unlawful or in violation of the rights of the Authority; or (d) upon the filing of a suit or other commencement of judicial proceeding to enforce the rights of the Bond Trustee and the Bondholders, have appointed a receiver or receivers with respect to the University, PPMC, Pennsylvania Hospital and TCCHHS and their respective Facilities, with such powers as the court making such appointment shall confer; or (e) upon notice to the University, PPMC, Pennsylvania Hospital and TCCHHS, to accelerate the due dates of all sums due or to become due under the Loan Agreement, if and to the extent that the Bonds have been accelerated under the Bond Indenture and such acceleration has not been annulled; or (f) enforce all rights and remedies as a Master Noteholder under the Master Indenture.

### **Amendments**

The Loan Agreement may be amended from time to time in accordance with the provisions described under “THE BOND INDENTURE - Amendments to Loan Agreement” herein.



## **APPENDIX E**

### **SUMMARY OF CERTAIN PROVISIONS OF THE MASTER INDENTURE**

## TABLE OF CONTENTS

Definitions .....	1
Issuance of Obligations.....	12
Limitation on Liability of University; Designated Units .....	12
Conversion to General Obligation Debt.....	12
Security for Obligations.....	13
Additional Obligated Group Members; Additional Designated Units.....	13
Withdrawal From the Obligated Group; Cessation of Status as a Designated Unit .....	13
Insurance .....	14
Insurance and Condemnation Proceeds .....	14
Limitations on Creation of Liens .....	14
Limitations on Issuance of Additional Indebtedness .....	14
Rate Covenant.....	16
Sale, Lease or Other Disposition of Property .....	16
Consolidation, Merger, Sale or Conveyance .....	18
Events of Default .....	18
Acceleration of Obligations .....	20
Application of Moneys Collected .....	20
Actions by Holders .....	21
Defeasance .....	21
Amendments and Supplements to Master Indenture .....	22
Sixteenth Supplemental Master Trust Indenture.....	23

## **SUMMARY OF CERTAIN PROVISIONS OF THE MASTER INDENTURE**

The following are summaries of certain provisions of the Master Indenture. The summaries should not be regarded as full statements of the Master Indenture or of the portions summarized. For complete statements of the provisions thereof, reference is made to the document in its entirety, copies of which will be available for inspection during normal business hours at the principal corporate trust office of the Master Trustee.

### **Definitions**

The following are definitions of certain terms used in the Master Indenture, and in the following summaries of provisions of the Master Indenture:

“Accounts” shall mean any right to payment for goods sold or leased or for services rendered which is not evidenced by an instrument or chattel paper, whether or not it has been earned by performance.

“Accountant” shall mean any Entity who or which is appointed by any Member of the Obligated Group for the purpose of examining and reporting on or passing on questions relating to the financial statements of one or more Members of the Obligated Group, one or more Designated Units or the entire Obligated Group, has all certifications necessary for the performance of such services, and has a favorable reputation for skill and experience in performing similar services in respect of entities of a comparable size and nature.

“Affiliate” shall mean any Entity directly or indirectly controlling or controlled by or under direct or indirect common control with the University. For purposes of this definition, “control” when used with respect to any specified Entity means the power to direct the policies of such Entity, directly or indirectly, whether through the power to appoint and remove its directors, the ownership of voting securities, by contract, membership or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Book Value” shall mean, with respect to any Property, the cost of such Property, net of accumulated depreciation, calculated in conformity with generally accepted accounting principles.

“Capitalization” shall mean the principal amount of all outstanding Long Term Indebtedness of the Obligated Group, plus the equity accounts of the Obligated Group (i.e., unrestricted fund balances, including any shareholder equity); provided that, with respect to the University, only the equity accounts of the Designated Units shall be taken into account.

“Code” shall mean the Internal Revenue Code of 1986, as amended from time to time, and any successor thereto.

“Completion Indebtedness” shall mean any Long-Term Indebtedness incurred by any Entity (a) for the purpose of financing the completion of acquisition or construction of land, leasehold interest, buildings, fixtures or equipment with respect to which Long-Term Indebtedness was previously incurred in accordance with the provisions of the Master Indenture, and (b) in a principal amount not in excess of the amount required to (i) provide a completed and equipped facility of substantially the type and scope contemplated at the time such prior Long-Term Indebtedness was originally incurred, (ii) capitalize interest during the period of construction, (iii) provide a reserve with respect to such Completion Indebtedness and (iv) pay the costs and expenses of issuing such Completion Indebtedness.

“Consultant” shall mean an Entity who or which (a) is not, and no member, stockholder, director, officer or employee of which is, an officer or employee of any Member of the Obligated Group or Affiliate, and (b) is appointed by any Member of the Obligated Group or Designated Unit for the purpose of passing on questions relating to the financial affairs, management or operations of one or more Members of the Obligated Group or the entire Obligated Group or one or more Designated Units and has a favorable reputation for skill and experience in performing similar services in respect of entities engaged in reasonably comparable endeavors. If any Consultant’s report or opinion is required to be given with respect to matters partly within and partly without the expertise of any Consultant, such Consultant may rely upon the report or opinion of another Consultant possessing the necessary expertise.

“Counsel” shall mean an attorney-at-law or law firm (which may include counsel to a Member of the Obligated Group including inside counsel retained by a Member of the Obligated Group as an employee).

“CPUP” shall mean the division of the University the activities of which are recorded in the Financial Statements for the Clinical Practices of the University of Pennsylvania.

“Credit Facility” shall mean any letter of credit, line of credit, insurance policy, guaranty or other agreement constituting a credit enhancement or liquidity facility which is issued by a bank, trust company, savings and loan association or other institutional lender, insurance company or surety company for the benefit of the holder of any Indebtedness in order to provide a source of funds for the payment of all or any portion of the payment obligations of any Member of the Obligated Group under such Indebtedness.

“Debt Service Coverage Ratio” shall mean for any period of time the ratio determined by dividing the Income Available for Debt Service by the Debt Service Requirements.

“Debt Service Requirements” shall mean, for any period of time, the amounts payable or the payments required to be made with respect to Long-Term Indebtedness during such period. In determining Debt Service Requirements: (a) principal of and interest on a Guaranty shall equal 20% of the principal and interest on the indebtedness guaranteed (calculated as if it were Indebtedness), unless such Guaranty shall have been drawn upon, in which case, during the period beginning on the date such Guaranty is drawn upon and ending on the date the Entity whose obligation was guaranteed resumes paying currently scheduled principal and interest payments as they are scheduled to be due on such obligation, the amount of principal and interest taken into account shall equal 100% of the principal and interest on the indebtedness guaranteed (calculated as if it were Indebtedness) or unless the income available for debt service of the guaranteed Entity is at least 1.35 times maximum annual debt service of the guaranteed Entity for each of such Entity’s immediately preceding three fiscal years in which case none of the principal of or interest on the Guaranty shall be taken into account; (b) Non-Amortizing Principal shall be (i) excluded from the calculation of Debt Service Requirements if, at the time of such calculation of Debt Service Requirements, the Non-Amortizing Principal does not exceed Unrestricted Assets as shown on the most recent Financial Statements of the Obligated Group, or (ii) if, at the time of such calculation, a Credit Facility secures payment of such Non-Amortizing Principal, such Non-Amortizing Principal shall be treated as due and payable in the amounts and at the times specified in the Credit Facility; (c) at the option of the obligor, Non-Amortizing Principal and principal of Interim Indebtedness may be assumed to be amortized from the date of incurrence thereof over a 30-year term with level debt service payments at an assumed interest rate equal to the then marginal borrowing cost of the obligor as certified in an Officer’s Certificate (which as to such marginal interest rate shall be accompanied by and based on an opinion of a banking or investment banking institution knowledgeable in matters of health care financings); (d) Variable Rate Indebtedness shall be assumed to be Indebtedness the interest rate on which is equal to (i), in respect of any Outstanding Indebtedness, the average interest

rate on such Indebtedness for the twelve (12) months immediately preceding the month prior to such calculation (or if such Indebtedness shall have had a variable rate for less than a twelve (12) month period, the average of interest rates borne by such Indebtedness during the time in which it has borne interest at a variable rate) and (ii), in respect of any proposed Indebtedness, the initial rate established for such Indebtedness, as determined by an Officer's Certificate of the obligor; (e) any amounts payable from (i) funds available under an Escrow Deposit (other than amounts so payable solely by reason of the obligor's failure to make payments from other sources), (ii) funds available under a debt service reserve fund, or other similar reserve fund held by the holder of Long Term Indebtedness (or any trustee on its behalf) (provided that no Event of Default has occurred and is continuing under the Master Indenture and no default or event of default has occurred and is continuing with respect to the Long Term Indebtedness in question) or (iii) the proceeds of such Long Term Indebtedness (i.e. accrued and capitalized interest), shall be excluded from the determination of the Debt Service Requirements; (f) notwithstanding that the definition of Indebtedness excludes Credit Facilities, to the extent they are drawn upon to purchase, but not to retire, Indebtedness, interest expense incurred on any such Credit Facility in excess of the interest expenses on such Indebtedness shall be included in the determination of the Debt Service Requirements; (g) if an interest rate exchange agreement, interest rate cap or floor agreement or other similar arrangement or agreement is expressly identified pursuant to its terms as being entered into in connection with and in order to hedge interest rate fluctuations on any Long-Term Indebtedness and the unguaranteed debt of the obligated counterparty is rated in one of the three highest rating categories (without regard to any "+" or "-" or similar modifier) by a Rating Agency and no default exists under such agreement, the principal and interest payable during a period for such Long-Term Indebtedness for purposes of computing the Debt Service Requirements for such period shall be determined by reference to the net amount payable under, or after giving effect to, such agreement; and (h) if one or more guaranty agreements, put option agreements, credit support agreements or other similar arrangement or agreement is expressly identified pursuant to its terms as being entered into by one or more Members of the Obligated Group in connection with any Long-Term Indebtedness of any one or more Members of the Obligated Group and the unguaranteed debt of the obligated counterparty is rated in one of the three highest rating categories (without regard to any "+" or "-" or similar modifier) by a Rating Agency and no default exists under such agreement, the principal and interest payable during a period for such Long-Term Indebtedness for purposes of computing the Debt Service Requirements for such period shall be determined by reference to the net amount payable under, or after giving effect to, such arrangement or agreement including, without limitation, any fees, interest or other amounts payable to any one or more Members of the Obligated Group pursuant to such arrangement or agreement.

