

**Partners HealthCare
System, Inc. and Affiliates**
Consolidated Financial Statements
September 30, 2019 and 2018

Partners HealthCare System, Inc. and Affiliates

Index

September 30, 2019 and 2018

	Page(s)
Report of Independent Auditors	1–2
Consolidated Financial Statements	
Consolidated Balance Sheets	3
Consolidated Statements of Operations	4
Consolidated Statements of Changes in Net Assets	5
Consolidated Statements of Cash Flows	6
Notes to Consolidated Financial Statements	7–52



Report of Independent Auditors

To the Board of Directors of
Partners HealthCare System, Inc.

We have audited the accompanying consolidated financial statements of Partners HealthCare System, Inc. and its affiliates (Partners HealthCare), which comprise the consolidated balance sheets as of September 30, 2019 and 2018, and the related consolidated statements of operations, of changes in net assets and of cash flows for the years then ended.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

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

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



Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Partners HealthCare System, Inc. and its affiliates as of September 30, 2019 and 2018, and the results of their operations, changes in net assets and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2 to the consolidated financial statements, Partners HealthCare System, Inc. changed the manner in which it presents net assets and reports certain aspects of its financial statements as a not-for-profit entity, and the manner in which it presents the recognition of and measurement of financial assets in 2019. Our opinion is not modified with respect to this matter.

Princeton House Cooper LLP

Boston, Massachusetts

December 6, 2019

Partners HealthCare System, Inc. and Affiliates
Consolidated Balance Sheets
September 30, 2019 and 2018

<i>(in thousands of dollars)</i>	2019	2018
Assets		
Current assets		
Cash and equivalents	\$ 283,807	\$ 398,413
Investments	2,791,502	1,942,117
Current portion of investments limited as to use	2,235,171	1,465,354
Patient accounts receivable, net	1,129,594	1,078,086
Research grants receivable	136,557	154,449
Other current assets	556,954	517,812
Receivable for settlements with third-party payers	116,791	115,561
Total current assets	7,250,376	5,671,792
Investments limited as to use, less current portion	4,498,716	3,716,162
Long-term investments	1,997,617	1,628,972
Net pledges and contributions receivable, less current portion	284,924	246,951
Property and equipment, net	6,557,206	6,401,710
Other assets	643,534	637,944
Total assets	\$ 21,232,373	\$ 18,303,531
Liabilities and Net Assets		
Current liabilities		
Current portion of long-term obligations	\$ 455,165	\$ 459,390
Accounts payable and accrued expenses	790,820	696,890
Accrued medical claims and related expenses	57,550	64,398
Accrued employee compensation and benefits	932,870	854,375
Accrual for settlements with third-party payers	75,287	68,711
Unexpended funds on research grants	262,017	284,178
Total current liabilities	2,573,709	2,427,942
Accrued professional liability	542,136	512,516
Accrued employee benefits	2,410,974	958,275
Interest rate swaps liability	510,579	254,295
Accrued other	187,060	231,954
Long-term obligations, less current portion	5,260,196	4,945,968
Total liabilities	11,484,654	9,330,950
Commitments and contingencies		
Net assets		
Unrestricted	7,358,335	7,073,335
Donor restricted	2,389,384	1,899,246
Total net assets	9,747,719	8,972,581
Total liabilities and net assets	\$ 21,232,373	\$ 18,303,531

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates
Consolidated Statements of Operations
Years Ended September 30, 2019 and 2018

<i>(in thousands of dollars)</i>	2019	2018
Operating revenues		
Net patient service revenue	\$ 10,145,150	\$ 9,239,118
Premium revenue	791,356	1,420,489
Direct academic and research revenue	1,594,085	1,485,467
Indirect academic and research revenue	463,247	420,559
Other revenue	957,499	741,636
Total operating revenues	13,951,337	13,307,269
Operating expenses		
Employee compensation and benefit expenses	7,110,009	6,635,581
Supplies and other expenses	3,339,331	3,027,832
Medical claims and related expenses	556,110	993,870
Direct academic and research expenses	1,594,085	1,485,467
Depreciation and amortization expenses	686,374	674,030
Interest expense	180,922	180,590
Total operating expenses	13,466,831	12,997,370
Income from operations	484,506	309,899
Nonoperating gains (expenses)		
Income from investments	182,829	198,118
Change in fair value of interest rate swaps	(271,527)	131,182
Other nonoperating income (expenses)	(123,911)	(61,321)
Academic and research gifts, net of expenses	214,267	91,415
Contribution income - affiliates	-	157,312
Total nonoperating gains, net	1,658	516,706
Excess of revenues over expenses	486,164	826,605
Other changes in net assets		
Change in net unrealized appreciation on marketable investments	-	(90,243)
Funds utilized for property and equipment	111,641	39,052
Change in funded status of defined benefit plans	(1,415,364)	399,318
Other changes in net assets	2,478	9,433
Cumulative effect of accounting change	1,100,081	-
Increase in unrestricted net assets	\$ 285,000	\$ 1,184,165

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates
Consolidated Statements of Changes in Net Assets
Years Ended September 30, 2019 and 2018

<i>(in thousands of dollars)</i>	Unrestricted	Donor Restricted	Total
Net assets at September 30, 2017	<u>\$ 5,889,170</u>	<u>\$ 1,574,939</u>	<u>\$ 7,464,109</u>
Increases (decreases)			
Income from operations	309,899	-	309,899
Income from investments	198,118	35,691	233,809
Change in fair value of interest rate swaps	131,182	-	131,182
Other nonoperating income (expenses)	(61,321)	143,387	82,066
Academic and research gifts, net of expenses	91,415	-	91,415
Contribution income - affiliates	157,312	166,281	323,593
Change in net unrealized appreciation on marketable investments	(90,243)	8,449	(81,794)
Funds utilized for property and equipment	39,052	(18,598)	20,454
Change in funded status of defined benefit plans	399,318	-	399,318
Other changes in net assets	9,433	(10,903)	(1,470)
Change in net assets	<u>1,184,165</u>	<u>324,307</u>	<u>1,508,472</u>
Net assets at September 30, 2018	7,073,335	1,899,246	8,972,581
Increases (decreases)			
Income from operations	484,506	-	484,506
Income (loss) from investments	182,829	(5,536)	177,293
Change in fair value of interest rate swaps	(271,527)	-	(271,527)
Other nonoperating income (expenses)	(123,911)	379,892	255,981
Academic and research gifts, net of expenses	214,267	-	214,267
Funds utilized for property and equipment	111,641	(83,281)	28,360
Change in funded status of defined benefit plans	(1,415,364)	-	(1,415,364)
Other changes in net assets	2,478	1,880	4,358
Cumulative effect of accounting change	1,100,081	197,183	1,297,264
Change in net assets	<u>285,000</u>	<u>490,138</u>	<u>775,138</u>
Net assets at September 30, 2019	<u>\$ 7,358,335</u>	<u>\$ 2,389,384</u>	<u>\$ 9,747,719</u>

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates
Consolidated Statements of Cash Flows
Years Ended September 30, 2019 and 2018

<i>(in thousands of dollars)</i>	2019	2018
Cash flows from operating activities		
Change in net assets	\$ 775,138	\$ 1,508,472
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Contribution income - affiliates	-	(323,593)
Change in funded status of defined benefit plans	1,415,364	(399,318)
Loss on refunding of debt	836	50,638
Change in fair value of interest rate swaps	271,527	(130,115)
Depreciation and amortization	686,374	674,030
Provision for bad debts	-	165,861
Amortization of bond discount, premium and issuance costs	(10,698)	(9,163)
(Gain) loss on disposal of property	(129)	104
Net realized and change in unrealized appreciation on investments	(381,166)	(270,254)
Cumulative effect of accounting change	(1,297,264)	-
Restricted contributions and investment income	(303,785)	(106,734)
Cash premium upon issuance of bonds	-	140,222
Increases (decreases) in cash resulting from a change in		
Patient accounts receivable	(51,508)	(238,003)
Other assets	(41,960)	(83,911)
Accounts payable and other accrued expenses	136,895	42,430
Accrued medical claims and related expenses	(6,848)	(131,639)
Settlements with third-party payers	(1,887)	9,923
Net cash provided by operating activities	<u>1,190,889</u>	<u>898,950</u>
Cash flows from investing activities		
Purchases of property and equipment	(837,584)	(647,470)
Proceeds from sale of property	410	69
Purchase of investments	(3,653,436)	(3,630,869)
Proceeds from sales of investments	2,561,465	2,891,874
Cash acquired through affiliations, net	-	5,955
Net cash used for investing activities	<u>(1,929,145)</u>	<u>(1,380,441)</u>
Cash flows from financing activities		
Borrowings under line of credit	-	52,848
Repayments under line of credit	(52,848)	-
Payments on long-term obligations	(81,071)	(76,740)
Proceeds from long-term obligations, net of financing costs	559,238	1,350,741
Deposits into refunding trusts	(105,454)	(1,292,796)
Restricted contributions and investment income	303,785	106,734
Net cash provided by financing activities	<u>623,650</u>	<u>140,787</u>
Net decrease in cash and equivalents	(114,606)	(340,704)
Cash and equivalents		
Beginning of year	<u>398,413</u>	<u>739,117</u>
End of year	<u>\$ 283,807</u>	<u>\$ 398,413</u>

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

1. Organization and Community Benefit Commitments

Partners HealthCare System, Inc. (PHS) is the sole member of The Massachusetts General Hospital (MGH), Brigham Health, Inc. (BH), NSMC HealthCare, Inc. (NSMC), Newton-Wellesley Health Care System, Inc. (NWHCS), Foundation of the Massachusetts Eye and Ear Infirmary, Inc. (MEEI), Partners Continuing Care, Inc. (PCC), Partners HealthCare International, LLC (PHI) and Partners HealthCare Insurance Holding Company, LLC (PHIHC) which is the sole corporate member of AllWays Health Partners, Inc. (formerly known as Neighborhood Health Plan, Incorporated). The two physicians who serve as the President and Chief Executive Officer of PHS (PHS CEO) and the Chief Clinical Officer of PHS are the members of Partners Community Physicians Organization, Inc. (PCPO). PHS, together with all of its affiliates, is referred to as "Partners HealthCare."

Partners HealthCare operates academic medical centers, community acute care hospitals, facilities that provide both inpatient and outpatient mental health services, urgent care centers, rehabilitation medicine and long-term care services, physician organizations, a home health agency, nursing homes and a graduate level program for health professions. Partners HealthCare provides services to patients primarily from the Greater Boston area as well as New England and beyond. In addition, Partners HealthCare is a nonuniversity-based non-profit private medical research enterprise and is a principal teaching affiliate of the medical and dental schools of Harvard University. Partners HealthCare operates a licensed, not-for-profit managed care organization and a licensed, for-profit insurance company (collectively referred to as AllWays Health) that provide health insurance products and administrative services to the Massachusetts Medicaid program (MassHealth), ConnectorCare (a state subsidized program for adults who meet income and immigration guidelines) and commercial populations.

Community Benefit

Partners HealthCare's community benefit programs include working with community residents and organizations to make measurable, sustainable improvements in the health status of underserved populations. Partners HealthCare's hospitals and licensed affiliated health centers partner with the community to support low-income, vulnerable families to overcome barriers to health and wellbeing. In addition, Partners HealthCare supports initiatives related to equity, social determinants of health and work force development.

The Massachusetts Attorney General's Community Benefits Guidelines direct non-profit acute care hospitals and health maintenance organizations to prepare annual reports documenting the status and level of their community benefit programs and initiatives. These annual reports serve the important purpose of providing the public with access to useful information about these programs and initiatives. Partners HealthCare files its report annually with the Massachusetts Attorney General. The report summarizes community benefit activities on a system-wide basis. In addition, each of the acute care hospitals within Partners HealthCare has a community benefit planning and service delivery structure and files separate, annual community benefit reports. AllWays Health also files a community benefit report annually.

The New Hampshire Attorney General's Community Benefits Reporting Guide requires hospitals and healthcare charitable trusts to develop a plan and submit a report on their community activities. Wentworth-Douglass Hospital (Wentworth-Douglass) and Wentworth-Douglass Physician Corporation annually file a report with the New Hampshire Office of the Attorney General.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Charity Care

Partners HealthCare provides care to all emergent patients regardless of their ability to pay. The cost of providing that care is reflected in the consolidated statements of operations. The cost related to those patients for which Partners HealthCare receives either partial or no reimbursement for healthcare services provided is summarized below.

