Henry Ford Health System

Consolidated Financial Statements as of and
for the Years Ended December 31, 2016 and 2015,
and Independent Auditors' Report

TABLE OF CONTENTS

Deloitte.

Deloitte & Touche LLP
200 Renaissance Center
Suite 3900
Detroit, MI 48243-1313
USA

Tel: +1 313 396 3000
Fax: +1 313 396 3618
www.deloitte.com

INDEPENDENT AUDITORS' REPORT

To the Audit Committee of the Board of Trustees
Henry Ford Health System
Detroit, Michigan

We have audited the accompanying consolidated financial statements of Henry Ford Health System and affiliates (the "System"), which comprise the consolidated balance sheets as of December 31, 2016 and 2015, and the related consolidated statements of operations and changes in net assets and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the System as of December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Deloitte & Touche LLP

April 13, 2017

CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2016 AND 2015
(In thousands)

ASSETS	2016	2015
CURRENT ASSETS:		
Cash and cash equivalents	$ 828,444	$ 688,878
Short-term investments—available for sale, at fair value	272	1,751
Patient care receivables—net of allowances of $124,399 and $137,309 in 2016 and 2015, respectively	279,232	241,858
Health care premium receivables	45,313	33,467
Due from third-party payors	18,657	4,454
Assets held for sale	-	28,258
Other current assets	212,881	167,228
Current portion of assets limited as to use	47,822	37,894
Total current assets	1,432,621	1,203,788
LONG-TERM INVESTMENTS	325,123	371,715
ASSETS LIMITED TO USE	988,664	733,649
JOINT VENTURE INVESTMENTS	23,487	15,320
DEFERRED TAX ASSET	1,947	1,712
INTANGIBLE AND OTHER ASSETS—Net	45,436	19,826
GOODWILL—Net of accumulated amortization of $28,606 in 2016 and 2015	14,199	14,128
PROPERTY, PLANT, AND EQUIPMENT—Net	1,426,699	1,245,674
TOTAL	$4,258,176	$3,605,812

LIABILITIES	2016	2015
CURRENT LIABILITIES:		
Short-term borrowings	$ 24,167	$ 29,167
Accounts payable	236,159	193,380
Due to third-party payors	32,059	28,252
Medical claims liability	194,324	173,417
Other liabilities and accrued expenses	300,736	257,171
Current portion of capital lease payable	8	30
Current portion of long-term obligations	15,967	24,702
Current portion of malpractice and general liability	37,261	33,953
Total current liabilities	840,681	740,072
MALPRACTICE AND GENERAL LIABILITY	95,246	91,115
DEFERRED COMPENSATION, POSTRETIREMENT, AND OTHER LIABILITIES	448,522	378,097
DEFERRED TAX LIABILITY	-	9,679
LONG-TERM OBLIGATIONS	1,029,037	835,116
LONG-TERM CAPITAL LEASE PAYABLE	4,308	4,153
Total liabilities	2,417,794	2,058,232
NET ASSETS:		
Unrestricted		
Henry Ford Health System	1,593,299	1,335,025
Noncontrolling interests	3,135	9,168
Total unrestricted	1,596,434	1,344,193
Temporarily restricted	137,884	104,790
Permanently restricted	106,064	98,597
Total net assets	1,840,382	1,547,580
TOTAL	$4,258,176	$3,605,812

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	2016	2015
UNRESTRICTED REVENUE:		
Patient service revenue	$ 3,020,851	$ 2,461,528
Less provision for bad debts	(69,585)	(75,923)
Net patient service revenue	2,951,266	2,385,605
Health care premiums	2,413,214	2,398,762
Investment income	47,356	25,035
Other income	291,453	244,409
Total unrestricted revenue	5,703,289	5,053,811
EXPENSES:		
Salaries, wages, and employee benefits	2,232,350	1,862,111
Health care provider expense	1,445,234	1,363,229
Supplies	846,826	734,382
Depreciation and amortization	173,122	155,887
General and other administrative	386,452	395,372
Other contracted services	288,161	220,894
Malpractice	29,656	33,095
Plant operations	53,583	46,957
Interest expense	38,541	37,554
Repairs and maintenance	64,980	51,018
Rent and lease	49,287	41,392
Total expenses	5,608,192	4,941,891
EXCESS OF REVENUE OVER EXPENSES BEFORE UNUSUAL ITEMS	95,097	111,920
UNUSUAL ITEMS:		
Inherent contribution of acquired net assets (Note 1)	240,269	-
Gain on sale of Midwest assets (Note 1)	1,696	-
Loss on refinancing (Note 12)	(58,742)	-
Impairment charge (Note 1)	-	(36,986)
Total unusual items	183,223	(36,986)
EXCESS OF REVENUE OVER EXPENSES FROM CONSOLIDATED OPERATIONS	278,320	74,934
LESS EXCESS OF REVENUE OVER EXPENSES ATTRIBUTABLE TO NONCONTROLLING INTERESTS	2,715	2,861
EXCESS OF REVENUE OVER EXPENSES ATTRIBUTABLE TO HENRY FORD HEALTH SYSTEM	275,605	72,073

(Continued)