"Defeasance Obligations" shall mean (a) direct obligations of, or obligations the timely payment of the principal of and interest on which is guaranteed by, the United States of America; (b) evidences of ownership of a proportionate interest in specific direct obligations of, or specified obligations the timely payment of the principal of and the interest on which are unconditionally and fully guaranteed by, the United States of America, which obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity of custodian; (c) obligations issued by the Resolution Funding Corporation pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (the "FIRRE Act"), (i) the principal of which obligations is payable when due from payments of the maturing principal of non-interest bearing direct obligations of the United States of America issued by the Secretary of the Treasury and deposited in the Funding Corporation Principal Fund established pursuant to the FIRRE Act, and (ii) the interest on which obligations, to the extent not paid from other specified sources, is payable when due by the Secretary of the Treasury pursuant to the FIRRE Act; and (d) obligations that are (i) issued by any state or political subdivision thereof or any agency or instrumentality of such a state or political subdivision, (ii) fully secured as to principal and interest by obligations described in clause (a), (b) or (c) above and (iii) rated at the time of purchase by a Rating Agency in its highest rating category (without regard to any "+" or "-" or similar modifier).

“Designated Unit” shall mean HUP, CPUP and any other Unit which the University causes to become a Designated Unit in accordance with the Master Indenture.

“Entity” shall mean an individual, a corporation, a partnership, an association, a joint stock company, a joint venture, a trust, an unincorporated organization, a governmental unit or an agency, political subdivision or instrumentality thereof, a Unit or any other group or organization of individuals.

“Escrow Deposit” shall mean a segregated escrow fund or other similar fund, account or deposit in trust established with respect to any Indebtedness, consisting of (a) cash sufficient and irrevocably pledged to pay all or a portion of the principal of, and premium, if any, and interest on any Indebtedness, as the same shall become due or payable upon redemption, or (b) Defeasance Obligations the principal of and interest on which will be in an amount sufficient and irrevocably pledged to pay all or a portion of the principal of, and premium, if any, and interest on any Indebtedness, as the same shall become due or payable upon redemption, or (c) other investment securities the principal of and interest on which will be in an amount sufficient and irrevocably pledged to pay all or a portion of the principal of, and premium, if any, and interest on any Indebtedness, as the same shall become due or payable upon redemption, which result in the payments being deemed paid or the Indebtedness, or a portion thereof, being deemed no longer outstanding under the documents under which such Indebtedness was issued, or (d) any combination of the above.

“Event of Default,” with respect to the Master Indenture, shall mean any event of default under the Master Indenture.

“Financial Statements” shall mean, for any period, the financial statements for such period containing such statements necessary for a fair presentation of unrestricted fund financial position or net worth, results of operations and changes in unrestricted fund balance or net worth and financial position as at the end of such reporting period, all stated in accordance with generally accepted accounting principles consistently applied, which have been examined by an independent Accountant and contain such independent Accountant’s report thereon, which report shall not be other than a standard accountant's report.

“Fiscal Year” shall mean a period of twelve consecutive months ending on June 30 or on such other date as may be specified in an Officer’s Certificate of the University executed and delivered to the Master Trustee.

“Governing Body” shall mean, when used with respect to any Entity, its board of directors, board of trustees, or other board, committee or group of individuals in which the powers of a board of directors or board of trustees is vested generally or for the specific matters under consideration.

“Governmental Issuer” shall mean any state, territory or possession of the United States or any municipal corporation or political subdivision formed under the laws thereof or any constituted authority or agency or instrumentality of any of the foregoing empowered to issue obligations on behalf thereof.

“Governmental Restrictions” shall mean federal, state or other applicable governmental laws or regulations affecting any Member of the Obligated Group, any Designated Unit or the facilities thereof placing restrictions and limitations on the (a) fees and charges to be fixed, charged or collected or (b) the timing of the receipt of such revenues.

“Gross Receipts” shall mean, (a) with respect to the University, all revenues, income, receipts and money (other than proceeds of borrowing and income thereon) received in any period by or on behalf of the Designated Units, and (b) with respect to any Member of the Obligated Group other than the University, all revenues, income, receipts and money (other than proceeds of borrowing and income

thereon) received in any period by or on behalf of such Member of the Obligated Group. Gross Receipts shall include, without limiting the generality of the foregoing, (a) revenues derived from operations, (b) gifts, grants, bequests, donations and contributions and the income therefrom, excluding gifts, grants, bequests, donations and contributions to the extent specifically restricted by the donor to a particular purpose inconsistent with their use for the payment of Obligations, (d) rentals received from the leasing of real or tangible personal property, and (e) proceeds derived from (i) insurance, (ii) Accounts, (iii) securities and other investments, (iv) inventory and other tangible and intangible property, (v) medical or hospital insurance, indemnity or reimbursement programs or agreements and (vi) contract rights and other rights and assets now or hereafter owned, held or possessed.

“Guaranty” shall mean, with respect to any Member of the Obligated Group other than the University, any obligation of a Member of the Obligated Group guaranteeing in any manner, directly or indirectly, any obligation of any other Entity which obligation of such other Entity would, if such obligation were the obligation of a Member of the Obligated Group, constitute Indebtedness under the Master Indenture and, with respect to the University, any obligation of the University guaranteeing in any manner, directly or indirectly, any obligation of any other Entity if such obligation of the University is a limited obligation of the University payable solely from Property of Designated Units.

“Holder” shall mean the registered owner of any Obligation. In the case of an Obligation issued to a trustee or other fiduciary acting on behalf of the holders of any bonds, notes or other similar obligations that are secured by such Obligation, including any registered securities depositary then in the business of holding (for the benefit of beneficial owners whose interests may be evidenced by book-entry registration) substantial amounts of obligations of types comprising the Obligations, the term Holder shall mean the trustee or other fiduciary or, if so provided in the Related Financing Documents, the holders of the Related Bonds in proportion to their respective interests therein, including any registered securities depositary then in the business of holding (for the benefit of beneficial owners whose interests may be evidenced by book-entry registration) substantial amounts of obligations of types comprising the Obligations.

“HUP” shall mean the division of the University the activities of which are recorded in the Financial Statements for the Hospital of the University of Pennsylvania.

“Income Available For Debt Service” shall mean, with respect to any period of time, excess of revenues over expenses, or, in the case of for-profit entities, net income after tax, as determined in accordance with generally accepted accounting principles, to which shall be added depreciation, amortization, other non-cash charges and interest expense on Long-Term Indebtedness, and from which shall be excluded any extraordinary items, any gain or loss resulting from either the extinguishment of Indebtedness or the sale, exchange or other disposition of assets not made in the ordinary course of business and any revenues or expenses of any Entity not a Member of the Obligated Group; provided that, in determining Income Available for Debt Service, the only revenues or expenses of the University to be taken into account shall be the revenues or expenses of its Designated Units reflected on financial statements prepared in accordance with generally accepted accounting principles.

“Indebtedness” of any Entity shall mean (a) all liabilities (exclusive of reserves) properly recordable as indebtedness on the audited financial statements of such Entity (except that, with respect to the University, “Indebtedness” shall include only such liabilities as are properly recordable as indebtedness on the audited financial statements of the Designated Units), and (b) all other obligations for borrowed money (except that, with respect to the University, “Indebtedness” shall include only such obligations to the extent payable solely from or secured solely by Property of Designated Units); provided that Indebtedness shall not include: any Indebtedness of any Member of the Obligated Group to any Designated Unit of or to any Member of the Obligated Group other than the University; any obligation

that does not constitute indebtedness under generally accepted accounting principles; obligations of any Member of the Obligated Group under any Credit Facility unless such Credit Facility has been drawn upon to retire Indebtedness; or interest rate exchange agreements, interest rate cap or floor agreements or other similar arrangements or agreements expressly identified pursuant to their terms as being entered into in connection with and in order to hedge interest rate fluctuations on any Indebtedness.

“Initial Notes” shall mean the notes issued as Obligations under the Master Indenture to secure one or more series of Pennsylvania Higher Educational Facilities Authority The Trustees of the University of Pennsylvania Health Services Revenue Bonds in an original aggregate principal amount not in excess of \$500,000,000.

“Insurance Consultant” shall mean an Entity who or which (a) is not, and no member, stockholder, director, officer or employee of which is, an officer or employee of any Member of the Obligated Group or Affiliate, and (b) is appointed by any Member of the Obligated Group or a Designated Unit for the purpose of reviewing and recommending insurance coverages for the facilities and operations of one or more Members of the Obligated Group or the entire Obligated Group or one or more Designated Unit 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.

“Interim Indebtedness” shall mean any Indebtedness that matures more than one year and not more than five years from its date of issuance and that the obligor intends to refinance through issuance of Long-Term Indebtedness.

“Lien” shall mean any mortgage, deed of trust or pledge of, security interest in or lien or encumbrance on any Property of any Designated Unit or any Property of any Member of the Obligated Group other than the University in favor of, or which secures any Indebtedness or other obligation to, any Entity other than a Designated Unit or any Member of the Obligated Group other than the University.