State Programs

Massachusetts

Massachusetts acute care hospitals are partially reimbursed for charity care services through the statewide Health Safety Net Trust Fund (HSN) established under Massachusetts law. A portion of the funding for the HSN is paid by an assessment on acute care hospitals' charges for private sector payers. The statewide assessment was \$165,308 in both 2019 and 2018 and the assessment expense on Partners HealthCare's acute care hospitals was \$59,918 and \$58,794 in 2019 and 2018, respectively.

Acute care hospitals are reimbursed for charity care based on claims for eligible patients and services that are submitted to and adjudicated by the HSN. Payments are based on Medicare rates and payment policies. The HSN was under-funded by approximately \$61,461 and \$14,421 in 2019 and 2018, respectively. This shortfall is allocated to acute care hospitals based on their share of total statewide patient care costs with approximately \$20,564 and \$3,686 in 2019 and 2018, respectively, allocated to Partners HealthCare's acute care hospitals. Each hospital's share of the overall state shortfall cannot exceed its total charity care reimbursement. Hospitals with a high proportion of charity care and government funding receive more favorable reimbursement, including limiting their shortfall allocation to no more than 15% of their payments for charity care. In aggregate, Partners HealthCare's acute care hospitals received charity care funding covering 60% and 72% of the estimated cost of charity care provided in 2019 and 2018, respectively.

The Commonwealth of Massachusetts (the Commonwealth) levies an additional assessment on hospitals that is redistributed to the hospitals based on pay-for-performance criteria. The total assessment was \$257,500 in both 2019 and 2018 and the assessment expense on Partners HealthCare's hospitals was \$93,053 and \$93,041 in 2019 and 2018, respectively. The total amount redistributed to hospitals was \$265,000 in both 2019 and 2018 of which Partners HealthCare's hospitals received \$56,496 and \$61,734 in 2019 and 2018, respectively. Additionally, there is a separate assessment for Partners HealthCare's post-acute hospitals which totaled \$6,912 and \$7,482 in 2019 and 2018, respectively.

New Hampshire

The State of New Hampshire (New Hampshire) imposes a Medicaid Enhancement Tax (MET) on hospital net patient service revenue. For both of New Hampshire's fiscal years ended June 30, 2019 and 2018, the MET imposed was 5.4%. The amount of MET incurred by Wentworth-Douglass was \$18,825 and \$14,033 in 2019 and 2018, respectively.

New Hampshire acute care hospitals receive disproportionate share payments based on a portion of their charity care relative to other acute care hospitals. Wentworth-Douglass received \$9,097 and \$9,796 in 2019 and 2018, respectively.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Medicaid

Medicaid is a health insurance program jointly funded by the states and the federal government. Each state administers its own program and sets rules for eligibility, benefits and provider payments within broad federal guidelines and in some cases, including the Commonwealth and New Hampshire, within a Waiver Agreement between each state and the federal government. The program provides health care coverage to low-income adults and children. Eligibility is determined by a variety of factors which include income relative to the federal poverty line, age, immigrant status and assets.

Medicaid payments to Partners HealthCare's providers do not cover the full cost of services provided to Medicaid patients. In aggregate, reimbursement from Medicaid covered approximately 64% and 67% of the estimated cost of services provided in 2019 and 2018, respectively.

Federal Program

Medicare

Medicare is a federally sponsored health insurance program for people age 65 or older, under age 65 with certain disabilities and any age with End-Stage Renal Disease. Medicare's payments historically have not kept pace with increases in the cost of care provided at many hospitals. Additionally, payments to physicians have seen little or no increases over the past several years. Compounding this shortfall in payments is the continued shift of care from higher paying inpatient services to lower paying outpatient services.

Consequently, Medicare payments to Partners HealthCare's providers do not cover the full cost of services provided. In aggregate, reimbursement from Medicare covered approximately 73% and 72% of the estimated cost of services provided in 2019 and 2018, respectively.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Summary

For charity care, Medicaid and Medicare, the estimated cost of services provided is either obtained directly from a costing system or based on an entity specific ratio of cost to gross charges. In the latter case, cost is derived by applying this ratio to gross charges associated with providing care to charity care, Medicaid and Medicare patients. The following summarizes, by program, the cost of services provided, net reimbursement and cost of services in excess of reimbursement for each year:

	Years Ended September 30,	
	2019	2018
Cost of services provided		
Charity care	\$ 84,758	\$ 79,437
Medicaid	1,216,139	1,179,095
Medicare	3,947,938	3,604,603
	<u>\$ 5,248,835</u>	<u>\$ 4,863,135</u>
Net reimbursement		
Charity care	\$ 40,251	\$ 45,840
Medicaid	781,013	789,822
Medicare	2,876,749	2,596,740
	<u>\$ 3,698,013</u>	<u>\$ 3,432,402</u>
Cost of services in excess of reimbursement		
Charity care	\$ 44,507	\$ 33,597
Medicaid	435,126	389,273
Medicare	1,071,189	1,007,863
	<u>\$ 1,550,822</u>	<u>\$ 1,430,733</u>

In addition to charity care and inadequate funding from the Medicaid and Medicare programs, there are significant losses related to self-pay patients who fail to make payment for services rendered or insured patients who fail to remit co-payments and deductibles as required under the applicable health insurance arrangement. The estimated cost of providing these services was approximately \$70,743 and \$60,660 for 2019 and 2018, respectively.

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying consolidated financial statements have been prepared on the accrual basis of accounting and include the accounts of PHS and its affiliates. Significant interaffiliate accounts and transactions have been eliminated.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates are made in the areas of patient accounts receivable, research grants receivable, investments, receivables and accrual for settlements with third-party payers, accrued medical claims and related expenses, accrued employee compensation and benefits, accrued professional liability, interest rate swaps liability and accrued other.

Income Taxes

PHS and substantially all of its affiliates are tax-exempt organizations under Section 501(c)(3) or 501(c)(4) of the Internal Revenue Code (IRC) or disregarded entities for tax purposes.

In December 2017, the U.S. Government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (Tax Act). The Tax Act, effective in phases beginning in 2018, made broad and complex changes to the U.S. tax code. Beginning in 2018, the Tax Act required Partners HealthCare to consider certain transportation fringe benefits provided to employees as unrelated business taxable income (UBTI). In addition, beginning in 2019, Partners HealthCare was required to determine unrelated business income or loss on an activity-by-activity basis. Partners HealthCare evaluates opportunities to minimize its tax exposure on UBTI by use of tax credits permitted by the IRC. Total tax expense of \$3,750 and \$14,856 was recognized for the years ended September 30, 2019 and 2018, respectively.

Adoption of New Accounting Guidance

Partners HealthCare adopted the following new Accounting Standards Updates (ASU) in 2019: *Revenue From Contracts with Customers* (Revenue Standard); *Financial Instruments-Overall: Recognition and Measurement of Financial Assets and Financial Liabilities* (Financial Instruments Standard); *Presentation of Financial Statements for Not-for-Profit entities* (Not-For-Profit Standard); and *Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made* (Contributions Standard).

The Revenue Standard implements a single framework for recognition of all revenue earned from customers in exchange contracts. 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 Revenue Standard was adopted on October 1, 2018 using the modified retrospective transition method. The adoption of this standard did not have a significant impact on operations of Partners HealthCare and applicable disclosures have been included.

The Financial Instruments Standard made changes to the recognition of and measurement of financial assets. Partners HealthCare now records marketable investments at fair value with changes in fair value recognized as nonoperating investment income. The Financial Instruments Standard was adopted on October 1, 2018 with prospective application and a cumulative effect adjustment at the date of adoption. The impact of adopting this new accounting guidance resulted in a cumulative effect of accounting change of \$1,100,081 to unrestricted net assets and \$197,183 to donor restricted net assets.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

The Not-For-Profit Standard makes targeted changes to the not-for-profit financial reporting model. The primary change under the new guidance is the presentation of two net asset classes versus the previously required three. The guidance also requires new disclosure about information useful for assessing liquidity and availability of resources. The Not-For-Profit Standard was adopted on October 1, 2018 using the retrospective transition method. The adoption of this standard did not have a significant impact on operations of Partners HealthCare.

The Contributions Standard clarifies the definition of an exchange and non-exchange transaction and provides guidance on determining whether a non-exchange transaction (contribution) is conditional or unconditional. The Contributions Standard was adopted on October 1, 2018 using the modified prospective transition method. The adoption of this standard did not have a significant impact on operations of Partners HealthCare.

Fair Value of Financial Instruments

The fair value of financial instruments approximates the carrying amount reported in the consolidated balance sheets for cash and equivalents, investments and investments limited as to use, patient accounts receivable, research grants receivable, accounts payable and accrued expenses and interest rate swaps liability. More information can be found in Note 7, Fair Value Measurements.

Cash and Equivalents

Cash and equivalents represent cash, registered money market funds and highly liquid debt instruments with a maturity at the date of purchase of three months or less. Partners HealthCare's cash and equivalents are maintained with several national banks, and cash deposits typically exceed federal insurance limits. It is Partners HealthCare's policy to monitor these banks' financial strength on an ongoing basis, and no losses have been experienced to date.

Investments

Investments in equity securities with readily determinable fair values, debt securities and alternative investments are measured at fair value. Alternative investments, consisting of various hedge funds, private equity funds, private debt funds, other private partnerships and restricted securities of public companies that are not traded on a national securities exchange, are valued based on amounts reported by the fund manager and evaluated by management. Investments in securities sold short or traded on a national securities exchange are valued based on quoted market prices.

Income from investments (including realized gains and losses, unrealized change in value of investments, interest, dividends and endowment income distributions) is included in excess of revenues over expenses unless the income or loss is restricted by donor or law. Income from investments is reported net of investment-related expenses. Prior to the adoption of the Financial Instruments Standard, the change in net unrealized appreciation on certain marketable investments was excluded from excess of revenues over expenses.

Partners HealthCare has an endowment spending policy for pooled endowment funds. A fixed distribution rate for spending is determined each year which will come from either income and/or net accumulated appreciation.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Investments Limited as to Use

Investments limited as to use primarily includes assets whose use is contractually limited by external parties as well as assets set aside by the boards (or management) for identified purposes and over which the boards (or management) retain control such that the boards (or management) may, at their discretion, subsequently use such assets for other purposes. Certain investments corresponding to deferred compensation are accounted for such that all income and appreciation (depreciation) is recorded as a direct addition (reduction) to the asset and corresponding liability.

Derivative Instruments

Derivatives are recognized on the balance sheet at fair value with changes in the fair value recorded in excess of revenues over expenses.

Patient Accounts Receivable

The payments received for healthcare services rendered from federal and state agencies (under the Medicare and Medicaid programs), managed care payers, commercial insurance companies and patients are subject to explicit and implicit discounts. These discounts are based on contractual agreements, discount policies and management's assessment of historical experiences and are reflected in the period of service.

Research Grants Receivable

Partners HealthCare receives research funding from departments and agencies of the U.S. Government, industry and other foundation sponsors. Research grants receivable include amounts due from these sponsors of externally funded research. These amounts have been billed or are billable to the sponsor, or in limited circumstances, represent accelerated spending in anticipation of future funding. Research grants receivable are reported at net realizable value.

As of September 30, 2019 and 2018, Partners HealthCare estimates it has approximately \$3,760,000 and \$3,329,000, respectively, of conditional research grants, subject to government appropriations, for future research to be performed. Timing and amounts of funds received are subject to continued government funding and may change over time.

Other Current Assets

Other current assets include prepaid expenses, inventory, nonpatient receivables, current portion of pledges receivable and premiums receivable. Inventory (primarily supplies and pharmaceuticals) is stated at an average cost or the lower of cost (first-in, first-out method) or market.

Property and Equipment

Property and equipment is reported on the basis of cost less accumulated depreciation. Donated items are recorded at fair value at the date of contribution. All research grants received for capital are recorded in the year of expenditure as a change in unrestricted net assets. Property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Depreciation of property and equipment is calculated by use of the straight-line method at rates intended to depreciate the cost of assets over their estimated useful lives, which generally range from three to fifty years. Interest costs incurred on borrowed funds during the period of construction of capital assets are capitalized, net of any interest earned, as a component of the cost of acquiring those assets.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Asset Retirement Obligations

Asset retirement obligations, reported in accrued other, are legal obligations associated with the retirement of long-lived assets. These liabilities are initially recorded at fair value and the related asset retirement costs are capitalized by increasing the carrying amount of the related assets by the same amount as the liability. Asset retirement costs are subsequently depreciated over the useful lives of the related assets. Any changes to the liability due either to the passage of time, better information or the settlement of an obligation are reflected in the current period.