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	2016	2015
UNRESTRICTED NET ASSETS:		
Excess of revenue over expenses from consolidated operations	$ 278,320	$ 74,934
Change in net unrealized gains and losses on investments	9,202	(30,779)
Net assets released from restrictions for capital	6,395	3,911
Acquisition of noncontrolling interest (Note 1)	(27,724)	-
Distributions to noncontrolling interests	(3,858)	(2,134)
Pension and other postretirement net adjustments	(10,094)	(10,748)
Increase in unrestricted net assets	252,241	35,184
TEMPORARILY RESTRICTED NET ASSETS:		
Income on restricted investments	2,449	1,746
Contributions and grants	62,126	32,959
Change in net unrealized gains and losses on investments	3,451	(7,042)
Net assets released from restrictions for operations	(34,214)	(35,696)
Net assets released from restrictions for capital	(6,395)	(3,911)
Inherent contribution of acquired net assets	1,012	
Annual spending appropriation	4,665	4,451
Increase (decrease) in temporarily restricted net assets	33,094	(7,493)
PERMANENTLY RESTRICTED NET ASSETS:		
Income on restricted investments	3,503	2,864
Contributions and other	7,908	3,413
Inherent contribution of acquired net assets	721	
Annual spending appropriation	(4,665)	(4,451)
Increase in permanently restricted net assets	7,467	1,826
TOTAL INCREASE IN NET ASSETS	292,802	29,517
TOTAL NET ASSETS—Beginning of year	1,547,580	1,518,063
TOTAL NET ASSETS—End of year	$ 1,840,382	$ 1,547,580

See notes to consolidated financial statements. (Concluded)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:		
Increase in net assets	$ 292,802	$ 29,517
Adjustments to reconcile increase in net assets to net cash provided by operating activities:		
Provision for bad debts	69,585	75,923
Depreciation and amortization	173,122	155,887
Pension and other postretirement net adjustments	10,094	10,748
Impairment charge	-	36,986
Inherent contribution of net assets	(240,269)	-
Inherent contribution of restricted assets	(1,733)	-
Loss on refinancing	58,742	-
Gain on sale of assets	(1,696)	-
(Gain) loss on sale of disposal of assets	(471)	6,587
Income on restricted investments	(5,952)	(4,610)
Restricted contributions and grants	(70,034)	(36,372)
Net realized and unrealized (gains) losses on investments—other than trading securities	(15,073)	20,008
Net realized and unrealized gains on investments—trading	(11,568)	-
Acquisition of noncontrolling interest	27,724	-
Distributions to noncontrolling interests	3,858	2,134
Change in assets and liabilities:		
Patient and health care premium receivables	(66,467)	(101,474)
Deferred tax asset	(235)	(884)
Other current assets	4,668	(36,600)
Trading securities	(4,052)	15,819
Joint venture investments	(2,566)	(7,136)
Other assets	276	(8,689)
Accounts payable	(1,658)	9,023
Other liabilities	15,247	15,016
Deferred tax liability	-	(2,274)
Due to/from third-party payors	(15,090)	58,293
Medical claims liability	(47,134)	23,870
Malpractice and general liability	(3,838)	(3,672)
Net cash provided by operating activities	168,282	258,100
CASH FLOWS FROM INVESTING ACTIVITIES:		
Additions to property	(176,555)	(124,535)
Proceeds from the sale or maturity of available for sale investments	445,319	394,724
Purchase of available for sale investments	(359,410)	(387,209)
Proceeds from the sale or maturity of trading securities	65,827	-
Purchase of trading securities	(35,317)	-
Dividends received from unconsolidated affiliates	-	5,825
Cash acquired from business combinations	41,234	-
Net cash used in investing activities	(18,902)	(111,195)

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	2016	2015
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from long-term obligations	$ 1,003,714	$ 2,700
Redemption of long-term obligations	(1,025,180)	-
Payments of financing costs	(6,678)	-
Proceeds from short-term borrowings	2,000	-
Payments on short-term borrowings	(21,698)	(5,000)
Payments of long-term obligations	(19,040)	(24,450)
Payments of capital lease payable	(60)	(28)
Acquisition of noncontrolling interests	(15,000)	-
Distributions to noncontrolling interests	(3,858)	(2,134)
Income on restricted investments	5,952	4,610
Restricted contributions and grants	70,034	36,372
Net cash (used in) provided by financing activities	(9,814)	12,070
INCREASE IN CASH AND CASH EQUIVALENTS	139,566	158,975
CASH AND CASH EQUIVALENTS—Beginning of year	688,878	529,903
CASH AND CASH EQUIVALENTS—End of year	$ 828,444	$ 688,878
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid during the year for interest, including amounts capitalized of $1,059 and $697 in 2016 and 2015, respectively	$ 30,071	$ 41,002
Amounts accrued in property, plant, and equipment—net	$ 11,828	$ 6,739
Unsettled investment trades	$ 1,642	$ 2,407
Unsettled investment purchases	$ 2,999	$ 5,464
Cash paid for taxes	$ 16,645	$ 28,513

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Organization—Henry Ford Health System (the "Corporation") and its affiliates (collectively, the "System") constitute a comprehensive health care system offering health care to the people of southeastern and southcentral Michigan. The System provides medical, surgical, psychiatric, and rehabilitative services in inpatient and outpatient settings; conducts research activities; and engages in the education and training of residents, nurses, and allied health professionals. The System includes one of the nation's largest employed physician group practices. A significant portion of the System's revenues are derived through its health maintenance organization (HMO) and its subsidiaries.