“Long-Term Indebtedness” shall mean all (a) Indebtedness which, at the time of incurrence or issuance, has a final maturity or term greater than one year or which is renewable at the option of the obligor thereof for a term greater than one year from the date of original incurrence or issuance and (b) Short Term Indebtedness for which a commitment by a financial lender exists to provide financing to retire such Short-Term Indebtedness and such commitment provides for the repayment of principal on terms that would, if such commitment were implemented, constitute Long-Term Indebtedness; provided, that, Long Term Indebtedness shall not include (i) Non-Recourse Indebtedness except that, to the extent that income directly attributable to facilities financed with Non-Recourse Indebtedness is included in Income Available for Debt Service in any computation of the Debt Service Coverage Ratio, principal of and interest on such Non-Recourse Debt shall be taken into account in computing such Debt Service Coverage Ratio; (ii) Subordinated Indebtedness; (iii) current obligations payable out of current revenues, including current payments for the funding of pension plans and contributions to self insurance programs; (iv) obligations under contracts for supplies, services or pensions, allocated to the current operating expenses of future years in which the supplies are to be furnished, the services rendered or the pensions paid; and (v) rentals payable under leases which are not properly capitalized under generally accepted accounting principles.

“Master Trustee” shall mean U.S. Bank National Association, as successor trustee, and its successors in the trusts created under the Master Indenture.

“Maximum Annual Debt Service Requirement” shall mean the greatest Debt Service Requirements among the Debt Service Requirements for the then current Fiscal Year and the Debt Service Requirements for each future Fiscal Year.



“Member of the Obligated Group” shall mean (a) the University, PPMC, Pennsylvania Hospital, CCA, Wissahickon Hospice and TCCHHS and each other Entity that becomes a Member of the Obligated Group in accordance with the provisions of the Master Indenture, whether or not such Entity has issued any Obligations thereunder, and which has not withdrawn from the Obligated Group, and (b) when used in respect of any particular Obligation or other Indebtedness, shall mean the obligor thereunder.

“Non-Amortizing Principal” shall mean that portion of the principal of Long-Term Indebtedness (a) maturing within a period of twelve consecutive months in which 25% or more of the original principal amount of such Long-Term Indebtedness matures, which principal amount is not required by the documents governing such Long-Term Indebtedness to be amortized before the commencement of such twelve month period in amounts such that, following such amortization, the principal amount maturing during such twelve month period will be less than 25% of such original principal amount, or (b) that may be tendered for purchase or redemption prior to maturity at the option of the holder thereof (including any of such Long-Term Indebtedness that is payable on demand within 365 days from the date of incurrence), or (c) that is required to be tendered for purchase or redemption prior to maturity thereof (other than a purchase or redemption required upon the future occurrence of a condition or event) within a period of twelve consecutive months in which 25% or more of the original principal amount of such Long-Term Indebtedness is required to be redeemed or tendered for purchase.

“Non-Recourse Indebtedness” shall mean any Indebtedness incurred to finance or refinance the acquisition or construction of any Property secured by a Lien, liability for which is effectively limited to the acquired or constructed Property subject to such Lien, with no recourse, directly or indirectly, to any other Property of any Member of the Obligated Group.

“Obligated Group” shall mean all Members of the Obligated Group.

“Obligation” shall mean any obligation issued under the Master Indenture by a Member of the Obligated Group pursuant to the terms of the Master Indenture.

“Officer’s Certificate” shall mean a certificate signed, in the case of a corporation, by the Chairman, Vice Chairman, President or Chief Financial Officer thereof or, in the case of a certificate delivered by any other Entity, the chief executive or chief financial officer thereof, or, in either case, by any other person authorized by resolution of the Governing Body of such Entity to execute such certificate. When an Officer’s Certificate is required under the Master Indenture to set forth matters relating to one or more Members of the Obligated Group, such Officer’s Certificate may be given in reliance upon another certificate, or other certificates, and supporting materials, if any, provided by any duly authorized officer of the applicable Member of the Obligated Group.

“Opinion of Bond Counsel” shall mean an opinion in writing signed by an attorney or firm of attorneys experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds.

“Opinion of Counsel” shall mean an opinion in writing signed by any Counsel acceptable to the Master Trustee.

“Outstanding” (a) when used with reference to Obligations, shall mean, as of any date of determination, all Obligations theretofore issued or incurred and not paid and discharged other than (i) Obligations theretofore cancelled by the Master Trustee or delivered to the Master Trustee for cancellation, (ii) Obligations deemed paid and no longer Outstanding as provided in the Master Indenture or for which an Escrow Deposit has been established, (iii) Obligations in lieu of which other Obligations have been authenticated and delivered or have been paid pursuant to the provisions of the Master Indenture regarding mutilated, destroyed, lost or stolen Obligations unless proof satisfactory to the Master

Trustee has been received that any such Obligation is held by a bona fide purchaser for value without notice, and (iv) any Obligation held by any Member of the Obligated Group; or, (b) when referring to Indebtedness other than Obligations, shall mean, as of any date of determination, all Indebtedness theretofore issued or incurred other than (i) Indebtedness which has been paid, or for which an Escrow Deposit is established, (ii) Indebtedness for which an Opinion of Counsel stating that such Indebtedness has been discharged has been provided to the Master Trustee, (iii) evidence of Indebtedness for which new evidence of Indebtedness has been substituted in a manner analogous to clause (a)(iii) above and (iv) any evidence of Indebtedness held by any Member of the Obligated Group, provided that Obligations or evidences of Indebtedness held by any Member of the Obligated Group may be deemed by such Member of the Obligated Group to be continuously Outstanding if such Obligations or evidences of Indebtedness were acquired with an intent that they only be held temporarily in connection with an effort to remarket them to Entities other than the Member of the Obligated Group.

“Pennsylvania Hospital” shall mean Pennsylvania Hospital of the University of Pennsylvania Health System, a Pennsylvania non-profit corporation or any legal successor thereto.

“Permitted Liens” shall mean the Master Indenture, all Related Financing Documents and, as of any particular time:

(a) Any lien from any Member of the Obligated Group to any Designated Unit or to any Member of the Obligated Group other than the University;

(b) Any judgment lien or notice of pending action against any Member of the Obligated Group so long as (i) such judgment or pending action is being contested and execution thereon has been stayed or the period for responsive pleading or appeal has not lapsed, or (ii) in the absence of such contest, neither the pledge and security interest of the Master Indenture nor any Property of any Member of the Obligated Group will be materially impaired or subject to material loss or forfeiture;

(c) (i) 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; (ii) any liens on any Property for taxes, assessments, levies, fees, water and sewer charges, 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, which are not due and payable or which are not delinquent or which, or the amount or validity of which, are being contested and execution thereon is stayed or, with respect to liens of mechanics, materialmen, laborers, suppliers or vendors, which have been due for less than 90 days; (iii) easements, rights-of-way, servitudes, restrictions, oil, gas or other mineral reservations and other minor defects, encumbrances, and irregularities in the title to any Property, Plant and Equipment which do not materially impair the use of such Property, Plant and Equipment; (iv) to the extent that it affects title to any Property, the Master Indenture; and (v) landlord’s liens;

(d) Any lease;

(e) Any Lien securing Indebtedness provided such Lien also secures all Obligations (other than Obligations representing Subordinated Indebtedness or Non-Recourse Indebtedness) on a parity basis;

(f) Any Lien arising by reason of good faith deposits with any member of the Obligated Group in connection with leases of real estate, bids or contracts (other than contracts for the payment of money), deposits by any member of the Obligated Group 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;

(g) 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 Member of the Obligated Group to maintain self-insurance or to participate in any funds established to cover any insurance risks or in connection with workers' compensation, unemployment insurance, pension or profit sharing plans or other similar social security plans, or to share in the privileges or benefits required for companies participating in such arrangements;

(h) Any Lien arising by reason of an Escrow Deposit;

(i) Any Lien in favor of a trustee or the holder of Indebtedness on the proceeds of Indebtedness prior to the application of such proceeds;

(j) Any Lien on moneys deposited by patients or others with any Member of the Obligated Group as security for or as prepayment for the cost of patient care;

(k) Any Lien on Property received by any Member of the Obligated Group through gifts, grants or bequests, such Lien being due to restrictions on such gifts, grants or bequests of Property or the income thereon and any Lien on pledges, gifts or grants to be received in the future including any income derived from the investment thereof;

(l) Statutory rights of the United States of America by reason of federal funds made available under 42 U.S.C. §291 et seq. and similar rights under other federal and state statutes;

(m) Liens existing at the time of a consolidation or merger pursuant to the Master Indenture, on the date of acquisition of any Property or at the time an Entity becomes a Member of the Obligated Group or a Unit becomes a Designated Unit;

(n) Any Lien existing on the date of authentication and delivery of the first Obligation under the Master Indenture provided that no such Lien (or the amount of Indebtedness secured thereby) may be increased, extended, renewed or modified to apply to any Property of any Member of the Obligated Group not subject to such Lien on such date or to secure Indebtedness not Outstanding as of that date, unless such Lien as so extended, renewed or modified otherwise qualifies as a Permitted Lien under the Master Indenture;

(o) A security interest in any funds or accounts established pursuant to the provisions of any Related Financing Documents;

(p) Liens in the form of purchase money security interests in Property financed with the proceeds of Indebtedness secured thereby;

(q) Any Lien on Property; provided, however, that the aggregate Book Value of all Property encumbered pursuant to this paragraph (q) shall not exceed 15% of the Book Value of all Property of the Obligated Group as shown in the Financial Statements for the most recent Fiscal Year or, if more recent, any period of 12 full consecutive calendar months for which the Financial Statements have been reported upon by an independent Accountant;

(r) Liens on accounts receivable arising as a result of sale of such accounts receivable with or without recourse or pledge thereof to secure Short-Term Indebtedness permitted to be incurred under the Master Indenture;

(s) Any Lien on inventory that does not exceed 25% of the Book Value thereof;

(t) Any Lien subordinate to the lien described in paragraph (e) of this definition required by a statute under which a Related Bond is issued or required by any Entity providing a Credit Facility securing payments of principal of and interest on Obligations;

(u) Liens on Property due to rights of third party payors for recoupment of amounts paid to any Member of the Obligated Group; and

(v) Any Lien existing for not more than ten days after the University shall have received notice thereof.