Other Assets

Other assets consist of long-term receivables, intangible assets, prepaid ground rent, malpractice insurance receivables (Note 16), receivable for settlements with third-party payers and investments in healthcare related limited partnerships. The carrying value of other assets is evaluated for impairment if the facts and circumstances suggest that the carrying value may not be recoverable.

Compensated Absences

In accordance with formal policies concerning vacation and other compensated absences, accruals of \$312,312 and \$298,910 were recorded as of September 30, 2019 and 2018, respectively.

Unexpended Funds on Research Grants

Research grants received in advance of corresponding grant expenditures are accounted for as a direct addition to investments limited as to use and unexpended funds on research grants.

Self-Insurance Reserves

Partners HealthCare is generally self-insured for employee healthcare, disability, workers' compensation and certain other employee benefits. These costs are accounted for on an accrual basis to include estimates of future payments for claims incurred prior to year end.

Net Assets

Donor restricted net assets include (a) the historical dollar amounts of gifts and the income and gains on such gifts which are required by donors to be retained and (b) gifts and the income and gains on these gifts which can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions where donors have specified the purpose for which the net assets are to be spent, or time restrictions imposed by donors or implied by the nature of the gift (capital projects, pledges to be paid in the future and life income funds) or by interpretations of law (gains available for appropriation but not appropriated in the current period). Unrestricted net assets include all of the remaining net assets of Partners HealthCare. More information can be found in Note 18, Net Assets.

Realized gains and losses are classified as unrestricted net assets unless they are restricted by the donor or law. Realized gains and net unrealized appreciation on donor restricted gifts are classified as donor restricted until appropriated for spending by Partners HealthCare in accordance with policies established by Partners HealthCare and applicable Uniform Prudent Management of Institutional Funds Acts (UPMIFA). Net losses on donor restricted endowment funds are classified as a reduction to donor restricted net assets.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Contributed Securities

Partners HealthCare's policy is to sell securities contributed by donors upon receipt, unless prevented from doing so by donor request. For the years ended September 30, 2019 and 2018, contributed securities of \$59,356 and \$64,080, respectively, were received and liquidated. Donors restricted \$18,949 and \$15,328 of the proceeds received from the sale of these contributed securities for long-term purpose for the years ended September 30, 2019 and 2018, respectively.

Statement of Operations

Activities deemed by management to be ongoing, major and central to the provision of healthcare services, teaching, research activities and health insurance are reported as operating revenues and expenses. Other activities are deemed to be nonoperating and include unrestricted gifts (net of fundraising expenses), external community benefit program support, net change in unexpended academic and research gifts, change in fair value of interest rate swaps, substantially all income (loss) from investments and interest on advanced borrowings. Academic and research gifts largely consist of donor contributions (and the related investment income including realized gains and losses) designated to support the clinical, teaching or research efforts of a physician or department as directed by the donor. These gifts are reported as unrestricted, net of related support expenses, when donor restrictions are of a general nature that are inherent in the normal activities of the organization.

The consolidated statements of operations includes excess of revenues over expenses. Changes in unrestricted net assets, which are excluded from excess of revenues over expenses, include change in net unrealized appreciation on marketable investments (in 2018), contributions of long-lived assets (including assets acquired using contributions which by donor restriction were to be used for acquisition of such assets), change in funded status of defined benefit plans and cumulative effect of accounting change.

Revenues

To determine the appropriate revenue recognition policy, Partners HealthCare first assesses whether the transaction is an exchange or non-exchange transaction in accordance with accounting guidance. In general, an exchange transaction consists of an exchange of goods and/or services for commensurate value. Transactions that consist of transferring goods and/or services without receiving commensurate value in return are considered non-exchange transactions.

For exchange transactions, revenue is recognized as goods and/or services are provided and is based on the amount expected to be received in exchange for those goods and/or services. Revenue recognized as exchange transactions include: net patient service revenue, premium revenue and other revenue.

Non-exchange transactions include contributions and grants for which the service provider does not receive commensurate value in return for the funding.

Gifts

Gifts are reported as other nonoperating gains in the consolidated statements of operations. Unconditional promises to give cash and other assets to Partners HealthCare are reported at fair value at the date the promise is received. Conditional promises to give are recognized when the conditions are substantially met. Gifts are reported as donor restricted support if they are received with donor stipulations that limit the use of the donated assets. Donor restricted contributions whose restrictions are met within the same year as received are reported as unrestricted gifts in the consolidated statements of operations.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Gifts of long-lived assets with explicit restrictions that specify use of assets and gifts of cash or other assets that must be used to acquire long-lived assets are reported as additions to donor restricted net assets if the assets are not placed in service during the year.

Grants

Grants and contracts normally provide for the recovery of direct and indirect costs, subject to audit. Partners HealthCare recognizes revenue associated with direct and indirect costs as direct costs are incurred. The recovery of indirect costs is based on predetermined rates for U.S. Government grants and contracts and negotiated rates for other grants and contracts.

Medical Claims and Related Expenses

AllWays Health contracts with various community health centers, hospital-based primary care physician practices and other health care providers for the delivery of services to its members and compensates these providers on a capitated, fee-for-service, per diem or diagnosis-related group (DRG) basis.

The cost of contracted health care services is accrued in the period in which services are provided and include certain estimated amounts. The estimated liability for medical claims and related expenses is actuarially determined based on analysis of historical claims-paid experience, modified for changes in enrollment, inflation and benefit coverage. The liability for medical claims and related expenses represents the anticipated cost of claims incurred but unpaid at the balance sheet date. The estimates for claims expense may be more or less than the amounts ultimately paid when claims are settled. Such changes in estimates are reflected in the current period in the consolidated statements of operations.

In the normal course of business, AllWays Health identifies and recoups overpayments through reductions in future payments made to providers and hospitals. Such overpayments are the result of, among other things, coordination of benefits and provider claim audits. For the years ended September 30, 2019 and 2018, AllWays Health recorded a reduction in its medical claims expense of \$32,213 and \$37,061, respectively, for such overpayments. As of September 30, 2019 and 2018, approximately \$803 and \$2,519, respectively, are recorded as receivables related to such overpayments.

Reinsurance

Reinsurance premiums are reported in medical claims and related expenses and reinsurance recoveries are reported as reductions in medical claims and related expenses.

Settlements

AllWays Health contracts with certain providers at negotiated rates based on historical and anticipated experience. These methods of reimbursement result in settlements based on actual versus anticipated experience which could result in either payments due from (to) these providers. Settlements receivable of \$2,423 and \$798 were recorded in other current assets as of September 30, 2019 and 2018, respectively. Settlements payable of \$701 and \$6,259 were recorded in accrued medical claims and related expenses as of September 30, 2019 and 2018, respectively. The settlements are intended to include both reported and unreported incurred claims as of September 30, 2019 and 2018.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

In 2014, the Affordable Care Act introduced new settlements related to a risk adjustment program, a risk corridor program and a reinsurance program designed to mitigate the transitional impact on insurers for new members. The risk corridor program and reinsurance program ended on December 31, 2016 in accordance with the provision of the Affordable Care Act. AllWays Health's estimated net receivable due from the federal government for these programs was \$56,370 and \$72,526 at September 30, 2019 and 2018, respectively. Similar to the federal program, Executive Office of Health and Human Services of the Commonwealth (EOHHS) has a risk corridor program, and AllWays Health's estimated net payable due to EOHHS was \$7,848 and \$388 as of September 30, 2019 and 2018, respectively.

Premium Deficiency Reserves

Premium deficiency reserves are assessed and recognized on a product line basis based upon expected premium revenue, medical expense and administrative expense levels, and remaining contractual obligations using historical experience. There were no premium deficiency reserves as of September 30, 2019 or 2018.

Claims Adjustment Expenses

Claims adjustment expenses (CAE) are those costs expected to be incurred in connection with the adjustment and recording of health claims. AllWays Health has recorded an estimate of unpaid CAE associated with incurred but unpaid claims, which is included in medical claims and related expenses in the accompanying consolidated statements of operations. Management believes the amount of the liability for unpaid CAE as of September 30, 2019, is adequate to cover AllWays Health's cost for the adjustment and recording of unpaid claims; however, actual expenses may differ from those established estimates. Adjustments to the estimates for unpaid CAE are reflected in operating results in the period in which the change in estimate is identified (Note 11).

Recent Accounting Guidance

In February 2016, the FASB issued Accounting Standards Updates (ASU) 2016-02, *Leases (Topic 842)*, which requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The guidance also expands the required quantitative and qualitative disclosures surrounding leases. The standard is effective for Partners HealthCare in 2020, and management is evaluating the impact of this standard on the consolidated financial statements by reviewing the key terms of all lease contracts and implementing new processes and procedures to comply with this standard.

In March 2017, the FASB issued ASU 2017-07, *Compensation – Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. The standard requires that the service cost component be presented in the same line item(s) as other employee compensation costs and that the remaining components be presented separately from those line items and outside of operations. The standard is effective for Partners HealthCare in 2020, and amounts related to non-service cost components of pension expense will be reclassified from employee compensation and benefit expenses to nonoperating gains (expenses). The adoption of this guidance is expected to reduce income from operations and increase nonoperating gains (expenses) with no impact on excess of revenues over expenses in the consolidated statements of operations.

Reclassification

Due to the adoption of new accounting guidance, net asset classes in the 2018 consolidated financial statements have been reclassified to conform with the 2019 presentation.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

3. Acquisitions

MEEI contributed their net assets to PHS on April 1, 2018. As a result, contribution income recorded at the fair value of contributed net assets on the transaction day is reflected in the consolidated statements of changes in net assets as follows:

Unrestricted net assets (in non-operating gains)	\$ 157,312
Donor restricted net assets	166,281
	<u>\$ 323,593</u>

Assets, liabilities and net assets assumed as of the acquisition date are as follows:

Assets

Cash and cash equivalents	\$ 11,716
Investments and investments limited as to use	282,733
Patient accounts receivable, net	27,650
Property and equipment, net	190,854
Other assets	67,692
	<u>\$ 580,645</u>

Liabilities

Long-term obligations	\$ 132,671
Accounts payable and accrued expenses	32,608
Accrued employee compensation and benefits	14,099
Accrual for settlements with third-party payers	4,936
Other liabilities	72,738
	<u>257,052</u>

Net assets

Unrestricted	157,312
Donor restricted	166,281
	<u>323,593</u>
Total net assets	<u>323,593</u>
Total liabilities and net assets	<u>\$ 580,645</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

A summary of the financial results of MEEI from April 1, 2018 through September 30, 2018 included in the consolidated s of operations and changes in net assets is as follows:

Total operating revenue	\$ 220,061
Total operating expenses	217,011
Income from operations	<u>3,050</u>
Nonoperating gains, net	<u>5,096</u>
Excess of revenues over expenses	8,146
Other changes	<u>159,180</u>
Increase in unrestricted net assets	<u>\$ 167,326</u>

A summary of the consolidated financial results of Partners HealthCare for the year ended September 30, 2018, as if the transaction had occurred on October 1, 2017 is as follows (unaudited):

	2018
Total operating revenue	\$ 13,518,035
Total operating expenses	<u>13,210,836</u>
Income from operations	307,199
Nonoperating gains, net	<u>520,708</u>
Excess of revenues over expenses	827,907
Pension related changes	399,318
Other changes	<u>(40,406)</u>
Increase in unrestricted net assets	<u>\$ 1,186,819</u>

For the year ended September 30, 2018, Partners HealthCare made multiple smaller acquisitions for a combined purchase price, net of cash acquired, of \$5,761. In accordance with accounting standards, the purchase price was allocated first to tangible assets and then intangible assets.