The Corporation is a Michigan not-for-profit corporation that operates Henry Ford Hospital, Henry Ford Medical Group, Henry Ford West Bloomfield Hospital, Henry Ford Kingswood Hospital, and Community Care Services, each of which is an operating division of the Corporation that is not separately incorporated. The Corporation is the parent and sole member or shareholder of Henry Ford Wyandotte Hospital ("Wyandotte"); Henry Ford Macomb Hospital Corporation ("Macomb"); Henry Ford Allegiance Health Group and Affiliates ("Allegiance Health Group and Affiliates"); Health Alliance Plan of Michigan (HAP); Henry Ford Health System Foundation (the "Foundation"); Henry Ford OptimEyes; Henry Ford Physician Network (HFPN); Henry Ford Physicians Accountable Care Organization, L.L.C. (HFPACO); HFHS-SCA Holdings, L.L.C.; Henry Ford Innovation Institute (HFII); Henry Ford Health System Government Affairs Services; Onika Insurance Company Ltd. ("Onika"); Sha Realty; and Neighborhood Development, L.L.C. HAP has the following wholly owned subsidiaries: HAP Preferred Incorporated (HPI); Alliance Health and Life Insurance Company ("Alliance"); HAP Midwest Health Plan, Inc. (MHP); and Administration Systems Research Corporation (ASR). Allegiance Health Group and Affiliates has the following wholly owned subsidiaries: W.A. Foote Memorial Hospital d.b.a. Henry Ford Allegiance Health ("Allegiance Health"); CareLink of Jackson, a Community-Owned Specialty Hospital d.b.a. Henry Ford Allegiance CareLink ("CareLink"); Allegiance Health Foundation d.b.a. Henry Ford Allegiance Health Foundation ("Allegiance Foundation"); and Healthlink, Inc. ("Healthlink") and its subsidiary, Hospice of Jackson d.b.a. Henry Ford Allegiance Hospice ("Allegiance Hospice"). Allegiance Health has the following wholly owned subsidiaries: Jackson Community Medical Record, L3C (JCMR); Physicians Choice Network, L.L.C. (PCN); and Jackson Health Network, L3C. Joint ventures include Foote Health Center Associates (FHCA) (62% ownership), Northwest Detroit Dialysis Centers (56.25% ownership), and Macomb Regional Dialysis Centers, L.L.C. (60% ownership), which are consolidated.

On October 13, 2015, MHP was notified by the State of Michigan that effective January 1, 2016, they would no longer be a participating Medicaid plan for two key regions, 9 and 10, that represented 91.7% of MHP's membership. The carrying value of goodwill and intangibles related to MHP were evaluated for impairment resulting in goodwill and intangible impairment charges recorded in the year ended December 31, 2015, of $31,252,000 and $5,734,000, respectively. On November 23, 2015, the System entered into an agreement to transfer certain assets of MHP. As of December 31, 2015, assets held for sale related to MHP were $27,711,000 and consisted of customer relationships. This transaction was completed on January 1, 2016, and resulted in a gain of $1,696,000.

On February 1, 2016, HAP completed the merger, which was accounted for as an acquisition, with HealthPlus of Michigan (HPM) pursuant to the Agreement and Plan of Merger dated October 30, 2015, and the order approving acquisitions as approved by the State of Michigan Department of Insurance and Financial Services. The fair value of the assets acquired exceeded the liabilities assumed resulting in an inherent contribution of $18,459,000, which was recorded during the year ended December 31, 2016.

Summarized consolidated opening balance sheet information for HPM as of the acquisition date is shown below (in thousands):

Cash and cash equivalents	$ 27,576	Accounts payable	$ 23,808
Health care premium receivables	5,907	Medical claims liability	68,041
Other current assets	25,373	Other liabilities and	
Long-term investments	26,638	accrued expenses	9,950
Assets limited to use	1,000	Deferred compensation,	
Intangible and other assets	27,950	postretirement, and	
Property, plant, and equipment	7,098	other liabilities	1,284
Total assets acquired	$ 121,542	Total liabilities assumed	$ 101,799

The operating results of HPM for the period February 1, 2016, through December 31, 2016, included total unrestricted revenue of $331,675,000, the majority of which is heath care premiums, and excess of revenue over expenses before unusual items of $6,897,000.

On April 1, 2016, Allegiance Health Group and Affiliates merged with the System, which was accounted for as an acquisition. Allegiance Health Group and Affiliates, headquartered in Jackson, Michigan, operates an acute care facility and has more than 40 sites offering a wide array of primary and specialty care and represents a significant geographic expansion of the System's health care provider operations beyond southeastern Michigan. The fair value of the assets acquired exceeded the liabilities assumed resulting in an inherent contribution of $221,810,000, which was recorded during the year ended December 31, 2016.

Summarized consolidated opening balance sheet information for Allegiance Health Group and Affiliates as of the acquisition date is shown below (in thousands):

Cash and cash equivalents	$ 13,658	Short-term borrowings	$ 14,698
Patient care receivables	46,431	Accounts payable	15,540
Other current assets	22,819	Due to third-party payors	4,694
Current portion of assets limited as to use	3,132	Other liabilities and accrued expenses	42,797
Assets limited as to use	270,941	Current portion of long-term obligations	5,209
Joint venture investments	5,601	Current portion of malpractice and general liability	3,132
Intangible and other assets	1,183	Malpractice and general liability	8,145
Property, plant, and equipment	161,018	Deferred compensation, postretirement, and other liabilities	53,098
		Long-term obligations	153,927
Total assets acquired	$ 524,783	Total liabilities assumed	$ 301,240
		Temporarily restricted net assets	$ 1,012
		Permanently restricted net assets	721
		Total restricted net assets acquired	$ 1,733

The operating results of Allegiance Health Group and Affiliates for the period April 1, 2016, through December 31, 2016, included total unrestricted revenue of $414,789,000, the majority of which is patient service revenue, and excess of revenue over expenses before unusual items of $2,492,000.