“PPMC” shall mean Presbyterian Medical Center of the University of Pennsylvania Health System d/b/a Penn Presbyterian Medical Center, a Pennsylvania non-profit corporation or any legal successor thereto.

“Property” shall mean any and all rights, titles and interests in and to any and all assets whether real or personal, tangible or intangible, including cash, and wherever situated; provided that, with respect to the University, “Property” shall include only rights, titles and interests in and to assets included in financial statements of its Designated Units prepared in accordance with generally accepted accounting principles; further provided that, “Property” shall not include donor restricted funds as determined in accordance with generally accepted accounting principles.

“Property, Plant and Equipment” shall mean all Property classified as property, plant and equipment under generally accepted accounting principles.

“Rating Agency” shall mean any of the following organizations (or their respective successor organizations, if applicable) (a) Standard & Poor’s Ratings Service, a Division of The McGraw-Hill Companies, Inc., (b) Moody’s Investors Service, Inc., and (c) Fitch Ratings, Inc. If all of such Rating Agencies no longer perform the functions of a securities rating service for whatever reason, the term “Rating Agency” shall thereafter be deemed to refer to any other nationally recognized rating service or services as shall be designated in writing by the University to the Master Trustee, provided that such designee shall not be unsatisfactory to the Master Trustee.

“Related Bond Indenture” shall mean any indenture, bond resolution or other comparable instrument pursuant to which a series of Related Bonds is issued.

“Related Bond Issuer” shall mean the issuer of any issue of Related Bonds.

“Related Bond Trustee” shall mean the trustee and its successors in the trust created under any Related Bond Indenture, and if there is no such trustee, shall mean the Related Bond Issuer.

“Related Bonds” shall mean the revenue bonds or other obligations issued by Governmental Issuer pursuant to a Related Bond Indenture, the proceeds of which are loaned or otherwise made available to (a) a Designated Unit or a Member of the Obligated Group other than the University in consideration of the execution, authentication and delivery of an Obligation to or for the order of such Governmental Issuer, or (b) any Entity other than a Designated Unit or a Member of the Obligated Group other than the University in consideration of the issuance to such Governmental Issuer (i) by such Entity of any evidence of indebtedness or other obligation of such Entity, and (ii) by a Member of the Obligated Group of a Guaranty in respect of such indebtedness or other obligation, which Guaranty is represented by an Obligation.

“Related Financing Documents” shall mean:

(a) in the case of any Obligation, (i) all documents, including any Related Bond Indenture, pursuant to which the proceeds of the Obligation are made available to an Member of the Obligated Group, the payment obligations evidenced by the Obligation are created and any security for the Obligation (if permitted under the Master Indenture) is granted, and (ii) all documents creating any additional payment or other obligations on the part of an Member of the Obligated Group which are executed in favor of the Holder in consideration of the Obligation proceeds being loaned or otherwise made available to the Member of the Obligated Group; and

(b) in the case of Indebtedness other than Obligations, all documents relating thereto which are of the same nature and for the same purpose as the documents described in clause (a) above.

“Short-Term Indebtedness” shall mean all Indebtedness excluding: (a) a Guaranty of an obligation of a Member of the Obligated Group; (b) Long Term Indebtedness; and (c) the current portion of Long-Term Indebtedness.

“Subordinated Indebtedness” shall mean any Indebtedness that is expressly made subordinate and junior in right of payment of principal of, redemption premium, if any, and interest on, all Obligations, on terms and conditions which substantially require that (a) no payment on account of principal of, redemption premium, if any, or interest on such Subordinated Indebtedness shall be made, nor shall any property or assets be applied to the purchase or other acquisition or retirement of such Subordinated Indebtedness if, at the time of such payment or application, or immediately after giving effect thereto, there shall exist a default in the payment of the principal of, redemption premium, if any, or interest on any Obligations, or there shall have occurred an Event of Default with respect to any Obligations, as defined therein and in the Master Indenture, and such Event of Default shall not have been cured or waived or shall not have ceased to exist; and (b) in the event that any Subordinated Indebtedness is declared or otherwise becomes due and payable because of the occurrence of an event of default with respect thereto, the Holders of Obligations shall be entitled to receive payment in full thereof before the holders of the Subordinated Indebtedness shall be entitled to receive any payment on account of such Subordinated Indebtedness as a result of such event of default, and no holder of Subordinated Indebtedness, or a trustee acting on such holder’s behalf, shall be entitled to exercise any control over proceedings to enforce the terms and conditions of the Master Indenture.

“Supplemental Indenture” shall mean an indenture supplemental to, and authorized and executed pursuant to, the terms of the Master Indenture.

“TCCHHS” shall mean The Chester County Hospital and Health System, a Pennsylvania non-profit corporation or any legal successor thereto.

“Total Revenues” shall mean, as to any period of time, net operating revenue plus non-operating revenues less any allowance for uncollectible accounts, as determined in accordance with generally accepted accounting principles consistently applied; provided that any determination of Total Revenues of the University shall take into account only such revenues and allowances of uncollectible accounts includable in financial statements for the Designated Units prepared in accordance with generally accepted accounting principles.

“Transfer” shall mean any act or occurrence the result of which is to dispossess any Entity of an asset or interest therein, including specifically, but without limitation, the forgiveness of any debt; provided, however, that the payment of bills or other accounts in the ordinary course of business shall be excluded.

“Unit” shall mean any enterprise owned and operated by the University for which the University has obtained separate Financial Statements.

“University” shall mean The Trustees of the University of Pennsylvania, a Pennsylvania non-profit corporation, or any legal successor thereto.

“University Debt” shall mean all obligations for borrowed money that, at the time of incurrence or issuance, have a final maturity or term greater than one year or which is renewable at the option of the obligor thereof for a term greater than one year from the date of original incurrence or issuance properly recordable as indebtedness on the audited financial statements of the University.

“University Property” shall mean any and all rights, titles and interests in and to any and all assets whether real or personal, tangible or intangible, including cash, and wherever situated; provided that, “Property” shall not include donor restricted funds as determined in accordance with generally accepted accounting principles.

“Unrestricted Assets” shall mean all assets of the Obligated Group not restricted as to use and available to pay debt service on indebtedness of the Obligated Group. References to the amount or value of Unrestricted Assets shall mean such amount or value at the market value thereof with respect to marketable securities, and such amount or value at the cost or appraised value thereof with respect to all other assets.

“Variable Rate Indebtedness” shall mean any portion of Indebtedness the interest rate on which fluctuates subsequent to the time of incurrence.

### **Issuance of Obligations**

Each Member of the Obligated Group is permitted to issue Obligations evidencing (a) Indebtedness, (b) obligations to issuers of Credit Facilities or (c) obligations to counterparties on interest rate exchange agreements, interest rate cap or floor agreements or other similar arrangements or agreements. All Members of the Obligated Group are jointly and severally liable for each Obligation (but the liability of the University is limited as described below). The number and aggregate principal amount of Obligations is not limited (except to the extent described in “Limitations on Issuance of Additional Indebtedness” below).

### **Limitation on Liability of University; Designated Units**

The obligations of the University under the Master Indenture are limited as to payment to Property of Designated Units, except with respect to any obligation that the University has chosen to guaranty. Any actions, payments, covenants, obligations or other things to be done or performed by the University are based on the use of the Property of the Designated Units and not the Property of the University generally. The initial Designated Units are the Hospital of the University of Pennsylvania and the Clinical Practices of the University of Pennsylvania.

### **Conversion to General Obligation Debt**

The University is permitted, without the consent of the owners of the Obligations, to convert all Outstanding Obligations under the Master Indenture to general obligations of the University if, and only if, each Rating Agency then currently rating Obligations confirms that such action will not cause its rating of the Obligations to be lowered. Upon conversion of the Obligations to general obligations of the University, the operational and financial covenants and restrictions in the Master Indenture will be removed, including the covenants described in the following headings of this Appendix E: “Limitations

on Creation of Liens"; "Limitations on Issuance of Additional Indebtedness"; Rate Covenant"; and "Sale, Lease or Other Disposition of Property". In addition, all references to Designated Units in the Master Indenture would be amended to refer to the University as a whole.

### **Security for Obligations**

The Master Trustee has been granted a security interest in the funds and accounts established under the Master Indenture and in the Gross Receipts. The Members of the Obligated Group have covenanted that, during the continuance of an Event of Default, they will deliver to the Master Trustee, in each month, Gross Receipts sufficient to pay (or, with respect to Debt Service Requirements payable less frequently than monthly, to accumulate through equal monthly installments) Debt Service Requirements on the Obligations and other amounts due under the Master Indenture during the following month. All Obligations will be secured on a parity basis, except that a particular Obligation may be secured by a Credit Facility or by a debt service reserve fund or account securing only payment of such Obligation.