4. Operating Revenues

Net Patient Service Revenue

Partners HealthCare maintains agreements with The Centers for Medicare and Medicaid Services under the Medicare program, the Commonwealth under the Medicaid program and various managed care payers that govern payment for services rendered to patients covered by these agreements. The agreements generally provide for per case or per diem rates or payments based on discounted charges for inpatient care and discounted charges or fee schedules for outpatient care. Certain contracts also provide for payments that are contingent upon meeting agreed upon quality and efficiency measures.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Partners HealthCare recognizes net patient service revenue associated with services provided to patients who have third-party payer coverage on the basis of contractual rates for the services rendered. For uninsured patients that do not qualify for charity care, Partners HealthCare recognizes revenue on the basis of its standard rates (subject to discounts) for services provided. On the basis of historical experience, a significant portion of uninsured patients are unable or fail to pay for the services provided. Consequently, Partners HealthCare determined it has provided implicit discounts to uninsured patients in accordance with the Revenue Standard. These discounts represent the difference between amounts billed to patients and amounts expected to be collected based on historical experience. Prior to the adoption of the Revenue Standard, a provision for bad debts of \$165,861 was recorded in 2018 that represented charges for services provided that were deemed to be uncollectible. The following summarizes net patient service revenue, net of contractual allowances and discounts by significant payer:

	Years Ended September 30,			
	2019		2018	
Net patient service revenue (net of contractual allowances and discounts)				
Medicare	\$ 2,495,102	24.6%	\$ 2,225,006	24.1%
Medicare managed care	446,198	4.4%	345,086	3.7%
Medicaid	651,594	6.4%	560,914	6.1%
Medicaid managed care	151,204	1.5%	194,510	2.1%
Massachusetts's managed care organizations	3,970,248	39.1%	3,963,921	42.9%
Other commercial	1,906,389	18.8%	1,436,003	15.5%
All others	524,415	5.2%	513,678	5.6%
Total all payers	<u>\$ 10,145,150</u>	<u>100.0%</u>	<u>\$ 9,239,118</u>	<u>100.0%</u>

Net patient service revenue includes estimated retroactive revenue adjustments due to future audits, reviews and investigations. Retroactive adjustments are considered in the recognition of revenue on an estimated basis in the period the related services are rendered, and such amounts are adjusted in future periods as adjustments become known or as years are no longer subject to such audits, reviews and investigations. Contracts, laws and regulations governing the Medicare, Medicaid and charity care programs and managed care payer arrangements are 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. A portion of the accrual for settlements with third-party payers has been classified as long-term because such amounts, by their nature or by virtue of regulation or legislation, will not be paid within one year.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Third-party payers receivable (accrual) consists of the following:

	September 30,	
	2019	2018
Current portion		
Receivable for settlements with third-party payers	\$ 116,791	\$ 115,561
Accrual for settlements with third-party payers	(75,287)	(68,711)
	<u>41,504</u>	<u>46,850</u>
Long-term portion		
Receivable for settlements with third-party payers included in other assets	10,776	5,774
Accrual for settlements with third-party payers included in accrued other	(26,989)	(29,220)
	<u>(16,213)</u>	<u>(23,446)</u>
Third-party payers receivable (accrual)	<u>\$ 25,291</u>	<u>\$ 23,404</u>

Partners HealthCare recognizes changes in third-party payer settlements and other estimates in the year of the change in estimate. For the years ended September 30, 2019 and 2018, adjustments to prior year estimates resulted in an increase to income from operations of \$40,448 and \$51,677, respectively. Subsequent changes to estimated discounts are generally recorded as adjustments to net patient service revenue in the period of change.

Partners HealthCare provides either full or partial charity care to patients who cannot afford to pay for their medical services based on income and family size. Charity care is generally available to qualifying patients for medically necessary services. Partners HealthCare reports certain bad debts related to emergency services as charity care. As there is no expectation of collection, there is no net patient service revenue recorded related to charity care.

Premium Revenue

Premiums are due monthly and are recorded as earned during the period in which members are eligible to receive services. Premiums received prior to the first day of the coverage period are recorded as unearned premiums in accounts payable and accrued expenses.

Academic and Research Revenue

Academic and research revenue is recognized as either an exchange or non-exchange transaction, depending on the contract type. The following table sets forth total academic and research revenue received by Partners HealthCare by funding source:

	Years Ended September 30,			
	2019		2018	
National Institute of Health and other federal agencies	\$ 890,493	43.3%	\$ 844,826	44.3%
Federal subcontracts	188,008	9.1%	184,134	9.7%
Industry/Corporate	162,670	7.9%	156,536	8.2%
Foundations/non-profits and other sponsors	583,800	28.4%	521,625	27.4%
Total research revenue	<u>1,824,971</u>		<u>1,707,121</u>	
Academic revenue	<u>232,361</u>	11.3%	<u>198,905</u>	10.4%
Total academic and research revenue	<u>\$ 2,057,332</u>	<u>100.0%</u>	<u>\$ 1,906,026</u>	<u>100.0%</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Other Revenue

Other revenue includes all other operating revenue sources, the most significant being the following:

	Years Ended September 30,	
	2019	2018
Specialty and retail pharmacy operations	\$ 178,994	\$ 70,774
Intellectual property and royalties	96,558	30,287
Parking and office rentals	76,110	73,237
Tuition	61,993	59,109
Outsourced services	38,729	39,132
Cafeteria sales	37,729	34,511
Contract administrative fees	33,410	33,228
International contracts	31,246	32,107
Blood factor sales	27,530	16,713
Accountable care organization administration fees	21,118	14,193
Consulting services	15,004	14,166
Investment income	13,759	13,712
Other	325,319	310,467
	<u> </u>	<u> </u>
Total other revenue	<u>\$ 957,499</u>	<u>\$ 741,636</u>

5. Liquidity and Availability

Cash and investments are managed centrally by PHS under policies developed by the Investment Committee and reviewed by the Finance Committee of the PHS Board of Directors. Wherever possible, funds are commingled and are assigned to one of three investment pools (the Money Market Pool, the Aggregate Bond Pool and the Long Term Pool, collectively, the Pools) which have been structured to provide a range of investment objectives, risk profiles and rates of return appropriate for Partners HealthCare's assets. Funds are allocated among the Pools based on expected liquidity needs as determined by multi-year financial plans, restrictions and management judgment.

The tiered time horizon structure of the Pools is designed to meet anticipated and contingent liquidity needs. The following table sets forth the periods within which funds are available to meet liquidity needs and Pools, based on redemption provisions with investment managers, from which such funds would be drawn as of September 30, 2019:

Investment Pool	Same Day	1 Week	1 Month	3 Months	1 Year	> 1 Year	Total
Money market	\$ 251,956	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 251,956
Aggregate bond	459,594	70,043	60,856	-	-	-	590,493
Long term	31,011	1,593,065	2,236,094	1,716,957	837,611	3,455,405	9,870,143
Total	<u>\$ 742,561</u>	<u>\$ 1,663,108</u>	<u>\$ 2,296,950</u>	<u>\$ 1,716,957</u>	<u>\$ 837,611</u>	<u>\$ 3,455,405</u>	<u>\$ 10,712,592</u>
Cumulative total	\$ 742,561	\$ 2,405,669	\$ 4,702,619	\$ 6,419,576	\$ 7,257,187	\$ 10,712,592	

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

As of September 30, 2019, the market value of the Money Market pool was \$251,956, all of which was comprised of same day available funds. As of September 30, 2019, the market value of the Aggregate Bond Pool was \$590,493, of which \$459,594 was comprised of same day available funds, which include cash and U.S. Treasuries. Of the remaining \$130,899, \$70,043 was comprised of separately managed mortgage and asset-backed securities and corporate bonds which could be liquidated within one week, while \$60,856 was invested in a commingled fixed income vehicle which could be liquidated within one month.

As of September 30, 2019, Partners HealthCare also had cash and equivalents not included in the Pools of \$198,775 and net patient accounts receivable of \$1,129,594 that would be available for general expenditures within one year of the balance sheet date.

In addition, Partners HealthCare maintains a \$150,000 Credit Agreement (the Credit Agreement) that provides access to same day funds.

6. Investments and Investments Limited as to Use

Investments are either invested in the Pools or separately managed. Substantially all of the affiliates, along with PHS, participate in the Pools. Their respective ownership interests are tracked and updated monthly and are accounted for using the fair value method. Income (including realized gains and losses) from the Pools is allocated to each participant on a monthly basis based on its proportionate interest in the Pools.

Oversight of the management of Partners HealthCare's investable assets, including the Pools and pension assets, is provided by the Investment Committee of PHS Board of Directors which seeks to achieve incremental returns by manager selection and asset allocation (increasing/decreasing allocations within allowable ranges based on current and projected valuations). The Committee is supported by a professional staff, an outside investment consultant and a pension actuarial consultant.

Partners HealthCare utilizes a target allocation policy and balances projected returns, correlation and volatility of various asset classes within the overall risk tolerance. Asset allocations are managed based on relative valuations among and within asset classes and the perceived ability of managers to outperform passive benchmarks. Exposure by asset class is the sum of allocation to those managers whose mandates most closely fit the listed asset classes. Asset allocation can and will deviate from target exposures and is regularly monitored for rebalancing.

The Pools invest in a variety of assets which include private partnerships whose assets include equity, fixed income and other investments. As of September 30, 2019, the Pools have unfunded commitments of approximately \$1,215,079 which will be drawn down by the various general partners over the next several years. The maximum annual drawdown is expected to be 3% to 5% of investments and investments limited as to use.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Investments and investments limited as to use are recorded in the balance sheet as follows:

	September 30,	
	2019	2018
Current assets		
Investments	\$ 2,791,502	\$ 1,942,117
Current portion of investments limited as to use	2,235,171	1,465,354
	<u>5,026,673</u>	<u>3,407,471</u>
Long-term assets		
Investments limited as to use, less current portion	4,498,716	3,716,162
Long-term investments	1,997,617	1,628,972
	<u>\$ 11,523,006</u>	<u>\$ 8,752,605</u>

Investments limited as to use consist of the following:

	September 30, 2019		September 30, 2018	
	Current Portion	Long-Term Portion	Current Portion	Long-Term Portion
Internally designated funds				
Reserved for capital expenditures	\$ 1,153,160	\$ -	\$ 885,548	\$ -
Unexpended academic and research gifts	-	3,659,920	-	2,951,821
Deferred compensation	-	405,032	-	355,294
Other	612,505	398,384	253,006	377,477
	<u>1,765,665</u>	<u>4,463,336</u>	<u>1,138,554</u>	<u>3,684,592</u>
Externally limited funds				
Unexpended funds on research	262,017	-	284,178	-
Contributions held for others	2,051	-	1,610	-
Professional liability trust fund	-	35,380	-	31,570
Held by trustees under debt and other agreements	205,438	-	41,012	-
	<u>469,506</u>	<u>35,380</u>	<u>326,800</u>	<u>31,570</u>
	<u>\$ 2,235,171</u>	<u>\$ 4,498,716</u>	<u>\$ 1,465,354</u>	<u>\$ 3,716,162</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Investments and investments limited as to use as of September 30, 2018 was reported at either fair value or on the equity or cost methods of accounting. The composition of these investments, segregated between pooled investments and those that are separately invested, was as follows:

	September 30, 2018			Total
	At Fair Value	On Equity Method	On Cost Method	
Pooled investments				
Invested cash equivalents	\$ 47,324	\$ -	\$ -	\$ 47,324
Separately managed investments	1,647,937	-	-	1,647,937
Mutual funds	63,370	-	-	63,370
Commingled funds	1,524,184	-	-	1,524,184
Private partnerships	-	1,889,786	2,702,139	4,591,925
	<u>3,282,815</u>	<u>1,889,786</u>	<u>2,702,139</u>	<u>7,874,740</u>
Separately invested				
Invested cash equivalents	128,063	-	55	128,118
Equities	6,397	-	49,163	55,560
Fixed income securities	24,176	-	-	24,176
Mutual funds	559,945	-	6	559,951
Other	32,186	-	77,874	110,060
	<u>750,767</u>	<u>-</u>	<u>127,098</u>	<u>877,865</u>
	<u>\$ 4,033,582</u>	<u>\$ 1,889,786</u>	<u>\$ 2,829,237</u>	<u>\$ 8,752,605</u>

Separately managed investments include cash and equivalents of \$174,368, equities of \$915,935 and fixed income securities of \$557,634 as of September 30, 2018.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Investment income and gains (losses) from cash and equivalents, investments, investments limited as to use and beneficial interests in perpetual trusts comprise the following:

	Years Ended September 30,	
	2019	2018
Unrestricted		
Dividends, interest and other income	\$ 55,891	\$ 51,491
Endowment income distributions, net of reinvested gains	57,559	46,234
Net realized gains (losses) on investments		
Realized gains	419,858	273,474
Other-than-temporary impairment	-	(58,845)
Change in unrealized appreciation of investments	(97,045)	66,002
Total investment activity included in excess of revenues over expenses	436,263	378,356
Change in net unrealized appreciation on marketable investments	-	(90,243)
Total unrestricted investment activity	436,263	288,113
Donor restricted		
Dividends and interest income	5,630	24,794
Endowment income distributions	(69,519)	(60,520)
Net realized gains (losses) on investments		
Realized gains	91,044	58,944
Other-than-temporary impairment	-	(8,750)
Change in unrealized appreciation of investments	(32,691)	21,223
Change in net unrealized appreciation on marketable investments	-	8,449
Change in value of beneficial interests in perpetual trusts	916	841
Total donor restricted investment activity	(4,620)	44,981
Total investment income and gains (losses)	\$ 431,643	\$ 333,094

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Investment income included in operating results and excess of revenues over expenses comprise the following:

	Years Ended September 30,	
	2019	2018
Investment income included in operations and reported in other revenue	\$ 13,759	\$ 13,712
Investment income included in nonoperating gains and reported in		
Income from investments	182,829	198,118
Academic and research gifts, net of expenses	239,675	166,526
	<hr/>	<hr/>
Total investment activity included in excess of revenues over expenses	\$ 436,263	\$ 378,356

7. Fair Value Measurements

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 (also referred to as exit price). Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. In determining fair value, the use of various valuation approaches, including market, income and cost approaches, is permitted.