In connection with its acquisition of a majority ownership interest in ASR by HAP, ASR entered into an employment contract and stock transfer and redemption agreement (the "Agreement") with its 33% noncontrolling interest (NCI) holder. Under the terms of the Agreement, the NCI holder had the right to require ASR to purchase the NCI holder's interest for the higher of $5,000,000 or an amount based on a predefined formula measuring the growth in ASR-related business over a three-year look back period (the "Put Option"). The Agreement obligates HAP as guarantor for ASR. On April 1, 2016, the NCI holder exercised the Put Option and ASR recorded a $27,724,000 liability based on its calculation of the Put Option and transferred $15,000,000 to the NCI holder in exchange for an agreement to extend the negotiation period. The NCI holder has filed litigation against ASR and HAP as a protective step, should the parties be unable to reach a mutual resolution (refer to Note 14). The remaining outstanding payable owing to the NCI holder of $12,724,000 is reflected in accounts payable in the consolidated balance sheet as of December 31, 2016.

Basis of Presentation—The consolidated financial statements include the accounts of the System members as described above. The accounting and reporting policies of the System conform to accounting principles generally accepted in the United States of America (GAAP). All intercompany transactions have been eliminated. The preparation of the consolidated financial statements in conformity with GAAP requires that management make estimates and assumptions that affect the reported amounts. Actual results could differ from those estimates.

In connection with the Series 2016 bond issuance, the System amended and restated its 2006 Master Indenture. The Amended and Restated Master Trust Indenture (the "2016 Master Indenture") created the Henry Ford Health System Credit Group (the "Credit Group"). The Credit Group is comprised of the Henry Ford Health System Obligated Group (the "Obligated Group"), Henry Ford Health System

Designated Affiliates (the "Designated Affiliates"), and Henry Ford Health System Limited Designated Affiliates (the "Limited Designated Affiliates"). The Corporation, Wyandotte, Macomb, and Allegiance Health are members of the Obligated Group. HAP (excluding its subsidiaries HPI, Alliance, MHP, and ASR) and the Foundation are Designated Affiliates. There are currently no Limited Designated Affiliates.

Net Patient Service Revenue, Patient Care Receivables, and Allowance for Doubtful Accounts—Net patient service revenue is reported at the estimated net realizable amounts. Net patient service revenue associated with services provided to patients who have third-party payor coverage is reported on the basis of contractual rates for the services rendered. Reimbursement from most payors for acute inpatient and outpatient services vary according to a patient classification system that is based on clinical, diagnostic, and other factors. Reimbursements for services to certain patients include prospectively determined per diem rates, fee schedules, and discounts from established charges. Medicare, Medicaid, and Blue Cross have cost-reimbursed items and tentative rates with final settlement determined after submission of annual cost reports and a subsequent audit or review process, and represent the major payors included in patient care receivables at December 31, 2016 and 2015. Revenues associated with health care services provided by the System to members of its HMO are included in health care premiums in the consolidated statements of operations and changes in net assets.

In evaluating the collectability of accounts receivable, the System analyzes its past history and identifies trends for each of its major payor sources of revenue to estimate the appropriate allowance for doubtful accounts and provision for bad debts. Management regularly reviews data about these major payor sources of revenue in evaluating the sufficiency of the allowance for doubtful accounts. For receivables associated with services provided to patients who have third-party coverage, the System analyzes contractually due amounts and provides an allowance for doubtful accounts and a provision for bad debts. For receivables associated with self-pay patients (which include both patients without insurance and patients with deductible and co-payment balances due for which third-party coverage exists for a portion of the bill), the System records a provision for bad debts in the period of service on the basis of its past experience. At such point in time that a billed service is believed to be uncollectible, the related receivable is written off against the allowance for doubtful accounts. Estimates of retroactive adjustments under reimbursement agreements with third-party payors are accrued in the period the related services are rendered and adjusted in future periods as final settlements are received.

The System administers a patient financial assistance policy designed to provide financial assistance for uninsured patients as well as for insured patients with limited resources. For uninsured patients who meet the qualifications stipulated in the System's patient financial assistance policy, emergency and other medically necessary inpatient and outpatient services are provided at no cost. For uninsured patients that do not qualify for financial assistance, the System offers a discount off standard rates for services provided that result in net charges that do not exceed 115% of Medicare payment rates. The accounts receivable from self-pay patients represented 12% and 16% of total accounts receivable at December 31, 2016 and 2015, respectively. Insured patients with limited financial resources may qualify for a discount on self-pay balances. The System's allowances, which are primarily related to self-pay patients, were $124,399,000 and $137,309,000 at December 31, 2016 and 2015, respectively. These allowances include estimates related to both presumptive eligibility for charity of $32,294,000 and $23,344,000 and bad debts of $92,105,000 and $113,965,000 at December 31, 2016 and 2015, respectively. The decrease in the allowances is due to a decrease in the uninsured or self-pay population as a result of health care reform, including Medicaid expansion that began in 2014.