### **Additional Obligated Group Members; Additional Designated Units**

Entities of the University may become Members of the Obligated Group, and the University may name additional Designated Units, if, in addition to certain other requirements, (a) (i) an Officer's Certificate of the University demonstrating that the Debt Service Coverage Ratio of the Obligated Group for the most recent period of 12 full consecutive calendar months preceding the proposed date of such Entity becoming a Member of the Obligated Group or such Unit becoming a Designated Unit for which Financial Statements are available would not have been less than 1.10 had the Entity been a Member of the Obligated Group or the Unit a Designated Unit for such twelve-month period; or (ii) a report of a Consultant demonstrating that the forecasted Debt Service Coverage Ratio of the Obligated Group for each of the two financial reporting periods of 12 consecutive calendar months immediately succeeding the date of such Entity becoming a Member of the Obligated Group or such Unit becoming a Designated Unit (A) is not less than 1.50, or (B) is not less than 1.10 and not less than 65% of what it would have been if such Entity were not made a Member of the Obligated Group or such Unit had not been a Designated Unit, or (C) is higher than it would have been if such Entity had not become a Member of the Obligated Group or if such Unit had not become a Designated Unit; provided, however, that if the Debt Service Coverage Ratio of the Obligated Group calculated pursuant to clause (ii) is greater than 1.25, an Officer's Certificate of the University may be substituted for the required Consultant's report.

### **Withdrawal From the Obligated Group; Cessation of Status as a Designated Unit**

No Member of the Obligated Group may withdraw from the Obligated Group and no Unit may be released from status as a Designated Unit unless, in addition to meeting other requirements, (a) an Officer's Certificate of the University demonstrating that the Debt Service Coverage Ratio of the Obligated Group for the most recent financial reporting period of 12 full consecutive calendar months preceding the proposed date of such action for which Financial Statements are available, if such action had actually occurred at the beginning of such period, would not have been less than 1.10; or (b) a report of a Consultant demonstrating that the forecasted Debt Service Coverage Ratio of the Obligated Group for each of the two financial reporting periods of 12 full consecutive calendar months immediately succeeding the date of such action (i) is at least 1.50, or (ii) is less than 1.50 but is at least 1.10 and is not less than 65% of what it would have been if such action had not taken place, or (iii) is higher than it would have been if such action had not take place; provided, however, that if the Debt Service Coverage Ratio of the Obligated Group is greater than 1.25, an Officer's Certificate of the University may be substituted for the required Consultant's report.

The University may not withdraw as a Member of the Obligated Group unless, in addition to meeting the requirements of the preceding paragraph, the Property of the Designated Units has been

conveyed to a separate corporation or corporations and such corporation or corporations have become Members of the Obligated Group.

## **Insurance**

The University on behalf of each Designated Unit and each other Member of the Obligated Group agrees on behalf of itself that it will maintain insurance (including one or more self-insurance programs considered to be adequate by an Insurance Consultant) covering such risks and in such amounts as, in its reasonable judgment, is adequate to protect it and its Property and operations. At least once every five years, the University shall employ an Insurance Consultant to prepare and file with the Master Trustee a report on the adequacy of the insurance maintained by the University on behalf of each Designated Unit and the other Members of the Obligated Group. Within 60 days after the end of each Fiscal Year, the University is required to file with the Master Trustee an Officer's Certificate to the effect that the insurance coverage maintained by the University and the other Members of the Obligated Group complies with the requirements of the Master Indenture.

## **Insurance and Condemnation Proceeds**

Amounts received by any Member of the Obligated Group as insurance proceeds with respect to any casualty loss or as condemnation awards with respect to any Property may be used in such manner as the recipient may determine unless the amount of such proceeds or awards received with respect to any casualty loss or condemnation exceeds 10% of the Book Value of the Property, Plant and Equipment of the Obligated Group, in which case such amounts must be applied (a) (i) in such a way that the Debt Service Coverage Ratio of the Obligated Group for each of the two periods of 12 full consecutive calendar months following the date on which such proceeds or awards are expected to have been fully applied is forecasted to be not less than 1.25; and (ii), if the Debt Service Coverage Ratio of the Obligated Group projected for either of the periods described in clause (i) is less than 1.50, a written report of a Consultant confirming such certification; or (b) a written report of a Consultant stating the Consultant's recommendations, including recommendations as to the use of such proceeds or awards, to cause the Debt Service Coverage Ratio of the Obligated Group for each of the periods described in paragraph (a) above to be not less than 1.25, or, if in the opinion of the Consultant the attainment of such level is impracticable, to the highest practicable level.

## **Limitations on Creation of Liens**

Each Member of the Obligated Group agrees not to create or suffer to be created any Liens upon any of its Property other than Permitted Liens.

## **Limitations on Issuance of Additional Indebtedness**

Members of the Obligated Group are not permitted to issue Indebtedness other than the Initial Notes and Indebtedness permitted under the Master Indenture, including the following:

(a) Permitted Short-Term Indebtedness. Short-Term Indebtedness may be issued in an aggregate principal amount not exceeding 20% of the Total Revenues of the Obligated Group for the most recent period of 12 full consecutive calendar months for which Financial Statements are available, provided that the Obligated Group shall either (i) be free from all such Short-Term Indebtedness, except for an amount equal to 5.0% of Total Revenues of the Obligated Group, for a period of twenty consecutive calendar days in each Fiscal Year or (ii) deliver an Officer's Certificate of the University to the effect that such Short-Term Indebtedness was incurred or continues to exist as a result of a temporary delay in the receipt by any Obligated Group Member or Designated Unit of amounts due from third-party



payors, governmental agencies or grantors and that the outstanding principal amount of Short-Term Indebtedness has been reduced to the minimum amount practicable under the circumstances.

(b) Permitted Long-Term Indebtedness. Long-Term Indebtedness as to which one of the following tests is met:

(i) Maximum Annual Debt Service Requirements of the Obligated Group following issuance of the Long-Term Indebtedness will not exceed 15% of operating expenses of the Obligated Group for the most recent period of 12 full consecutive calendar months preceding the date of issuance of such Long-Term Indebtedness; or

(ii) the principal amount of all Long-Term Indebtedness of the Obligated Group Outstanding immediately following issuance of the Long-Term Indebtedness will not exceed 66-2/3% of Capitalization; or

(iii) for the most recent period of 12 full consecutive calendar months for which Financial Statements are available, the Debt Service Coverage Ratio of the Obligated Group, taking into account the average annual Debt Service Requirements on the Long-Term Indebtedness to be incurred as if that amount had been payable during such period, was not less than 1.25; or

(iv) the forecasted Debt Service Coverage Ratio, taking into account the Long-Term Indebtedness to be incurred, for each of the two Fiscal Years next succeeding the date on which, in the case of Long-Term Indebtedness to be incurred to finance capital improvements (other than a Guaranty), such capital improvements are expected to be placed in operation, or, in the case of Long-Term Indebtedness not financing capital improvements or in the case of a Guaranty, each of the two full Fiscal Years next succeeding the date on which the Long-Term Indebtedness is to be incurred, is forecasted to be at least 1.10; or

(v) (A) for each of the two most recent periods of 12 full consecutive calendar months for which Financial Statements are available, the Debt Service Coverage Ratio of the Obligated Group, taking into account the average annual Debt Service Requirements on the Long-Term Indebtedness to be incurred as if that amount had been payable during each of such periods, was at least 1.00; and (B) a Consultant has determined that the failure by the Obligated Group to attain a Debt Service Coverage Ratio of at least 1.20 in each of such periods was caused by compliance with Governmental Restrictions or changes in public or private third-party reimbursement programs and the Obligated Group has generated Income Available for Debt Service at the highest levels practicable; or

(vi) (A) for each of the two most recent periods of 12 full consecutive calendar months for which Financial Statements are available, the Debt Service Coverage Ratio of the Obligated Group (without taking into account Debt Service Requirements on the Long-Term Indebtedness to be incurred) was at least 1.00; (B) the forecasted Debt Service Coverage ratio, taking into account the Long-Term Indebtedness to be incurred, for each of the two Fiscal Years next succeeding the date on which, in the case of Long-Term Indebtedness to be incurred to finance capital improvements (other than a Guaranty), such capital improvements are expected to be placed in operation, or, in the case of Long-Term Indebtedness not financing capital improvements or in the case of a Guaranty, each of the two full Fiscal Years next succeeding the date on which the Long-Term Indebtedness is to be incurred, is forecasted to be at least 1.00; and (C) a Consultant has determined that the failure of the Obligated Group to attain a Debt Service Coverage Ratio of at least 1.20 for the period described in (A) and the failure to attain a forecasted Debt Service Coverage Ratio of the Obligated Group of at least 1.10 for the period

described in (B) is caused by compliance with Governmental Restrictions or changes in public or private third-party reimbursement programs and the Obligated Group has generated and is expected to generate Income Available for Debt Service at the highest levels practicable.

(c) Completion Indebtedness. Completion Indebtedness may be incurred without limitation.

(d) Refunding Indebtedness. Refunding Indebtedness may be incurred without meeting the tests set forth in (b) above if (i) an Officer's Certificate certifying that the Debt Service Requirements on the Indebtedness proposed to be issued for each Fiscal Year (or, at the option of the University, for each period of 12 consecutive calendar months) is not in excess of 115% of the Debt Service Requirements on the Outstanding Indebtedness being refunded for the same Fiscal Year or 12-month period; or (ii) if the maximum Debt Service Requirements on the Indebtedness proposed to be issued for any Fiscal Year (or, at the option of the University, for any 12 consecutive calendar months) is in excess of 110% of the maximum Debt Service Requirements on the Outstanding Indebtedness being refunded for such Fiscal Year or 12-month period, such evidence as may be required to show that such proposed Indebtedness may be incurred in accordance with the requirements under the heading "Limitations on Issuance of Additional Indebtedness" herein.

(e) Non-Recourse Indebtedness Subordinated Indebtedness. Non-Recourse Indebtedness and Subordinated Indebtedness may be incurred without limitation.

(f) Conversion of Indebtedness. For purposes of the covenant against incurrence of Indebtedness contained under the heading "Limitations on Issuance of Additional Indebtedness" herein, the conversion of Indebtedness from Variable Rate Indebtedness to Indebtedness bearing a fixed interest rate or from one type of Variable Rate Indebtedness to another type of Variable Rate Indebtedness or from Indebtedness bearing a fixed interest rate to Variable Rate Indebtedness pursuant to the terms of the documents providing for the issuance of such Indebtedness shall not be considered to be incurrence of Indebtedness.