Fair Value Hierarchy

A fair value hierarchy has been established based on whether the inputs to valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the reporting entity's assumptions about the inputs market participants would use. The fair value hierarchy requires the reporting entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. In addition, for hierarchy classification purposes, the reporting entity should not look through the form of an investment to the nature of the underlying securities held by an investee.

The hierarchy is described below.

- Level 1 Valuations using quoted prices in active markets for identical assets or liabilities. Valuations of these products do not require a significant degree of judgment. Level 1 assets and liabilities primarily include debt and equity securities that are traded in an active exchange market.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

- Level 2 Valuations using observable inputs other than Level 1 prices such as quoted prices in active markets for similar assets or liabilities; quoted prices for identical or similar assets or liabilities in markets that are not active; broker or dealer quotations; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities primarily include debt securities with quoted prices that are traded less frequently than exchange-traded instruments as well as debt securities and derivative contracts whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data.
- Level 3 Valuations using unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Level 3 includes assets and liabilities whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques reflecting the reporting entity's assumptions about the assumptions market participants would use as well as those requiring significant management judgment.

Valuation Techniques

Pooled investments, separately invested cash equivalents and debt and equity securities are classified within Level 1 or Level 2 of the fair value hierarchy as they are valued using quoted market prices, broker or dealer quotations, or other observable pricing sources. Certain types of investments are classified within Level 3 of the fair value hierarchy because they have little or no market activity and therefore have little or no observable inputs with which to measure fair value.

The valuation of interest rate swaps is determined using widely accepted valuation techniques, including discounted cash flow analysis on the expected cash flows of each derivative. This analysis reflects the contractual terms of the derivatives, including the period to maturity, and uses observable market-based inputs, including interest rate curves and implied volatilities.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

The following tables summarize fair value measurements as of September 30, 2019 and 2018 for financial assets and liabilities measured at fair value on a recurring basis:

	Fair Value Measurements Using				Fair Value at September 30, 2019
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Valued Using NAV as a Practical Expedient	
Assets					
Pooled investments					
Invested cash equivalents	\$ 77,760	\$ 174,195	\$ -	\$ -	\$ 251,955
Separately managed investments	1,697,302	265,838	-	-	1,963,140
Mutual funds	70,043	-	-	-	70,043
Commingled funds	-	1,451,470	-	-	1,451,470
Private partnerships and other	-	-	-	6,975,984	6,975,984
	<u>1,845,105</u>	<u>1,891,503</u>	<u>-</u>	<u>6,975,984</u>	<u>10,712,592</u>
Separately invested					
Invested cash equivalents	124,688	-	-	-	124,688
Equities	36,266	-	-	-	36,266
Mutual funds	534,423	33,874	-	-	568,297
Beneficial interests in perpetual assets	-	-	50,457	-	50,457
	<u>695,377</u>	<u>33,874</u>	<u>50,457</u>	<u>-</u>	<u>779,708</u>
	<u>\$ 2,540,482</u>	<u>\$ 1,925,377</u>	<u>\$ 50,457</u>	<u>\$ 6,975,984</u>	<u>\$ 11,492,300</u>
Interest rate swaps					
Liabilities		<u>\$ (510,579)</u>			<u>\$ (510,579)</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

	Fair Value Measurements Using			Fair Value at September 30, 2018
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Assets				
Pooled investments				
Invested cash equivalents	\$ 14,626	\$ 32,698	\$ -	\$ 47,324
Separately managed investments	1,379,248	268,689	-	1,647,937
Mutual funds	63,370	-	-	63,370
Commingled funds	-	1,524,184	-	1,524,184
	<u>1,457,244</u>	<u>1,825,571</u>	<u>-</u>	<u>3,282,815</u>
Separately invested				
Invested cash equivalents	128,063	-	-	128,063
Equities	6,397	-	-	6,397
U.S. Government and domestic fixed income securities	24,176	-	-	24,176
Mutual funds	559,945	-	-	559,945
Beneficial interests in perpetual assets	-	-	32,186	32,186
	<u>718,581</u>	<u>-</u>	<u>32,186</u>	<u>750,767</u>
	<u>\$ 2,175,825</u>	<u>\$ 1,825,571</u>	<u>\$ 32,186</u>	<u>\$ 4,033,582</u>
Interest rate swaps				
Assets		\$ 15,243		\$ 15,243
Liabilities		(254,295)		(254,295)
Net		<u>\$ (239,052)</u>		<u>\$ (239,052)</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

8. Pledges and Contributions Receivable

Pledges receivable represent unconditional promises to give and are net of allowances for uncollectible amounts. Pledges are recorded at the present value of their estimated future cash flows. Pledges collectible within one year are classified as other current assets, net of allowances, and total \$107,586 and \$95,292 as of September 30, 2019 and 2018, respectively. Estimated cash flows due after one year are discounted using published treasury bond and note yields that are commensurate with estimated collection risks. The blended discount rate was 1.6% and 2.9% for 2019 and 2018, respectively. Pledges are expected to be collected as follows:

	September 30,	
	2019	2018
Amounts due		
Within one year	\$ 127,396	\$ 111,277
In one to five years	178,196	160,865
In more than five years	60,339	67,349
Total pledges receivable	<u>365,931</u>	<u>339,491</u>
Less: Unamortized discount	11,714	20,955
	<u>354,217</u>	<u>318,536</u>
Less: Allowance for uncollectibles	24,138	20,937
Net pledges receivable	<u>330,079</u>	<u>297,599</u>
Contributions receivable from trusts	62,431	44,644
	<u>\$ 392,510</u>	<u>\$ 342,243</u>

9. Property and Equipment

Property and equipment consists of the following:

	September 30,	
	2019	2018
Land and land improvements	\$ 341,650	\$ 269,280
Buildings and building improvements	8,287,126	7,961,709
Equipment	2,957,515	2,996,429
Construction in progress	609,146	519,291
	<u>12,195,437</u>	<u>11,746,709</u>
Less: Accumulated depreciation	5,638,231	5,344,999
Property and equipment, net	<u>\$ 6,557,206</u>	<u>\$ 6,401,710</u>

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Depreciation expense for the years ended September 30, 2019 and 2018 was \$681,807 and \$670,132, respectively. Interest costs, net of interest earned, aggregating \$7,406 and \$5,032 were capitalized in 2019 and 2018, respectively.

For the years ended September 30, 2019 and 2018, fully depreciated assets with an original cost of \$388,575 and \$295,348, respectively, were written off.

10. Levels of Capital and Surplus

Risk-based capital (RBC) is a methodology adopted by the National Association of Insurance Commissioners (NAIC) for determining the minimum level of capital and surplus deemed necessary for an insurer based upon the types of assets held and business written. Pursuant to a guaranty entered into by PHS when it acquired AllWays Health in 2012 (the RBC Guaranty), PHS has committed to maintain AllWays Health's capital and surplus at a specified minimum level, measured quarterly in accordance with an RBC methodology permitted by the Massachusetts Division of Insurance (DOI). The RBC Guaranty may be enforced by the DOI. In 2019, AllWays Health returned capital of \$100,000 to PHS. In 2018, PHS provided capital to AllWays Health of \$4,000. AllWays Health's current contract with EOHHS requires AllWays Health to maintain a minimum net worth and/or financial insolvency insurance in an amount equal to the Minimum Net Worth calculation as defined in Massachusetts General Law 176G, Section 25. At December 31, 2018 and 2017 (AllWays Health's statutory year end), the minimum net worth requirement, as determined in accordance with EOHHS guidelines, was \$64,942 and \$143,774, respectively. AllWays Health's statutory net worth was \$271,421 and \$337,126 at December 31, 2018 and 2017, respectively, and thus exceeded the EOHHS requirements by \$206,479 and \$193,352, respectively.

11. Accrued Medical Claims and Related Expenses

Accrued medical claims and related expenses include estimates of expected trends in claims severity, frequency, and other factors, which could vary as the claims are ultimately settled and are based principally upon historical experience. For the years ended September 30, 2019 and 2018, changes in estimates resulted in a decrease of accrued medical claims and related expense of \$3,613 and \$7,796, respectively. Increases (decreases) of this nature occur as the result of claim settlements and recoveries during the current year and as additional information is received regarding individual claims, causing changes from the original estimates of the cost of these claims. Ongoing analysis of the recent loss development trends is also taken into account in evaluating the overall adequacy of the reserves.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Changes in accrued medical claims and related expenses are as follows:

	2019	2018
Balance at beginning of year	\$ 64,398	\$ 196,037
Less:		
Accrual for claims adjustment expenses	(994)	(3,523)
Accrued medical payables - other	(9,874)	(7,197)
Plus: Settlements payable, net	<u>30,506</u>	<u>18,286</u>
Net balance at beginning of year	<u>84,036</u>	<u>203,603</u>
Incurring related to		
Current year	559,723	1,001,666
Prior years	<u>(3,613)</u>	<u>(7,796)</u>
Total incurred	<u>556,110</u>	<u>993,870</u>
Paid related to		
Current year	487,195	935,878
Prior years	<u>63,985</u>	<u>177,559</u>
Total paid	<u>551,180</u>	<u>1,113,437</u>
Net balance at end of year	88,966	84,036
Plus:		
Accrual for claims adjustment expenses	3,040	994
Accrued medical payables - other	1,154	9,874
Less: Settlements payable, net	<u>(35,610)</u>	<u>(30,506)</u>
Balance at end of year	<u>\$ 57,550</u>	<u>\$ 64,398</u>

Medical claims and related expenses in the accompanying consolidated statements of operations include other nonclaims related costs. These nonclaims related expenses were for directly delivered services and medical cost risk sharing and incentives.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

12. Long-Term Obligations

Long-term obligations issued by PHS and its affiliates consist of the following:

	September 30,	
	2019	2018
Massachusetts Health and Educational Facilities Authority (Authority) Revenue Bonds		
Series F*, variable interest rate of 1.71% and 1.57%, final maturity in 2040	\$ 231,300	\$ 232,850
Series G*, variable interest rate of 1.90% and 1.61%, final maturity in 2042	75,000	75,000
Series H*, variable interest rate of 1.38% and 1.59%, final maturity in 2042	167,700	170,005
Series I*, average fixed interest rate of 4.76%, final maturity 2020	18,175	29,480
Series J*, average fixed interest rate of 5.00%, final maturity in 2024	49,035	70,370
Series P*, variable interest rate of 1.54% and 1.52%, final maturity in 2027	150,000	150,000
Massachusetts Development Finance Agency (Agency) Revenue Bonds		
Series K*, average fixed interest rate of 4.75%, variable interest rate of 1.56% and 1.53%, final maturity in 2046	122,170	136,360
Series L, average fixed interest rate of 4.93%, final maturity in 2032	87,705	95,065
Series M*, average fixed interest rate of 4.96%, variable interest rate of 1.75% and 1.59%, final maturity in 2048	295,000	347,500
Series N*, variable interest rate of 2.06% and 2.07%, final maturity in 2044	131,300	132,850
Series O*, average fixed interest rate of 4.58%, variable interest rate of 2.06% and 2.04%, final maturity in 2050	307,840	312,040
Series Q*, average fixed interest rate of 4.80%, final maturity in 2047	420,280	422,695
Series R*, variable interest rate of 1.97% and 1.99%, final maturity in 2052	100,000	100,000
Series S*, average fixed interest rate of 4.63%, variable interest rate of 2.05% and 2.03%, final maturity in 2047	942,850	948,105
Series T*, variable interest rate of 2.12%, final maturity of 2049	158,250	-
MEEI Series D*, variable rate of n/a and 3.31%, final maturity in 2038	-	54,703
New Hampshire Health and Education Facilities Authority Revenue Bonds		
Series 2017, average fixed interest rate of 5.00%, final maturity in 2041	97,405	99,565
PHS Taxable Debt		
Series 2007 taxable bonds, fixed interest rate of 6.26%, final maturity in 2037	100,000	100,000
Series 2011 taxable bonds, fixed interest rate of 3.44%, final maturity in 2021	250,000	250,000
2012 Taxable Senior Notes, fixed interest rate of 4.11%, final maturity in 2052	400,000	400,000
2014 Taxable Senior Notes, fixed interest rate of 4.73%, final maturity in 2044	150,000	150,000
Series 2015 taxable bonds, fixed interest rate of 4.12%, final maturity in 2055	300,000	300,000
2016 Taxable Senior Notes, fixed interest rate of 3.89%, final maturity in 2046	225,000	225,000
Series 2017 taxable bonds, fixed interest rate of 3.77%, final maturity in 2048	303,644	303,644
2018 Taxable Senior Notes, fixed interest rate of 4.60%, final maturity in 2049	400,000	-
Other obligations	6,912	10,308
Line of credit	-	52,848
Capital lease obligations	1,870	3,181
Total long-term obligations, par value	<u>5,491,436</u>	<u>5,171,569</u>
Unamortized discounts and premiums, net	247,170	259,487
Deferred financing costs	(23,245)	(25,698)
Total long-term obligations, net	<u>5,715,361</u>	<u>5,405,358</u>
Less: Current portion	455,165	459,390
	<u>\$ 5,260,196</u>	<u>\$ 4,945,968</u>

* Denotes series is issued in multiple subseries.

Variable interest rates are presented at September 30, 2019 and 2018, respectively.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Aggregate maturities and payments of long-term obligations during the next five years and thereafter (including the impact of unamortized discounts and premiums, net and deferred financing costs) and other amounts classified as current liabilities, are as follows:

	Scheduled Maturities	Bonds Supported by Partners HealthCare Liquidity	Bonds Supported by Bank Facilities	Total
2020	\$ 83,720	\$ 215,195	\$ 156,250	\$ 455,165
2021	332,354	-	-	332,354
2022	101,303	-	-	101,303
2023	103,969	-	-	103,969
2024	109,812	-	-	109,812
Thereafter	4,612,758	-	-	4,612,758
	<u>\$ 5,343,916</u>	<u>\$ 215,195</u>	<u>\$ 156,250</u>	<u>\$ 5,715,361</u>

The scheduled maturities represent annual payments as required under debt repayment schedules. The current portion of long-term obligations includes the payments scheduled to be made in 2020, bonds supported by Partners HealthCare liquidity that can be tendered prior to September 30, 2020, and bonds supported by bank facilities with financial institutions (standby bond purchase agreements or letters of credit) that expire prior to September 30, 2020. The bonds supported by Partners HealthCare liquidity provide the bondholder with an option to tender the bonds to Partners HealthCare. Accordingly, these bonds are classified as a current liability. The bonds supported by bank facilities provide the bondholder with an option to tender the bonds to the liquidity provider. Generally accepted accounting principles require bonds backed by bank facilities expiring within one year of the balance sheet date as well as potential principal amortization under bank facilities' term out provisions due within one year of the balance sheet date to be classified as a current liability.

If bonds supported by bank facilities cannot be remarketed the repayment terms of those bank facilities could result in repayments of \$56,250 in 2020, \$156,961 in 2021, \$106,961 in 2022, \$44,461 in 2023, \$11,111 in 2024 and \$5,556 thereafter. If the bonds supported by Partners HealthCare liquidity cannot be remarketed, payments on these bonds would include \$215,195 in 2020, \$86,600 in 2021, \$50,230 in 2022, \$119,870 in 2023, \$69,250 in 2024 and \$191,935 thereafter.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Scheduled maturities of long-term debt for each of the next five years (excluding the impact of unamortized discounts and premiums, net and deferred financing costs), assuming bonds backed by bank facilities are remarketed and the standby purchase agreements are renewed and bonds supported by Partners HealthCare liquidity are remarketed, are as follows:

2020	\$ 83,720
2021	334,959
2022	104,108
2023	106,974
2024	112,917
Thereafter	4,748,757
	<u>\$ 5,491,435</u>

Interest expense paid during the years ended September 30, 2019 and 2018 was \$230,348 and \$201,628, respectively.

In January 2019, PHS issued \$158,250 of Partners HealthCare System Series 2019 T Revenue Bonds. The bond proceeds were used to refund Massachusetts Eye and Ear Infirmary Series D Bonds (\$55,402), refund Series M-2 Bonds (\$50,000) and repay the borrowing under the Credit Agreement (\$52,848).

In December 2018 and January 2019, PHS issued \$350,000 and \$50,000, respectively, of Partners HealthCare System 2018 Taxable Senior Notes. Proceeds from the notes will be used to finance certain capital projects.

In December 2017, PHS issued \$948,105 of Partners HealthCare System Series 2017 S Revenue Bonds, plus bond premium of \$122,734. The bond proceeds, net of issuance costs of \$5,359 were used to refund portions of Series G (\$191,532), Series I (\$111,556), Series J (\$344,484), Series K (\$44,331), Series L (\$231,658) and Series M (\$141,920).

In December 2017, PHS issued \$99,565 of Partners HealthCare System Series 2017 NH Revenue Bonds, plus bond premium of \$17,488. The bond proceeds, net of issuance costs of \$562 were used to refund Wentworth-Douglass Hospital Series 2011 (\$97,206), Series 2016A (\$14,325) and Series 2016B (\$4,960).

In December 2017, PHS issued \$303,644 of Partners HealthCare System Series 2017 Taxable Bonds. The bond proceeds, net of issuance costs of \$1,943, were used to refund portions of Series K Bonds (\$50,054) and to finance certain capital projects (\$251,647).

Partners HealthCare bonds are general obligations of PHS supported by guarantees from BH, The Brigham and Women's Hospital, Inc., MGH and The General Hospital Corporation which may be suspended under certain conditions.

PHS and affiliate debt agreements contain certain covenants, including a minimum debt service coverage ratio and limitations on additional indebtedness and asset transfers.

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

Credit Agreement

Partners HealthCare maintains a \$150,000 Credit Agreement that provides access to same day funds. Advances under the Credit Agreement bear a variable rate of interest based on the London Interbank Offered Rate (LIBOR). As of September 30, 2019, there were no amounts outstanding under the Credit Agreement. The Credit Agreement expires in June 2020.

13. Derivatives

Interest Rate Swaps

Partners HealthCare utilizes swap contracts to manage fluctuations in cash flows resulting from interest rate risk on certain of its variable rate bonds. These bonds expose Partners HealthCare to variability in interest payments due to changes in interest rates. Management believes that it is prudent to limit the variability of its interest payments. To meet this objective and to take advantage of low interest rates, Partners HealthCare entered into various swap contracts involving the exchange of fixed rate payments by Partners HealthCare for variable rate payments from several counterparties based on a percentage of LIBOR.

By using swap contracts to manage the risk of changes in interest rates, Partners HealthCare exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the swap contracts. When the fair value of a swap contract is positive, the counterparty has a liability to Partners HealthCare, which creates credit risk. Partners HealthCare minimizes its credit risk by entering into swap contracts with several counterparties and requiring the counterparty to post collateral for the benefit of Partners HealthCare based on the credit rating of the counterparty and the fair value of the swap contract. Conversely, when the fair value of a swap contract is negative, Partners HealthCare has a liability to the counterparty and, therefore, it does not possess credit risk. Under certain circumstances, Partners HealthCare may be required to post collateral for the benefit of the counterparty. Market risk is the adverse effect on the value of a financial instrument that results from a change in interest rates. The market risk associated with interest rate changes is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

The following is a summary of the outstanding positions under these swap contracts as of September 30, 2019:

Effective Date	Notional Amount	Maturity	Rate Paid	Rate Received
5/1/03	\$ 150,000	7/1/35	4.40%	67% 1-month LIBOR
10/15/03	9,945	1/1/31	3.85%	70% 1-month LIBOR
7/1/05	150,000	7/1/40	3.63%	67% 1-month LIBOR
7/1/05	22,400	7/1/25	5.11%	67% 6-month LIBOR
9/1/05	3,350	1/1/23	3.26%	70% 1-month LIBOR
7/1/07	150,000	7/1/42	3.46%	67% 1-month LIBOR
7/1/09	100,000	7/1/44	3.71%	67% 1-month LIBOR
7/1/11	100,000	7/1/46	3.74%	67% 1-month LIBOR
7/1/13	100,000	7/1/48	3.80%	67% 1-month LIBOR
7/1/15	50,000	7/1/50	3.80%	67% 1-month LIBOR
4/1/16	100,000	7/1/52	3.76%	67% 1-month LIBOR
7/1/17	50,000	7/1/52	3.74%	67% 1-month LIBOR
7/1/19	50,000	7/1/49	1.85%	67% 1-month LIBOR
7/1/21	50,000	7/1/51	1.84%	67% 1-month LIBOR
7/1/23	50,000	7/1/53	1.82%	67% 1-month LIBOR
7/1/24	100,000	7/1/54	1.81%	67% 1-month LIBOR
7/1/25	50,000	7/1/55	1.77%	67% 1-month LIBOR
7/1/26	100,000	7/1/56	1.78%	67% 1-month LIBOR
7/1/27	100,000	7/1/57	1.78%	67% 1-month LIBOR
	<u>\$ 1,485,695</u>			

Partners HealthCare's swap contracts contain provisions that require collateral to be posted if the fair value of the swap exceeds certain thresholds. The collateral thresholds reflect the current credit ratings issued by major credit rating agencies on Partners HealthCare's and the counterparty's debt. Declines in Partners HealthCare's or the counterparty's credit ratings would result in lower collateral thresholds and, consequently, the potential for additional collateral postings by Partners HealthCare or the counterparty. As of September 30, 2019 and 2018, Partners HealthCare had posted collateral of \$204,916 and \$40,279, respectively. Partners HealthCare has established procedures to ensure that liquidity and securities are available to meet collateral posting requirements.

Upon the occurrence of certain events of default or termination events identified in the swap contracts, either Partners HealthCare or the counterparty could terminate the contracts in accordance with their terms. Termination results in the payment of a termination amount by one party that attempts to compensate the other party for its economic losses. If interest rates at the time of termination are lower than those specified in the swap contract, Partners HealthCare would make a payment to the counterparty. Conversely, if interest rates at such time are higher, the counterparty would make a payment to Partners HealthCare.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

14. Commitments

Leases

Partners HealthCare has capital and noncancelable operating leases for certain buildings and equipment. Minimum future lease commitments under noncancelable leases for the next five years and thereafter are as follows:

	Capital Leases	Operating Leases
2020	\$ 1,170	\$ 185,630
2021	754	171,807
2022	-	151,033
2023	-	137,278
2024	-	112,198
Thereafter	-	539,233
	<hr/>	<hr/>
Total lease payments	1,924	\$ 1,297,179
	<hr/>	<hr/>
Less: Amount representing interest	54	
	<hr/>	
Capital lease obligations at September 30, 2019	<u>\$ 1,870</u>	

Rental expense under operating leases approximated \$192,208 and \$187,800 in 2019 and 2018, respectively.

15. Pension and Postretirement Healthcare Benefit Plans

Substantially all employees of Partners HealthCare are covered under noncontributory defined benefit pension plans and various defined contribution pension plans. In addition, certain affiliates provide subsidized healthcare benefits for retired employees on a self-insured basis, with the benefit obligation being partially funded. These retiree healthcare benefits are administered through an insurance company and are accounted for on the accrual basis, which includes an estimate of future payments for claims incurred.