Health Care Premiums—Premiums received in advance of the respective period of coverage are credited to income ratably over the period of coverage. A significant portion of HAP's customer base is concentrated in companies that are part of the automotive manufacturing industry. HAP also has a significant portion of its customer base concentrated in Medicare and Medicaid beneficiaries.

Contributions—Unrestricted contributions are included in the consolidated statements of operations and changes in net assets when received. Gifts of cash and other assets are reported as restricted contributions if they are received with donor stipulations that limit the use of the assets. When the restrictions expire or the purpose of the restriction is accomplished, temporarily restricted assets are reclassified to unrestricted net assets and reported in the consolidated statements of operations and changes in net assets as other income or net assets released from restrictions for capital.

Other Income—Other income consists of assets released from restrictions, income from grants, income from contract pharmacy arrangements, administrative fees earned from HAP self-insured products, joint venture income, gift shop and cafeteria sales, parking garage fees, and other miscellaneous sources.

Performance Indicator—The consolidated statements of operations and changes in net assets include the excess of revenue over expenses from consolidated operations. Changes in unrestricted net assets, which are excluded from the excess of revenue over expenses from consolidated operations, consistent with industry practice, include change in net unrealized gains and losses on investments, net assets released from restrictions for capital, acquisition of noncontrolling interest, distributions to noncontrolling interest NCIs, and pension and other postretirement net adjustments. Certain income and expenses that are included in the performance indicator are separately presented as unusual items.

Cash and Cash Equivalents—Cash and cash equivalents consist of cash and highly liquid short-term investments (e.g., money market funds) with an original maturity of 90 days or less. Cash equivalents are stated at fair value, which approximates cost.

Short-Term Investments—Short-term investments consist primarily of fixed-income instruments with original maturities greater than 90 days and less than one year. Short-term investments are stated at fair value, which approximates cost.

Other Current Assets—Other current assets include inventories, which are stated at the lower of cost (first-in, first-out) or market.

Assets Limited as to Use and Investments—Assets limited as to use are reported at their estimated fair value or cost and include resources for which the board of trustees of the System has designated specific future uses; donor-restricted funds that arise through specific contributions to the System; and funds held by a trustee under the bond indenture agreements. The dollar amount of these assets, which are to be used to satisfy current liabilities, has been classified as a current asset.

Investments, inclusive of assets limited as to use, include marketable debt and equity securities. Investments in debt securities and investments in equity securities with readily determinable fair values are measured at fair value in the consolidated balance sheets. The System classifies these investments as either trading or available for sale in accordance with its intent. Investments that are actively traded are classified as trading. All other investments are classified as available for sale. Hedge funds and private equities are accounted for on the cost basis (except for pension assets, which are recorded at fair value). Other investments structured as limited liability corporations and partnerships are accounted for on the equity method.

Investment income includes interest, dividends, realized gains and losses, unrealized gains and losses, and equity earnings. Realized gains and losses on sales of investments are computed on the specific-identification method and the average cost method and are included in investment income or income on restricted investments. Unrealized gains and losses on investments related to trading securities are included in investment income or income on restricted investments. Unrealized gains and losses on available-for-sale investments are included in the change in net unrealized gains and losses on investments, in the changes in net assets, which is excluded from the excess of revenue over expenses from consolidated operations.

The System continually reviews available-for-sale investments for impairment conditions that may indicate that an other-than-temporary decline in market value has occurred. Declines in value judged to be other than temporary are included in investment income or income on restricted investments. In conducting this review, numerous factors are considered, which, individually or in combination, indicate that a decline is other than temporary. For debt securities, these factors include the intent to sell the security and whether the System will more likely than not sell the security before its anticipated recovery. For equity securities, these factors include the length of time and extent to which the market value is below the cost basis of the investment, the financial condition and near-term prospects of the individual security, and the ability and intent of the System to retain the investment for a period of time sufficient to allow for any anticipated recovery in the market value.

Investment Risks—Investment securities are exposed to various risks, such as interest rate, market, and credit. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is at least reasonably possible that changes in values in the near term could materially affect the amounts reported in the accompanying consolidated financial statements.

Fair Value of Financial Instruments—Fair value of financial instruments has been determined using available information and appropriate valuation methodologies. The fair value of assets is based on quoted market prices, dealer quotes, and prices obtained from independent sources. The fair value of liabilities is based on a discounted cash flows analysis, using interest rates currently available for the issuance of debt with similar terms and remaining maturities. Considerable judgment is required in certain circumstances to develop the estimates of fair value, and they may not be indicative of the amounts, which could be realized in a current market exchange.

Derivative Financial Instruments—The System periodically utilizes various financial instruments (e.g., options and swaps) to limit interest rate risk and guarantee income. The System's policies generally prohibit trading in derivative financial instruments on a leveraged basis.