## **Rate Covenant**

The Obligated Group covenants to set rates and charges for its facilities, services and products such that the Debt Service Coverage Ratio of the Obligated Group, calculated at the end of each Fiscal Year, will not be less than 1.10. If the required Debt Service Coverage Ratio is not achieved in any Fiscal Year, the Members of the Obligated Group must retain a Consultant to make recommendations to increase the Debt Service Coverage Ratio of the Obligated Group in the following Fiscal Year to the level required or, if in the opinion of the Consultant the attainment of such level is impracticable, to the highest level attainable. The Obligated Group is obligated to implement such recommendations to the extent such recommendations are feasible. So long as the provisions of this paragraph are complied with, failure to achieve the required Debt Service Coverage Ratio is not an Event of Default under the Master Indenture if the cash flow of the Obligated Group is sufficient to pay the total operating expenses of the Obligated Group and to pay the debt service on all Indebtedness of the Obligated Group.

If a Consultant's report is obtained to the effect that Governmental Restrictions have been imposed that make it impossible to achieve the required Debt Service Coverage Ratio, then such coverage requirement shall be reduced to the maximum coverage permitted by such Governmental Restrictions but in no event less than 1.00.

## **Sale, Lease or Other Disposition of Property**

Each Member of the Obligated Group agrees that it will not make Transfers in any Fiscal Year of its Property except for Transfers of one or more of the following types:

(a) Of inventory, supplies and accounts receivable to any Entity, if such Transfer is made in the ordinary course of business.

(b) Of Property, Plant and Equipment, to any Entity if, prior to the sale, lease or other disposition, there is delivered to the Master Trustee an Officer's Certificate stating that, in the judgment of the signer, such Property, Plant and Equipment has become inadequate, obsolete, worn out, unsuitable, unprofitable, undesirable or unnecessary and the sale, lease, removal or other disposition thereof will not impair the structural soundness, efficiency or economic value of the remaining Property, Plant and Equipment; provided, however, that no such Officer's Certificate shall be required to be delivered to the Master Trustee with respect to the Transfer of any item of Property, Plant and Equipment having a Book Value of less than \$500,000 or with respect to any Transfer of Property, Plant and Equipment otherwise permitted under the Master Indenture.

(c) To any Designated Unit or to any Member of the Obligated Group other than the University without limit.

(d) In an amount in any Fiscal Year not exceeding 10% of the Book Value of all Property of the Obligated Group as shown in the Financial Statements of the Obligated Group for the preceding Fiscal Year.

(e) Of Property, to any Entity (i) if a report of a Consultant is delivered to the Master Trustee demonstrating that after taking such Transfer into account, the forecasted Debt Service Coverage Ratio of the Obligated Group for each of the two Fiscal Years next succeeding the date on which such Transfer is expected to occur (A) would be not less than 1.75 (provided, however, that if the Debt Service Coverage Ratio is greater than 2.00, an Officer's Certificate may be substituted for the report of a Consultant), or (B) would be not less than 1.25 and not less than sixty-five percent of what it would have been in the absence of such transfer; or (C) would be higher than in the absence of such Transfer, or (ii) if the University shall unconditionally guarantee a principal amount of Obligations equal to the Book Value of the Property, Plant and Equipment transferred.

(f) Of cash or cash equivalents to any Entity, if prior to such Transfer, an Officer's Certificate of the Obligated Group Member making such Transfer is delivered to the Master Trustee stating that (i) such Transfer will be a loan evidenced in writing, (ii) such loan is for a reasonable term and bears a reasonable interest rate and (iii) such loan is reasonably expected to be repaid in accordance with its terms.

(g) To any Entity provided that the Member of the Obligated Group proposing to make such Transfer shall receive as consideration for such Transfer services or Property equal to the fair market value of the asset so transferred.

(h) To the University (other than to a Designated Unit of the University) if the University (whether or not an Obligated Group Member) shall unconditionally guarantee a principal amount of Obligations equal to the Book Value of the Property transferred.

(i) Any lease.

(j) Any Transfer in connection with a consolidation, merger, sale or conveyance described in the next section.

## **Consolidation, Merger, Sale or Conveyance**

Each Member of the Obligated Group covenants that it will not merge or consolidate with, or sell or convey all or substantially all of its assets to, and the University covenants that it will not sell or convey all or substantially all of the assets of any Designated Unit to, any Entity unless either such Entity is a Designated Unit or a Member of the Obligated Group other than the University or the following requirements are met:

(a) Either it will be the surviving Entity, or the successor Entity (if other than an Member of the Obligated Group) will be an Entity organized and existing under the laws of the United States of America or a state thereof and such Entity shall become a Member of the Obligated Group or a Designated Unit; and

(b) No Member of the Obligated Group including such successor corporation immediately after such merger or consolidation, or such sale or conveyance, would be in default in the performance or observance of any covenant or condition of the Master Indenture and one of the tests for the incurrence of Long-Term Indebtedness would be met for the incurrence of one additional dollar of Long-Term Indebtedness; and

(c) If not all principal of and interest on any Related Bond has been paid, the Master Trustee shall have received an Opinion of Bond Counsel, in form and substance satisfactory to the Master Trustee, to the effect that the consummation of such merger, consolidation, sale or conveyance will not adversely affect the validity of the Related Bond nor cause interest payable on Related Bonds intended to be excludable from gross income for federal income tax purposes to become includable in gross income under the Code; and

(d) There shall be delivered to the Master Trustee an Officer's Certificate to the effect that the unrestricted fund balance or net worth of the Obligated Group following such merger, consolidation, sale or conveyance will not be less than 85% of the unrestricted fund balance or net worth of the Obligated Group prior to such merger, consolidation, sale or conveyance.

Notwithstanding the provisions above, the University may convey all of the Property of any Designated Unit to a separate corporation without complying with the provisions of clauses (b) and (d) above, if such corporation receiving such Property complies with the provisions of clauses (a) and (c) above and if after such conveyance, the unrestricted fund balance or net worth of such corporation is at least equal to 85% of the unrestricted fund balance of the Designated Unit immediately prior to such conveyance.

## **Events of Default**

The following events constitute Events of Default under the Master Indenture:

(a) the Members of the Obligated Group shall fail to make any payment on any Obligation when due, subject to the expiration of any applicable grace period; or

(b) if any Member of the Obligated Group shall fail to observe or perform any covenant or agreement contained in the Master Indenture for a period of 30 days after written notice of such failure, requiring the same to be remedied, shall have been given by the Master Trustee to each of the Members of the Obligated Group, the giving of which notice shall be at the discretion of the Master Trustee unless the Master Trustee is requested in writing to do so by the Holders of at least 25% in aggregate principal amount of all Outstanding Obligations, in which event such notice shall be given; 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 within such 30-day period, no Event of Default shall be deemed to have occurred or to exist if, and so long as, the defaulting Member of the Obligated Group shall commence such observance or performance within such 30-day period and shall diligently and continuously prosecute the same to completion; or

(c) An event of default shall occur under a Related Bond Indenture or upon a Related Bond; or

(d) (i) any Member of the Obligated Group shall default in the payment of any Indebtedness (other than Obligations issued and Outstanding under the Master Indenture) with a principal amount in excess of \$1,000,000, and any period of grace with respect thereto shall have expired, or (ii) an event of default as defined in any mortgage, indenture or instrument under which there may be issued, or by which there may be secured or evidenced, any Indebtedness with a principal amount in excess of \$1,000,000, resulting in acceleration of the Indebtedness; provided, however, that such default shall not constitute an Event of Default if within 30 days (or within the time allowed for service of a responsive pleading in any proceeding to enforce payment of the Indebtedness under the laws governing such proceeding) any Member of the Obligated Group in good faith shall commence proceedings to contest the obligation to pay or the existence of such Indebtedness; or

(e) (i) the University shall default in the payment of any University Debt (other than Obligations issued and Outstanding under the Master Indenture) with a principal amount in excess of \$1,000,000, and any period of grace with respect thereto shall have expired, or (ii) an event of default as defined in any mortgage, indenture or instrument under which there may be issued, or by which there may be secured or evidenced, any University Debt with a principal amount in excess of \$1,000,000, resulting in acceleration of the University Debt; provided, however, that such default shall not constitute an Event of Default if within 30 days (or within the time allowed for service of a responsive pleading in any proceeding to enforce payment of the University Debt under the laws governing such proceeding) the University in good faith shall commence proceedings to contest the obligation to pay or the existence of such University Debt; or

(f) the entry of a decree or order by a court having jurisdiction of an order for relief against any Member of the Obligated Group, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of such Member under the United States Bankruptcy Code or any other similar applicable federal or state law, or appointing a receiver, liquidator, custodian, assignee, or sequestrator (or other similar official) of such Member or of any substantial part of its Property or any substantial part of the University Property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order unstayed and in effect for a period of 90 consecutive days; or

(g) the institution by any Member of the Obligated Group of proceedings for an order for relief, or the consent by it to an order for relief against it, or the filing by it of a petition to answer or consent seeking reorganization, arrangement, adjustment, compensation or relief under the United States Bankruptcy Code or any other similar applicable federal or state law, or the consent by it to the filing of any such petition or to the appointment of a receiver, liquidator, custodian, assignee, trustee or sequestrator (or other similar official) of such Member of the Obligated Group or of any substantial part of its Property or of any substantial part of the University Property, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due.