In 2019, a voluntary retirement program was offered to a sub-set of Newton-Wellesley Hospital employees who met specific criteria. For those employees who accepted the voluntary retirement package, the benefits of this program were conveyed as increased contributions to the defined benefit pension plan and the postretirement health plan. The total cost of this program was approximately \$31,803, of which approximately \$29,266 was for the defined benefit plan and \$2,537 was for the postretirement plan. In September 2019, approximately \$28,400 was funded into the defined benefit plan related to this program with the remaining \$866 being funded in October 2019.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Total expense for these plans consists of the following:

	Years Ended September 30,	
	2019	2018
Defined benefit plans	\$ 256,768	\$ 276,619
Defined contribution plans	179,195	166,743
Postretirement healthcare benefit plans	(110)	(3,345)
	<u>\$ 435,853</u>	<u>\$ 440,017</u>

Information regarding benefit obligations, plan assets, funded status, expected cash flows and net periodic benefit cost follows within this footnote.

Benefit Obligations

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2019	2018	2019	2018
Change in benefit obligations				
Benefit obligations at beginning of year	\$ 7,028,994	\$ 6,916,236	\$ 171,425	\$ 161,100
Service cost	324,429	329,653	3,105	3,157
Interest cost	309,280	278,872	6,618	4,902
Plan amendments (gain) loss	827	(6,487)	-	-
Actuarial (gain) loss	1,231,610	(309,035)	17,396	511
Special termination benefits	29,266	-	2,537	-
Benefits paid	(227,558)	(307,111)	(8,464)	(7,851)
Expenses paid	(13,017)	(15,760)	-	-
Employee contributions	129	142	8,620	9,606
Acquisition	-	142,484	-	-
Benefit obligations at end of year	<u>\$ 8,683,960</u>	<u>\$ 7,028,994</u>	<u>\$ 201,237</u>	<u>\$ 171,425</u>

The accumulated benefit obligation for all defined benefit pension plans at the end of 2019 and 2018 was \$8,267,644 and \$6,695,351, respectively.

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2019	2018	2019	2018
Weighted-average assumptions used to determine end of year benefit obligation				
Discount rate	3.40%	4.31%	3.05% - 3.30%	3.80% - 4.30%
Rate of compensation increase	3.00% - 4.45%	3.00% - 4.45%	N/A	N/A
Postretirement healthcare cost trend rate for next year	N/A	N/A	5.50%	6.00%
Rate to which the cost trend rate is to decline	N/A	N/A	5.00%	5.00%
Year that rate reaches the ultimate trend rate	N/A	N/A	2020	2020

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the postretirement healthcare plans. A one-percentage-point change in assumed healthcare cost trend rates would have the following effect:

	One-Percentage-Point	
	Increase	Decrease
Effect on postretirement benefit obligation	\$ 3,321	\$ (3,734)

Plan Assets

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2019	2018	2019	2018
Change in plan assets				
Fair value of plan assets at beginning of year	\$ 6,527,812	\$ 6,039,237	\$ 117,742	\$ 103,262
Actual return on plan assets	253,581	422,552	(534)	5,391
Employer contributions	258,277	288,643	4,408	7,334
Employee contributions	129	142	8,620	9,606
Benefits paid	(227,558)	(307,111)	(8,464)	(7,851)
Expenses paid	(13,017)	(15,760)	-	-
Acquisition	-	100,109	-	-
Fair value of plan assets at end of year	<u>\$ 6,799,224</u>	<u>\$ 6,527,812</u>	<u>\$ 121,772</u>	<u>\$ 117,742</u>

The assets of the defined benefit pension plans are aggregated in a single master trust (Master Trust) and managed as one asset pool. The investment objective for the Master Trust is to achieve the highest reasonable total return after considering (i) plan liabilities, (ii) funding status and projected cash flows, (iii) projected market returns, valuations and correlations for various asset classes and (iv) ability and willingness to incur market risk.

Within the Master Trust, assets are allocated to managers with investment mandates that may range from a single sub-asset class to very broad mandates; with restrictions that range from long-only to unconstrained; and with management structures ranging from separately managed funds to mutual/commingled funds to private partnerships. Less market sensitive managers employ long/short equity and diversified strategies. Investment risks (concentration, correlation, valuation, liquidity, leverage, mandate compliance, etc.) are monitored at the manager level as well as the pool level.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

The following table presents the capital allocations, reported exposures of the allocations and policy benchmarks by manager mandate within the Master Trust. Some managers, particularly less market sensitive managers, invest capital among multiple asset classes. Beginning in October 2018, the Long Term Policy Benchmark is 70% Morgan Stanley Capital International All Country World Index and 30% Barclays Global Aggregate Bond. Prior to October 2018, the Long Term Policy benchmark was set annually as a policy weighted calculation of multiple and private benchmarks and the weight of these benchmarks was changed each fiscal year at the direction of the PHS Investment Committee.

	September 30, 2019		September 30, 2018		
	Dollars	Reported Exposures	Dollars	Reported Exposures	Policy Benchmark
Global equity	\$ 865,191	12.7 %	\$ 834,907	12.8 %	11.0 %
Traditional U.S. equity	758,228	11.2 %	832,940	12.8 %	13.0 %
Traditional foreign developed equity	781,196	11.5 %	812,674	12.4 %	12.0 %
Traditional emerging markets equity	713,761	10.5 %	770,919	11.8 %	13.0 %
Private equity	763,774	11.2 %	580,925	8.9 %	8.0 %
Real assets	271,875	4.0 %	223,624	3.4 %	3.0 %
Less Market Sensitive managers	2,287,076	33.6 %	2,198,471	33.7 %	35.0 %
Fixed income managers	358,123	5.3 %	273,352	4.2 %	5.0 %
	<u>\$ 6,799,224</u>	<u>100.0 %</u>	<u>\$ 6,527,812</u>	<u>100.0 %</u>	<u>100.0 %</u>

The postretirement healthcare benefit plans assets are invested in commingled funds with the objective of achieving returns to satisfy plan obligations and with a level of volatility commensurate with Partners HealthCare's overall financial profile.

The following table presents plan assets, by type of investment, as of September 30, 2019 and 2018 measured at fair value on a recurring basis using the fair value hierarchy defined in Note 7:

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Investments Valued Using NAV as a Practical Expedient	Fair Value at September 30, 2019
Defined benefit pension plans				
Invested cash equivalents	\$ 103,891	\$ -	\$ -	\$ 103,891
Separately managed investments	666,531	191,541	310	858,382
Commingled funds	-	1,506,425	-	1,506,425
Private partnerships	88,551	-	4,241,975	4,330,526
	<u>858,973</u>	<u>1,697,966</u>	<u>4,242,285</u>	<u>6,799,224</u>
Postretirement healthcare benefit plans				
Commingled funds	28,405	81,577	11,790	121,772
Total plan assets	<u>\$ 887,378</u>	<u>\$ 1,779,543</u>	<u>\$ 4,254,075</u>	<u>\$ 6,920,996</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

	Fair Value Measurements Using			Fair Value at September 30, 2018
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Investments Valued Using NAV as a Practical Expedient	
Defined benefit pension plans				
Invested cash equivalents	\$ 43,228	\$ -	\$ -	\$ 43,228
Separately managed investments	664,321	304,620	-	968,941
Commingled funds	-	1,708,124	-	1,708,124
Private partnerships	-	-	3,807,519	3,807,519
	<u>707,549</u>	<u>2,012,744</u>	<u>3,807,519</u>	<u>6,527,812</u>
Postretirement healthcare benefit plans				
Commingled funds	19,474	83,863	14,405	117,742
Total plan assets	<u>\$ 727,023</u>	<u>\$ 2,096,607</u>	<u>\$ 3,821,924</u>	<u>\$ 6,645,554</u>

In evaluating the Level at which private partnerships have been classified within the fair value hierarchy, management has assessed factors including, but not limited to price transparency, the ability to redeem these investments at net asset value at the measurement date, and the existence or absence of certain restrictions at the measurement date. Investments in private partnerships generally have limited redemption options for investors and, subsequent to final closing, may or may not permit subscriptions by new or existing investors. These entities may also have the ability to impose gates, lockups and other restrictions on an investor's ability to readily redeem out of their investment interest in the fund. As of September 30, 2019 and 2018, Partners HealthCare has excluded all assets from the fair value hierarchy for which fair value is measured using net asset value per share as a practical expedient.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Funded Status

The funded status of the plans recognized in the balance sheet and the amounts recognized in unrestricted net assets follows:

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2019	2018	2019	2018
End of year				
Fair value of plan assets at measurement date	\$ 6,799,224	\$ 6,527,812	\$ 121,772	\$ 117,742
Benefit obligations at measurement date	(8,683,960)	(7,028,994)	(201,237)	(171,425)
Funded status	<u>\$ (1,884,736)</u>	<u>\$ (501,182)</u>	<u>\$ (79,465)</u>	<u>\$ (53,683)</u>
Amounts recognized in the balance sheet consist of				
Current liabilities	\$ (2,562)	\$ (1,820)	\$ (1,161)	\$ (1,488)
Long-term liabilities	(1,882,174)	(499,362)	(78,304)	(52,195)
	<u>\$ (1,884,736)</u>	<u>\$ (501,182)</u>	<u>\$ (79,465)</u>	<u>\$ (53,683)</u>
Amounts not yet recognized in net periodic benefit cost and included in unrestricted net assets consist of				
Actuarial net loss (gain)	\$ 2,858,791	\$ 1,508,828	\$ 41,230	\$ 16,214
Prior service cost (credit)	(261,883)	(296,658)	(18,931)	(24,220)
	<u>\$ 2,596,908</u>	<u>\$ 1,212,170</u>	<u>\$ 22,299</u>	<u>\$ (8,006)</u>
Amounts recognized in unrestricted net assets consist of				
Current year actuarial (gain) loss	\$ 1,440,052	\$ (298,585)	\$ 25,870	\$ 2,085
Amortization of actuarial gain (loss)	(89,760)	(133,111)	(861)	(847)
Current year prior service cost (credit)	827	(6,487)	-	-
Amortization of prior service (cost) credit	33,947	32,338	5,289	5,289
	<u>\$ 1,385,066</u>	<u>\$ (405,845)</u>	<u>\$ 30,298</u>	<u>\$ 6,527</u>

At the end of 2019 and 2018, the projected benefit obligation, accumulated benefit obligation and fair value of plan assets for pension plans with an accumulated benefit obligation in excess of plan assets were as follows:

	2019	2018
Accumulated benefit obligation in excess of plan assets		
Projected benefit obligation	\$ 8,683,960	\$ 7,028,994
Accumulated benefit obligation	8,267,644	6,695,351
Fair value of plan assets	6,799,224	6,527,812

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Expected Cash Flows

Information about the expected cash flows for the defined benefit and postretirement healthcare benefit plans is as follows:

	Defined Benefit Pension Plans	Postretirement Healthcare Benefit Plans	
Expected employer contributions			
2020	\$ 348,862	\$ 3,247	
			Medicare Subsidy
Expected benefit payments (receipts)			
2020	\$ 315,969	\$ 10,629	\$ (24)
2021	344,627	11,509	(21)
2022	363,424	12,344	(19)
2023	390,881	13,068	(15)
2024	406,963	13,719	(13)
2025-2029	2,330,152	73,141	(40)

Net Periodic Benefit Cost

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2019	2018	2019	2018
Service cost	\$ 324,429	\$ 329,653	\$ 3,105	\$ 3,157
Interest cost	309,280	278,872	6,618	4,902
Expected return on plan assets	(462,020)	(432,679)	(7,942)	(6,962)
Special termination benefits	29,266	-	2,537	-
Amortization of				
Prior service cost (credit)	(33,947)	(32,338)	(5,289)	(5,289)
Actuarial net (gain) loss	89,760	133,111	861	847
Net periodic benefit cost	<u>\$ 256,768</u>	<u>\$ 276,619</u>	<u>\$ (110)</u>	<u>\$ (3,345)</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Amounts expected to be amortized from unrestricted net assets into net periodic benefit cost during the year ending September 30, 2020 are as follows:

		Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans
Actuarial net loss (gain)	\$	168,383	\$	3,661
Prior service cost (credit)		(34,095)		(5,289)

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2019	2018	2019	2018
Weighted-average assumptions used to determine net periodic pension and postretirement cost				
Discount rate	4.31 %	3.90% - 4.00%	3.80% - 4.30%	2.85% - 3.85%
Expected return on plan assets	7.25 %	6.90% - 7.25%	6.75 %	6.75 %
Rate of compensation increase	3.00% - 4.45%	3.00% - 4.45%	N/A	N/A
Healthcare cost trend rate for this year	N/A	N/A	6.00%	5.00% - 6.50%
Rate to which the cost trend rate is to decline	N/A	N/A	5.00%	5.00%
Year that rate reaches the ultimate trend rate	N/A	N/A	2021	2021

Partners HealthCare uses a long-term return assumption which is validated annually by obtaining long-term asset return, volatility and correlation projections for relevant asset class indexes; modifying volatility and correlations to reflect the actual historical experience of the active managers; calculating the expected return using benchmark weights and indexes; and comparing the return assumption to the sum of the expected return and the historical outperformance of the actual return versus the benchmark. Partners HealthCare regularly monitors the active risk of the Master Trust by a statistical regression of the return series of the actual portfolio to that of the policy benchmark.