Intangible and Other Assets—Intangible and other assets for the years ended December 31, 2016 and 2015, consisted of the following (dollars in thousands):

December 31, 2016	**Carrying Amount**	**Accumulated Amortization**	**Net Book Value**	**Useful Life**
Definite-lived intangible assets:				
Customer relationships	$ 15,660	$ 3,468	$ 12,192	8–22
Trademarks	40	40	-	2
Provider relations	22,164	2,976	19,188	10–25
Reinsurance escrow	7,178	-	7,178	
Other	8,562	1,684	6,878	
Total	$ 53,604	$ 8,168	$ 45,436	

December 31, 2015	**Carrying Amount**	**Accumulated Amortization**	**Net Book Value**	**Useful Life**
Definite-lived intangible assets:				
Customer relationships	$ 5,660	$ 1,959	$ 3,701	13
Trademarks	40	40	-	2
Provider relations	4,214	1,897	2,317	10
Reinsurance escrow	8,967	-	8,967	
Other	6,019	1,178	4,841	
Total	$ 24,900	$ 5,074	$ 19,826	

As part of the HPM acquisition, the System acquired $27,950,000 of intangible assets that consisted of $17,950,000 of provider relations and $10,000,000 of customer relationships.

Amortization expense on intangible assets was $3,094,000 and $4,211,000 for the years ended December 31, 2016 and 2015, respectively.

Estimated amortization expense on intangible assets for the next five years and thereafter is as follows: $3,207,000 in 2017, $3,075,000 in 2018, $2,830,000 in 2019, $2,780,000 in 2020, $2,571,000 in 2021, and $18,491,000 thereafter.

Goodwill—The System evaluates goodwill for impairment as of September 30 of each year, unless conditions arise that would require a more frequent evaluation. In assessing the recoverability of goodwill, management performs a qualitative or quantitative assessment to test for impairment annually. If it is determined, on the basis of qualitative factors, that a quantitative impairment test is required, estimated future cash flows and other factors are made to determine the fair value of the respective reporting unit. If these estimates or related projections change in the future, the System may be required to record impairment charges for goodwill at that time. Impairments, if any, are charged to earnings.

Information on changes in the carrying amounts of goodwill as of December 31, 2016 and 2015, is as follows (in thousands):

	2016	2015
Balance—beginning of year	$ 14,128	$ 45,380
Goodwill acquired during the year	71	-
Impairment of MHP goodwill	-	(31,252)
Balance—end of year	$ 14,199	$ 14,128

Impairment—The System periodically evaluates the carrying value of its long-lived assets for impairment. This evaluation is based principally on the projected, undiscounted cash flows generated by the related assets.

Property, Plant, and Equipment—Property, plant, and equipment, which includes capitalized internal-use software, is recorded at cost or fair value at the date of acquisition. Depreciation is provided on the straight-line method over the estimated useful lives of the assets. Estimated useful lives used in computing depreciation are generally 10 years for land improvements, 15 to 40 years for buildings and building improvements, and three to 15 years for equipment.

Expenditures for maintenance and repairs are charged against operations. Expenditures for betterment and major renewals that extend the useful life of an asset are capitalized and depreciated.

Medical Claims Liability—Medical claims liability consists of unpaid medical claims and other obligations resulting from the provision of health care services. It includes claims reported as of the consolidated balance sheets date and estimates, based upon historical claims experience, for claims incurred but not reported (IBNR).

Management estimates the amount of the IBNR using standard actuarial developmental methodologies based upon historical data, including the period between the date services are rendered and the date claims are received and paid, as well as denied claim activity, expected medical cost inflation, seasonality patterns, and changes in membership. Management's IBNR best estimate also includes a provision for adverse deviation, which is an estimate for known environmental factors that are reasonably likely to affect the required level of IBNR reserves. This provision for adverse deviation is intended to capture the potential adverse development from known environmental factors, such as changes in current payment patterns versus historical payment patterns; potential unknown high-cost cases; providers incurring increased operating income pressure and looking to increase their net revenue within commercial populations; increased usage of higher cost services resulting from advances in technology and pharmacologic treatments; accelerated utilization of services due to increased prevalence of high-deductible, consumer-based health plans and the general concern by covered members relating to the potential loss of health care coverage in the near future; and/or exceptional situations that require judgmental adjustments in setting the reserves for claims. There were no material changes in the amount of these reserves, or as a percent of reserve for claims and other settlements, between December 31, 2016 and 2015.

The IBNR estimation methodology has been consistently applied from period to period. Management's IBNR best estimate is made on an accrual basis and adjusted in future periods as required. Any adjustments to the prior-period estimates are included in the current period. As additional information becomes known to management, it adjusts its assumptions accordingly to change its estimate of IBNR.

Therefore, if moderately adverse conditions do not occur, evidenced by more complete claims information in the following period, then management's prior-period estimates will be revised downward, resulting in favorable development. However, any favorable prior-period reserve development would increase current-period excess of revenue over expenses only to the extent that the current-period provision for adverse deviation is less than the benefit recognized from the prior-period favorable development. If moderately adverse conditions occur and are more acute than management estimated, then its prior-period estimates will be revised upward, resulting in unfavorable development, which would decrease current-period excess of revenue over expenses.

The majority of the IBNR reserve balance held at the end of each year is associated with the most-recent months' incurred services, as these are the services for which the fewest claims have been reported. The degree of uncertainty in the estimates of incurred claims is greater for the most-recent months' incurred services. Revised estimates for prior periods are determined each year based on the most-recent updates of paid claims for prior periods. Estimates for IBNR service costs are subject to the impact of changes in the regulatory environment, economic conditions, changes in claims trends, and numerous other factors. Given the inherent variability of such estimates, the actual liability could differ significantly from the amounts estimated.