## **Acceleration of Obligations**

Upon the occurrence of an Event of Default, the Master Trustee may, by notice in writing to the Members of the Obligated Group declare the principal of all (but not less than all) Outstanding Obligations to be due and payable immediately. The Master Trustee is required to make such declaration (a) upon the occurrence of an Event of Default described in paragraph (a) under “Events of Default” above, (b) upon the occurrence of all Event of Default described in paragraph (c) of “Events of Default” above if the Related Bond Indenture or Related Bonds permit the Holders of such Related Bonds to declare (or to request the Master Trustee to declare) such Related Bonds to be immediately due and payable and if the Master Trustee is requested to make such a declaration by the Holders of not less than 25% in aggregate principal amount of such Obligations then Outstanding or such greater percentage as may be required under the Related Bond Indenture or Related Bonds, or (c) if the Master Trustee is requested to make such a declaration by the Holders of not less than 25% in aggregate principal amount of all Outstanding Obligations.

If, at any time after the principal of all Outstanding Obligations shall have been so declared due and payable but before any judgment or decree for the payment of the moneys due shall have been obtained or entered (a) the Master Trustee receives payment of a sum sufficient to pay all matured installments of interest upon all Outstanding Obligations and the principal and premium, if any, of all such Outstanding Obligations that shall have become due otherwise than by acceleration (with interest on thereon to the extent permitted by law) and any other amounts required to be paid pursuant to such Obligations, and to pay the expenses and fees of the Master Trustee; and (b) all Events of Default, other than the nonpayment of principal of and accrued interest on Outstanding Obligations that shall have become due by acceleration, shall have been remedied, then the Master Trustee shall, if requested by the Holders of 25% in aggregate principal amount of all Obligations then Outstanding, waive all Events of Default and rescind and annul such declaration and its consequences.

## **Application of Moneys Collected**

Any amounts collected by the Master Trustee following an Event of Default, and, except as otherwise provided in the Master Indenture, any amounts held in funds established by the Master Trustee pursuant to the Master Indenture, shall be applied first to the payment of costs and expenses of collection, and then for the equal and ratable benefit of the Holders of Obligations as follows:

FIRST: To the payment to the Entities entitled thereto of all installments of interest then due on any Obligations in the order of the maturity of such installments and, if the amount available shall not be sufficient to pay in full any installment or installments maturing on the same date, then to the payment thereof ratably, according to the amounts due on such date, without any discrimination or preference;

SECOND: To the payment to the Entities entitled thereto of the unpaid principal installments which shall have become due, whether at maturity or by call for redemption, and on any Obligations in order of their due dates and, if the amounts available shall not be sufficient to pay in full all principal installments due on the same date, then to the payment thereof ratably, according to the amounts of principal installments due on such date, without any discrimination or preference; and

THIRD: To the payment to the Entities entitled thereto of any additional amounts due and unpaid in respect of Obligations, in the order of the due dates of such amounts, and if the moneys available therefor shall not be sufficient to pay in full any such additional amounts due on the same date, then to the payment thereof ratably, according to the amounts due thereon, without any discrimination or preference;

provided that for the purpose of determining the amount of unpaid principal in respect of any Obligations, there shall be deducted the amount, if any, which has been realized by the Holder by exercise of its rights as a secured party with respect to any Permitted Liens or is on deposit in any fund established pursuant to any Related Financing Documents for such Obligations (other than amounts consisting of payments of principal and interest previously made and credited against the payments due under such Obligations).

Any amounts remaining after application as above provided, shall be paid to the University, its successors or assigns, to whomever may be lawfully entitled to receive the same, or as a court of competent jurisdiction shall direct.

### **Actions by Holders**

The Holders of a majority in aggregate principal amount of Obligations Outstanding may direct the time, method, and place of conducting any proceeding for any remedy available to the Master Trustee, or exercising any trust or power conferred on the Master Trustee. The Master Trustee has the right to decline to follow any such direction if the Master Trustee, being advised by Counsel, determines that the action so directed may not lawfully be taken, or if the Master Trustee in good faith shall determine that the proceedings so directed would be illegal or involve it in personal liability.

No Holder of an Obligation may institute any suit, action or proceeding in equity or at law upon, under or with respect to the Master Indenture unless the Holders of at least 25% in aggregate principal amount of Obligations then Outstanding shall have made written request to the Master Trustee to institute such action, suit or proceeding and shall have offered to the Master Trustee such reasonable indemnity as it may require against the costs, expenses and liabilities to be incurred, and the Master Trustee, for 30 days after its receipt of such notice, request and offer of indemnity, shall have neglected or refused to institute any such action, suit or proceeding and no direction inconsistent with such written request shall have been given to the Master Trustee pursuant to the preceding paragraph.

### **Defeasance**

If the Master Trustee receives: (a) an amount which is (i) in the form of cash or Defeasance Obligations, and (ii) in a principal amount sufficient, together with the interest thereon and any funds on deposit under the Master Indenture and available for such purpose, to provide for the payment of the principal of and premium, if any, and interest on all Outstanding Obligations to and including the maturity date or prior redemption or prepayment date thereof; (b) irrevocable instructions to redeem all Obligations to be redeemed prior to maturity and to notify the Holders of each such redemption; and (c) an amount sufficient to pay or provide for the payment of all other sums payable under the Master Indenture by the Members of the Obligated Group or any thereof, then the Master Indenture shall cease to be of further effect.

In like manner, a Member of the Obligated Group may provide for the payment of any particular Obligation (or of a portion thereof) at or prior to maturity and the Obligation (or portion thereof) so provided for shall thereupon cease to be Outstanding under the Master Indenture.

In lieu of the foregoing, the issuer of any particular Obligation may deliver to the Holder thereof the amount required under the Related Financing Documents to provide for the payment of the principal, premium, if any, and interest due or to become due in respect of such Obligation and such Obligation shall no longer be deemed Outstanding under the Master Indenture.

## **Amendments and Supplements to Master Indenture**

Each Member of the Obligated Group, when authorized by a resolution of its Governing Body, and the Master Trustee may from time to time and at any time enter into a Supplemental Indenture for one or more of the following purposes:

- (a) to provide for the issuance of any Obligations under the Master Indenture;
- (b) to evidence the addition of a Member of the Obligated Group or a Designated Unit or the succession of another Entity to any Member of the Obligated Group or a Designated Unit, or successive successions, and the assumption by the new Member of the Obligated Group, new Designated Unit or successor Entity of the covenants, agreements and obligations of a Member of the Obligated Group or a Designated Unit, as applicable, under the Master Indenture;
- (c) to add to the covenants of any Member of the Obligated Group such further covenants, restrictions or conditions as its Governing Body and the Master Trustee shall consider to be for the protection of the Holders of Obligations, and to make the occurrence, or the occurrence and continuance, of a default in any of such additional covenants, restrictions or conditions an Event of Default permitting the enforcement of all or any of the several remedies provided in the Master Indenture; provided, however, that in respect of any such additional covenant, restriction or condition, such Supplemental Indenture may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such default or may limit the remedies available to the Master Trustee upon such default;
- (d) to cure any ambiguity or to correct or supplement any provision contained in the Master Indenture or in any Supplemental Indenture which may be defective or inconsistent with any other provision contained in the Master Indenture or in any Supplemental Indenture, or to make such other provisions in regard to matters or questions arising under the Master Indenture or any Supplemental Indenture as shall not impair the security of the Master Indenture or adversely affect the interests of the Holders of any particular Obligations or series of Obligations issued thereunder;
- (e) to modify or supplement the Master Indenture in such manner as may be necessary or appropriate to qualify the Master Indenture under the Trust Indenture Act of 1939 as then amended, or under any similar federal statute hereafter enacted, including provisions whereby the Master Trustee accepts such powers, duties, conditions and restrictions thereunder and each Member of the Obligated Group undertakes such covenants, conditions or restrictions additional to those contained in the Master Indenture as would be necessary or appropriate so to qualify the Master Indenture;
- (f) to provide for the establishment of funds and accounts under the Master Indenture and administration thereof and transfers of moneys between any such funds and accounts, provided that, except as otherwise provided in the Master Indenture or Supplemental Indenture, all such funds and accounts shall be established for the equal and ratable benefit of the Holders of all Outstanding Obligations;
- (g) to reflect a change in applicable law;
- (h) to modify, amend, change or remove any covenant, agreement, term or provision of the Master Indenture other than a modification of the type hereinafter described requiring the unanimous written consent of the Holders; provided that either (A) if at the time of the proposed amendment the Obligations or any series of Related Bonds are rated by a Rating Agency, written notice of the substance of such proposed amendment is given to such Rating Agency by the University not fewer than thirty days prior to the date such amendment is to take effect, and the University provides evidence satisfactory to the



Master Trustee that the ratings on the Obligations or any series of Related Bonds will not be lowered or withdrawn by such Rating Agency as a result of such proposed amendment; or (B) a Consultant's report is delivered to the Master Trustee prior to the date such amendment is to take effect, to the effect that the proposed amendment is consistent with then current industry standards for comparable institutions and demonstrating either that (1) the Projected Debt Service Coverage Ratio of the Obligated Group for the full Fiscal Year immediately after the effective date of such proposed amendment is not less than 1.20, assuming the maximum implementation (or such lower implementation certified to the Master Trustee by the University as being a reasonable basis for assumption) by the Obligated Group of the proposed amendment; or (2) if the proposed amendment is to a provision of the Master Indenture that contains a quantitative restriction or covenant, the average of the Projected Debt Service Coverage Ratio of the Obligated Group for the two full Fiscal Years immediately after the effective date of such proposed amendment or supplement will be greater than the average of the Debt Service Coverage Ratio of the Obligated Group for such period had the proposed amendment not been implemented assuming the maximum implementation (or such lower implementation certified to the Master Trustee by the University as being a reasonable basis for assumption) of the proposed amendment; or (3) (a) the average of the Projected Debt Service Coverage Ratios of the Obligated Group for the two full Fiscal Years immediately after the effective date of such proposed amendment will not be less than 1.10, and (b) the average of the Projected Debt Service Coverage Ratios of the Obligated Group for the two full Fiscal Years immediately after the effective date of such proposed amendment will not be more than thirty-five percent lower than the average of the Debt Service Coverage Ratios of the Obligated Group had the proposed amendment not been implemented, assuming with respect to the projections made under (a) and (b) the maximum implementation (or such lower implementation certified to the Master Trustee by the University as being a reasonable basis for assumption) of the proposed amendment if the proposed amendment is to a provision of the Master Indenture that contains a quantitative restriction or covenant.