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the postretirement healthcare plans. A one-percentage-point change in assumed healthcare cost trend rates would have the following effect:

	One-Percentage-Point	
	Increase	Decrease
Effect on service and interest cost	\$ 89	\$ (71)

Partners HealthCare System, Inc. and Affiliates

Notes to Consolidated Financial Statements

September 30, 2019 and 2018

(in thousands of dollars)

16. Professional Liability Insurance

Partners HealthCare insures substantially all of its professional and general liability risk on a claims-made basis in cooperation with other healthcare organizations in the Greater Boston area through a captive insurance company, Controlled Risk Insurance Company Ltd. (CRICO). PHS owns 11% of CRICO. The investment is accounted for on the cost basis of accounting. The policies cover claims made during their respective terms, but not those occurrences for which claims may be made after expiration of the policy, except for certain tail liabilities which CRICO has assumed on an occurrence basis through December 31, 2019. Management intends to renew its coverage on a claims-made basis and has no reason to believe that it will be prevented from such renewal. During 2018, CRICO announced and paid a dividend to member organizations. As a result, Partners HealthCare recognized a dividend of \$84,900 as a nonoperating gain.

Partners HealthCare follows the accounting policy of establishing reserves to cover the ultimate costs of medical malpractice claims, which include costs associated with litigating or settling claims. The liability also includes an estimated tail liability, established to cover all malpractice claims incurred but not reported to the insurance company as of the end of the year. The total malpractice liability of \$542,136 and \$512,516 as of September 30, 2019 and 2018, respectively, is presented as an accrued professional liability in the consolidated balance sheets. These reserves have been recorded on a discounted basis using an interest rate of 3.25% and 4.0% as of September 30, 2019 and 2018, respectively.

Partners HealthCare also recognizes an insurance receivable from CRICO, at the same time that it recognizes the liability, measured on the same basis as the liability, subject to the need for a valuation allowance for uncollectible amounts. The insurance receivable of \$459,634 and \$433,120 as of September 30, 2019 and 2018, respectively, is reported as a component of other assets in the consolidated balance sheets.

Management is not aware of any claims against Partners HealthCare or factors affecting CRICO that would cause the expense for professional liability risks to vary materially from the amount provided.

17. Concentration of Credit Risk

Financial instruments that potentially subject Partners HealthCare to concentration of credit risk consist of patient accounts receivable, research grants receivable, pledges receivable, premiums receivable, certain investments and interest rate swaps.

Partners HealthCare receives a significant portion of its payments for services rendered from a limited number of government and commercial third-party payers, including Medicare, Medicaid, Blue Cross and Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Research funding is provided through many government and private sponsors. AllWays Health receives a portion of its premium revenue from the Commonwealth. Pledges receivable are due from multiple donors. Partners HealthCare assesses the credit risk for pledges based on history and the financial wherewithal of donors, most of which are individuals or organizations well known to Partners HealthCare.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Investments, which include government and agency securities, stocks and corporate bonds, and private partnerships and other investments, are not concentrated in any corporation or industry or with any single counterparty. Alternative investments are less liquid than Partners HealthCare's other investments. The reported values of the alternative investments may differ significantly from the values that would have been used had a ready market for those securities existed. These instruments may contain elements of both credit and market risk. Such risks include, but are not limited to, limited liquidity, absence of oversight, dependence upon key individuals, emphasis on speculative investments and nondisclosure of portfolio composition.

Partners HealthCare minimizes the credit risk it is exposed to under interest rate swap agreements by utilizing several counterparties and requiring the counterparties to post collateral for the benefit of Partners HealthCare when the fair value of the swap is positive. Partners HealthCare minimizes its counterparty risk by contracting with nine counterparties, none of which accounts for more than 20% of the aggregate notional amount of the swap contracts.

18. Net Assets

Donor restricted net assets are available for the following purposes:

	September 30,	
	2019	2018
Donor restricted		
Charity care	\$ 173,946	\$ 138,327
Buildings and equipment	133,542	126,020
Clinical care, research and academic	2,081,896	1,634,899
	<u>\$ 2,389,384</u>	<u>\$ 1,899,246</u>

Endowment

Partners HealthCare's endowment consists of numerous individual funds established for a variety of purposes and includes both donor restricted endowment funds and funds designated by boards to function as endowment.

Partners HealthCare has interpreted UPMIFA as requiring the preservation of the value of the original gift of the donor restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, Partners HealthCare classifies as donor restricted net assets the original value of all gifts with donor stipulations to maintain in perpetuity, accumulated gains required to be maintained in perpetuity by explicit donor stipulation or accumulated gains which have been appropriated for expenditure in a manner consistent with the standard of prudence prescribed by UPMIFA. In accordance with UPMIFA, Partners HealthCare considers several factors in making a determination to appropriate or accumulate donor restricted endowment funds. These factors include: the duration and preservation of the fund; the purposes of the organization and the donor restricted endowment fund; general economic conditions; the possible effect of inflation and deflation; the expected total return from income and the appreciation of investments; other resources of the organization; and the investment policies of the organization.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Endowment Funds with Deficits

From time to time, the value of assets associated with individual donor restricted endowment funds may fall below the value of the initial and subsequent donor gift amounts. These deficits generally result from unfavorable market fluctuations that occurred after the investment of new donor restricted contributions or subsequent endowment additions. When such endowment deficits exist, they are classified as a reduction to donor restricted net assets.

The following presents the endowment net asset composition by type of fund as of September 30, 2019 and 2018 and the changes in endowment assets for the years ended September 30, 2019 and 2018:

	Unrestricted	Donor Restricted	Total
Endowment net asset composition by type of fund as of September 30, 2019			
Donor-restricted endowment funds	\$ -	\$ 1,839,545	\$ 1,839,545
Board-designated endowment funds	1,171,631	-	1,171,631
Total funds	<u>\$ 1,171,631</u>	<u>\$ 1,839,545</u>	<u>\$ 3,011,176</u>
	Unrestricted	Donor Restricted	Total
Changes in endowment net assets			
Endowment net assets at September 30, 2018	<u>\$ 1,264,410</u>	<u>\$ 1,365,096</u>	<u>\$ 2,629,506</u>
Investment return			
Investment income	3,563	5,379	8,942
Net realized and unrealized appreciation (depreciation)	39,907	60,014	99,921
Total investment return	<u>43,470</u>	<u>65,393</u>	<u>108,863</u>
Contributions	7,773	286,193	293,966
Appropriation of endowment assets for expenditure	(50,141)	(69,938)	(120,079)
Other changes	(93,881)	192,801	98,920
Total changes	<u>(92,779)</u>	<u>474,449</u>	<u>381,670</u>
Endowment net assets at September 30, 2019	<u>\$ 1,171,631</u>	<u>\$ 1,839,545</u>	<u>\$ 3,011,176</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

	Unrestricted	Donor Restricted	Total
Endowment net asset composition by type of fund as of September 30, 2018			
Donor-restricted endowment funds	\$ -	\$ 1,365,096	\$ 1,365,096
Board-designated endowment funds	1,264,410	-	1,264,410
Total funds	<u>\$ 1,264,410</u>	<u>\$ 1,365,096</u>	<u>\$ 2,629,506</u>

	Unrestricted	Donor Restricted	Total
Changes in endowment net assets			
Endowment net assets at September 30, 2017	<u>\$ 1,193,485</u>	<u>\$ 1,165,593</u>	<u>\$ 2,359,078</u>
Investment return			
Investment income	3,372	32,124	35,496
Net realized and unrealized appreciation (depreciation)	73,148	85,502	158,650
Total investment return	<u>76,520</u>	<u>117,626</u>	<u>194,146</u>
Contributions	7,416	71,212	78,628
Appropriation of endowment assets for expenditure	(47,305)	(60,203)	(107,508)
Other changes	34,294	70,868	105,162
Total changes	<u>70,925</u>	<u>199,503</u>	<u>270,428</u>
Endowment net assets at September 30, 2018	<u>\$ 1,264,410</u>	<u>\$ 1,365,096</u>	<u>\$ 2,629,506</u>

19. Functional Expenses

Expenses by functional classification are allocated based on management's judgement, nature of the expense and historical experience and are as follows:

	Healthcare services	Research and academic	Insurance	General and administrative	Year Ended September 30, 2019
Operating expenses					
Employee compensation and benefit expense	\$ 5,975,215	\$ -	\$ 57,906	\$ 1,076,888	\$ 7,110,009
Supplies and other expenses	3,229,298	-	52,091	57,942	3,339,331
Medical claims and related expenses	-	-	556,110	-	556,110
Direct academic and research expenses	-	1,594,085	-	-	1,594,085
Depreciation and amortization expenses	603,794	-	-	82,580	686,374
Interest expense	128,900	-	-	52,022	180,922
Total operating expenses	<u>\$ 9,937,207</u>	<u>\$ 1,594,085</u>	<u>\$ 666,107</u>	<u>\$ 1,269,432</u>	<u>\$ 13,466,831</u>

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

Direct academic and research expenses include \$924,570 of employee compensation and benefit expense and \$669,515 of supplies and other expenses for the year ended September 30, 2019.

	Healthcare services	Research and academic	Insurance	General and administrative	Year Ended September 30, 2019
Nonoperating expenses					
Employee compensation and benefit expense	\$ -	\$ -	\$ -	\$ 61,256	\$ 61,256
Supplies and other expenses	-	-	-	58,634	58,634
Interest expense	-	-	-	23,552	23,552
Total nonoperating expenses	\$ -	\$ -	\$ -	\$ 143,442	\$ 143,442

	Healthcare services	Research and academic	Insurance	General and administrative	Year Ended September 30, 2018
Operating expenses					
Employee compensation and benefit expense	\$ 5,535,828	\$ -	\$ 60,916	\$ 1,038,837	\$ 6,635,581
Supplies and other expenses	2,875,811	-	62,064	89,957	3,027,832
Medical claims and related expenses	-	-	993,870	-	993,870
Direct academic and research expenses	-	1,485,467	-	-	1,485,467
Depreciation and amortization expenses	583,960	-	-	90,070	674,030
Interest expense	130,590	-	-	50,000	180,590
Total operating expenses	\$ 9,126,189	\$ 1,485,467	\$ 1,116,850	\$ 1,268,864	\$ 12,997,370

Direct academic and research expenses include \$861,570 of employee compensation and benefit expense and \$623,897 of supplies and other expenses for the year ended September 30, 2018.

	Healthcare services	Research and academic	Insurance	General and administrative	Year Ended September 30, 2018
Nonoperating expenses					
Employee compensation and benefit expense	\$ -	\$ -	\$ -	\$ 57,927	\$ 57,927
Supplies and other expenses	-	-	-	47,476	47,476
Interest expense	-	-	-	23,914	23,914
Total nonoperating expenses	\$ -	\$ -	\$ -	\$ 129,317	\$ 129,317

20. Contingencies

Partners HealthCare is subject to complaints, claims and litigation which arise in the normal course of business. In addition, Partners HealthCare is subject to reviews and investigations by various federal and state government agencies to assure compliance with applicable laws, some of which are subject to different interpretations. Governmental review of compliance by healthcare organizations, including Partners HealthCare, has increased.

Partners HealthCare System, Inc. and Affiliates
Notes to Consolidated Financial Statements
September 30, 2019 and 2018

(in thousands of dollars)

21. Pending Transactions

On April 12, 2019, MGH and Wentworth-Douglas entered into a definitive affiliation agreement with Exeter Health Resources, Inc. This transaction is currently being reviewed by state and federal agencies.

22. Subsequent Events

Partners HealthCare has assessed the impact of subsequent events through December 6, 2019, the date the audited financial statements were issued. During this period, there were no subsequent events that require adjustment to the audited financial statements.