Deferred Compensation—Certain employees of the System participate in deferred compensation plans. The System has chosen to fund this liability using mutual funds and annuity or insurance contracts solely owned by the System, but accruing to vested employees. These amounts are subject to the claims of the System's general creditors. Earnings related to the deferred compensation assets, including unrealized appreciation or depreciation, are included in investment income and changes in the corresponding liability are included in salaries, wages, and employee benefits in the consolidated statements of operations and changes in net assets. The System recorded a charge (reduction) to salaries, wages, and employee benefits expense of $7,458,000 and $(362,000) in 2016 and 2015, respectively, related to earnings or losses from the deferred compensation assets.

Temporarily and Permanently Restricted Net Assets—Temporarily restricted net assets are those whose use by the System has been limited by donors to a specific time or purpose. Permanently restricted net assets have been restricted by donors to be maintained by the System in perpetuity.

Tax Status—The System, except for HAP, HFPN, Henry Ford Health System Government Affairs Services, Onika, HPI, Alliance, MHP, and ASR, consists of entities described under Internal Revenue Service Code Section 501(c)(3) and, as such, are exempt from federal income taxes under Internal Revenue Code Section 501(a) and do not have private foundation status under Internal Revenue Code Sections 509(a)(1), 509(a)(2), or 509(a)(3). HAP and Henry Ford Health System Government Affairs Services are entities described under Internal Revenue Code Section 501(c)(4) and, as such, are exempt from federal income taxes. HFPN, HPI, Alliance, MHP, and ASR are taxable entities. Approximately $1,751,000 and $19,953,000 in related tax expense was recorded in general and other administrative expense in 2016 and 2015, respectively. The System's wholly owned insurance captives, Onika and Cascades Insurance (which merged into Onika effective April 1, 2016), operate in the Cayman Islands and are currently not subject to income taxes. The System does not have any material uncertain tax positions as of December 31, 2016 and 2015.

Adoption of New Accounting Standards—In September 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Codification (ASC) 2015-16, *Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments*. This guidance requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined, including that the acquirer record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any. The guidance is effective for periods beginning after December 15, 2016, and interim periods within fiscal years beginning after December 15, 2017, and is to be applied prospectively to adjustments to provisional amounts that occur after the effective date, with earlier application permitted for financial statements that have not yet been made available for issuance. ASC 2015-16 was adopted in 2016 and did not have a material impact on the System's consolidated financial position or results of operations.

In November 2015, the FASB issued Accounting Standards Update (ASU) No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. This ASU amended the balance sheet classification requirements for deferred income taxes to simplify their presentation in the consolidated statement of financial position. This guidance requires that deferred tax liabilities and assets be classified as noncurrent in a classified consolidated statement of financial position. This guidance is effective for periods beginning after December 15, 2017, with early adoption permitted. The System adopted ASU No. 2015-17 retrospectively for 2015 and 2016. This resulted in a decrease in the current deferred tax asset with an offsetting increase in the long-term deferred tax asset of $867,000 and a decrease in the current portion of deferred tax liability with an offsetting increase in the long-term deferred tax liability of $9,679,000 as of December 31, 2015.

Forthcoming Accounting Standards—In March 2017, the FASB issued ASU No. 2017-07, *Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This ASU requires the service cost component of net periodic benefit cost related to defined benefit pension and postretirement benefit plans to be reported in the same financial statement line as other compensation costs arising from services rendered during the period. The other components of net periodic benefit cost are required to be presented separately from service costs and outside of operating income in the statement of operations. Only the service cost component of net periodic benefit cost will be eligible for capitalization in assets. This guidance is effective for the System beginning after December 15, 2018. The System is evaluating the impact this guidance may have on the consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other: Simplifying the Test for Goodwill Impairment.* This guidance simplifies the subsequent measurement of goodwill by eliminating Step 2 of the goodwill impairment test. If a reporting unit fails Step 1 of the goodwill impairment test, entities are no longer required to compute the implied fair value of goodwill following the same procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, the guidance requires an entity to perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and to recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. The new guidance is effective for the System for periods beginning after December 15, 2021. The System is evaluating the impact this guidance may have on the consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments.* This guidance adds or clarifies guidance on the classification of certain cash receipts and payments in the consolidated statements of cash flows. This guidance is effective for the System for periods beginning after December 15, 2018. The System is evaluating the impact this guidance may have on the consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-14, *Presentation of Financial Statement for Not-For-Profit Entities.* This guidance simplifies and improves how not-for-profit entities classify net assets as well as the information presented in financial statements and notes about liquidity, financial performance, and cash flows. This guidance is effective for the System for periods beginning after December 15, 2017. The System is evaluating the impact this guidance may have on the consolidated financial statements.

In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients,* which amends certain aspects of the FASB's revenue standard ASU No. 2014-09, *Revenue from Contracts with Customers*. This guidance clarifies guidance related to implementation issues that could arise when organizations implement the new revenue guidance. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers: Principal Versus Agent Considerations (Reporting Gross Versus Net).* This guidance amends the principal versus agent implementation guidance and illustrations in the FASB's revenue standard, ASU No. 2014-09. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date,* which defers the effective date of the FASB's revenue standard, ASU No. 2014-09, by one year for all entities and permits early adoption on a limited basis. In May 2014, the FASB issued ASU No. 2014-09. This guidance outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. After the deferral of the effective date, this guidance is effective for the System for periods beginning after December 15, 2017. The System is evaluating the impact this guidance may have on the consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842),* to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This guidance retains a distinction between operating leases and financing leases, and the classification criteria is substantially similar to previous lease guidance. The main change in the new guidance is the requirement for all leases to be recognized on the balance sheet at the present value of lease payments. This guidance is effective for the System in periods beginning after December 15, 2018. The System is evaluating the impact this guidance may have on the consolidated financial statements.