With the consent of the Holders of not less than a majority in aggregate principal amount of Obligations then Outstanding, each Member of the Obligated Group, when authorized by its Governing Body, and the Master Trustee, may from time to time and at any time enter into a Supplemental Indenture for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Master Indenture or of any Supplemental Indenture or of modifying in any manner the rights of the Holders of Obligations; provided, however, that (i) without the consent of the Holders of all Obligations whose Obligations are proposed to be modified, no such Supplemental Indenture shall effect a change in the times, amounts or currency of payment of the principal of, premium, if any, or interest on any Obligation or a reduction in the principal amount or redemption price of any Obligation or the rate of interest thereon or permit the preference or priority of any Obligation over any other Obligation, and (ii) without the consent of the Holders of all Obligations then Outstanding, no such Supplemental Indenture shall reduce the aforesaid percentage or affected class of Obligations, the Holders of which are required to consent to any such Supplemental Indenture.

Certain supplemental master trust indentures contain certain covenants that are for the benefit of bond insurers and letter of credit banks and are not for the benefit of the Bondholders. These covenants may only be enforced by the respective bond insurers and letter of credit banks.

### **Sixteenth Supplemental Master Trust Indenture**

In connection with the issuance of the 2015 Bonds, the Obligated Group and the Master Trustee will enter into a Sixteenth Supplemental Master Trust Indenture to the Master Indenture authorizing the issuance of the 2015 Master Note. The 2015 Master Note to be issued by the Obligated Group is numbered, bears interest at such times and at such rates, and matures on such dates as set forth in the Sixteenth Supplemental Master Trust Indenture.

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## **APPENDIX F**

### **PROPOSED FORM OF OPINION OF CO-BOND COUNSEL**

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## **PROPOSED FORM OF OPINION OF CO-BOND COUNSEL**

May 19, 2015

Re: \$357,565,000 Pennsylvania Higher Educational Facilities Authority,  
University of Pennsylvania Health System Revenue Bonds, Series of 2015

Ladies and Gentlemen:

We have acted as co-bond counsel to the Pennsylvania Higher Educational Facilities Authority (the “Authority”) in connection with the issuance of \$357,565,000 aggregate principal amount of its University of Pennsylvania Health System Revenue Bonds, Series of 2015 (the “Bonds”). The Bonds are issued under and pursuant to the laws of the Commonwealth of Pennsylvania, including the Pennsylvania Higher Educational Facilities Authority Act of 1967, the Act of December 6, 1967, P.L. 678, as amended and supplemented (the “Act”) and a Trust Indenture dated as of May 1, 1994, as previously amended and supplemented, and as further amended and supplemented by a Thirteenth Supplemental Trust Indenture dated as of May 1, 2015 (collectively, the “Indenture”), between the Authority and U.S. Bank National Association, as successor trustee (the “Trustee”).

The Bonds are being issued at the request of The Trustees of the University of Pennsylvania (the “University”), Presbyterian Medical Center of the University of Pennsylvania Health System d/b/a Penn Presbyterian Medical Center (“PPMC”), The Chester County Hospital and Health System (“TCHHS”), Pennsylvania Hospital of the University of Pennsylvania Health System (“Pennsylvania Hospital” and, together with the University, PPMC and TCHHS, the “Borrowers”) to provide funds which will be used to finance the costs of a project (the “Project”) consisting of: (a) the refunding of all or a portion of (i) the Authority’s University of Pennsylvania Health System Revenue Bonds, Series A of 2005, (ii) the Authority’s University of Pennsylvania Health System Revenue Bonds, Series B of 2005, and (iii) the Authority’s University of Pennsylvania Health System Revenue Bonds, Series B of 2008; (b) the reimbursement for the costs of various University of Pennsylvania Health System (the “Health System”) capital projects, including costs incurred in connection with the relocation and expansion of the Health System’s trauma center at the Hospital of the University of Pennsylvania (“HUP”) to a new PPMC Advanced Care Hospital Pavilion, the extension of the Perelman Center for Advanced Medicine South Pavilion, and the demolition of Penn Tower; and (c) the payment of certain costs of issuance in respect of the Bonds.

The proceeds of the Bonds are being loaned to the Borrowers pursuant to a Loan Agreement dated as of May 1, 1994, between the Authority and the University, as previously amended and supplemented, and as further amended and supplemented by a Twelfth Supplemental Loan Agreement dated as of May 1, 2015 among the Authority and the Borrowers (collectively, the “Loan Agreement”). Under the Loan Agreement, the Borrowers are obligated to make payments in amounts sufficient to pay, among other things, the principal or redemption price of and interest on the Bonds.

The Bonds are secured by the Indenture and by an assignment to the Trustee of all of the Authority’s right, title and interest in and to the Loan Agreement (except for the Authority’s rights thereunder to receive payments of administrative fees and expenses and indemnification against liability).

Each Borrower has represented in the Loan Agreement that it is an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the “Code”). Each Borrower has covenanted that, throughout the term of the Loan Agreement, it will not carry on or permit to be carried

on upon its Facilities (as defined in the Loan Agreement) any trade or business, nor will it take any action or permit any action to be taken on its behalf or cause or permit any circumstance within its control to arise or continue if the conduct of such trade or business or such other action or circumstance would cause the interest paid by the Authority on the Bonds to be subject to federal income tax in the hands of the holders thereof. Each Borrower has further covenanted that it will neither make nor instruct the Trustee to make any investment or other use of the proceeds of the Bonds, nor take or omit to take any other action, which would cause the Bonds to be arbitrage bonds under Section 148(a) of the Code.

Under the Indenture and the Loan Agreement, respectively, the Authority and the Borrowers have covenanted that they will comply with the requirements of Section 148 of the Code pertaining to arbitrage bonds. In addition, an officer of the Authority responsible for issuing the Bonds and the Borrowers have executed a certificate stating the reasonable expectations of the Authority and the Borrowers on the date of issue of the Bonds as to future events that are material for the purposes of such requirements of the Code.

In our capacity as co-bond counsel, we have examined such documents, records of the Authority and other instruments as we deemed necessary to enable us to express the opinions set forth below, including original counterparts or certified copies of the Indenture, the Loan Agreement and the other documents listed in the closing memorandum in respect of the Bonds filed with the Trustee. We have assumed that the Authority and the Borrowers will comply with their respective covenants in the Indenture and the Loan Agreement relating to the tax-exempt status of the Bonds. We have also examined an executed Bond, authenticated by the Trustee, and have assumed that all other Bonds have been similarly executed and authenticated. We have also assumed that the Indenture has been duly authorized, executed and delivered by the Trustee, and that the Loan Agreement has been duly authorized, executed and delivered by the Borrowers.

Based on the foregoing, it is our opinion that:

1. The Authority is a body corporate and politic validly existing under the laws of the Commonwealth of Pennsylvania, with full power and authority to undertake the Project, to execute and deliver the Indenture and the Loan Agreement and to issue and sell the Bonds.

2. The Indenture and the Loan Agreement have been duly authorized, executed and delivered by the Authority and the covenants of the Authority therein are valid and binding obligations of the Authority enforceable in accordance with their terms, except as the rights created thereunder and the enforcement thereof may be limited by bankruptcy, insolvency or other similar laws or equitable principles affecting the enforcement of creditors' rights generally.

3. The issuance and sale of the Bonds have been duly authorized by the Authority. Based on the assumption as to execution and authentication set forth above, the Bonds have been duly executed and delivered by the Authority and authenticated by the Trustee, are valid and binding obligations of the Authority and are entitled to the benefit and security of the Indenture, except as the rights created thereunder and the enforcement thereof may be limited as indicated in paragraph 2.

4. Under the laws of the Commonwealth of Pennsylvania as presently enacted and construed, the Bonds are exempt from personal property taxes in Pennsylvania, and interest on the Bonds is exempt from Pennsylvania personal income tax and corporate net income tax.

5. Interest on the Bonds (including original issue discount) is excludable from gross income for purposes of federal income tax under existing laws as enacted and construed on the date of initial delivery of the Bonds, assuming the accuracy of the certifications of the Authority and the Borrowers and continuing compliance by the Authority and the Borrowers with the requirements of the Code. Interest on

the Bonds is not an item of tax preference for purposes of either individual or corporate federal alternative minimum tax (“AMT”); however, interest on the Bonds held by a corporation (other than an S corporation, regulated investment company, or real estate investment trust) may be indirectly subject to federal AMT because of its inclusion in the adjusted current earnings of a corporate holder. We express no opinion regarding other federal tax consequences relating to ownership or disposition of, or the accrual or receipt of interest on, the Bonds.

We express no opinion herein with respect to the adequacy of the security for the Bonds or the sources of payment for the Bonds or with respect to the accuracy or completeness of the preliminary or final Official Statement prepared in respect of the Bonds or as to any other matter not set forth herein.

We call your attention to the fact that the Bonds are limited obligations of the Authority, payable only out of certain revenues of the Authority and certain other moneys available therefor as provided in the Indenture, and that the Bonds do not pledge the credit or taxing power of the Commonwealth of Pennsylvania or any political subdivision, agency or instrumentality thereof. The Authority has no taxing power.

Very truly yours,

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