2. NET PATIENT SERVICE REVENUE

A substantial portion of net patient service revenue was paid primarily by Medicare, Medicaid, and Blue Cross based upon contracted rates or under cost-reimbursement agreements in 2016 and 2015. Provisions for estimated retroactive adjustments under these agreements for current and prior years have been reflected in the accounts based upon the most-current information available. Net patient service revenue of $23,667,000 and $38,963,000 related to prior-year settlements was recorded in 2016 and 2015, respectively. Net patient service revenue (before the provision for bad debts), recognized from these major sources, as of December 31, 2016 and 2015, is as follows (dollars in thousands):

Payor	2016		2015	
Medicare	$ 1,239,320	41 %	$ 1,057,134	43 %
Medicaid	546,240	18	454,761	18
Blue Cross	720,924	24	544,596	22
Self-pay	130,009	4	115,242	5
Commercial and other	384,358	13	289,795	12
Total	$ 3,020,851	100 %	$ 2,461,528	100 %

Letters of final settlements have not been received from Medicare for 2009 through 2016, from Medicaid for 2013 through 2016, or from Blue Cross for 2016. The System is appealing various elements of Medicare final settlements dating back to 1999.

3. UNCOMPENSATED CARE AND COMMUNITY BENEFIT

The System provided health care services without charge or at amounts less than its established rates to patients who met the criteria of its charity care policy. The amount of charity care provided, determined on the basis of cost, is computed using a cost-to-charge ratio methodology. In addition to charity care, the System provided services to Medicare, Medicaid, and other public programs for which the payments received were less than the cost of providing services. The unpaid costs attributed to providing services under these programs are considered a community benefit. The System also provided research and community health services, such as community education and outreach in the form of free or low-cost clinics; health education; donations for the community; multiple health promotion and wellness programs, such as health screening; and various community projects and support groups.

Additionally, the System demonstrates its exempt purpose to benefit the community by operating emergency rooms and other clinical services open to the public 24 hours a day, seven days a week; providing facilities for the education and training of health care professionals; and maintaining research facilities for the study of new drugs and medical devices that offer the promise of improving health care.

The quantifiable costs of the System's community benefit for the years ended December 31, 2016 and 2015, were as follows (in thousands):

	2016	2015
Charity care at cost	$ 43,605	$ 24,048
Unpaid cost of Medicare, Medicaid, and other public programs	289,065	217,634
Bad debt at estimated cost	58,538	58,084
Total cost of uncompensated care	391,208	299,766
Research	54,420	57,520
Health professional education	82,626	68,529
Community health services and building activities	23,985	20,036
Subsidized health services	8,744	10,087
Community benefit operations and financial donations	3,010	3,195
Total community benefit	$ 563,993	$ 459,133

The Internal Revenue Service requires community benefit activities to be offset by external funding received. The System received $40,449,000 and $42,917,000 of external funding for research and $6,334,000 and $5,502,000 of external funding for community health services and building activities during the years ended December 31, 2016 and 2015, respectively.

4. INVESTMENTS AND FAIR VALUE MEASUREMENTS

The System assesses the inputs used to measure fair value using a three-level hierarchy based on the extent to which inputs used in measuring fair value are observable in the market. The fair value hierarchy is as follows:

Level 1—Quoted (unadjusted) prices for identical assets in active markets.

Level 2—Other observable inputs, either directly or indirectly, including:

- Quoted prices for similar assets in active markets
- Quoted prices for identical or similar assets in nonactive markets (few transactions, limited information, noncurrent prices, high variability over time, etc.)
- Inputs other than quoted prices that are observable for the asset (interest rates, yield curves, volatilities, default rates, etc.)
- Inputs that are derived principally from or corroborated by other observable market data

Level 3—Unobservable inputs that cannot be corroborated by observable market data.

Fair values of available-for-sale and trading securities are based on quoted market prices, where available. The System obtains one price for each security, primarily from a third-party pricing service ("pricing service"), which generally uses Level 1 or Level 2 inputs for the determination of fair value. The pricing service normally derives the security prices through recently reported trades for identical or similar securities, making adjustments through the reporting date based upon available observable market information. For securities not actively traded, the pricing service may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, nonbinding broker quotes, benchmark yields, credit spreads, default rates, and prepayment speeds. As the System is responsible for the determination of fair value, it performs quarterly analyses on the prices received from the pricing service to determine whether the prices are reasonable estimates of fair value. As a result of these reviews, the System has not historically adjusted the prices obtained from the pricing service.

In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement has been determined based on the lowest-level input that is significant to the fair value measurement in its entirety. The System's assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset.

The following methods and assumptions were used to estimate the fair value of each class of financial instrument:

Cash Equivalents—The carrying value of cash equivalents approximates fair value as maturities are less than three months. Cash equivalent instruments that trade on a regular basis in active markets are classified as Level 1. Those that do not meet this criteria are classified as Level 2.

Debt Securities—The estimated fair values of debt securities are based on quoted market prices and/or other market data for the same or comparable instruments and transactions in establishing the prices.

Due to the nature of pricing fixed-income securities, management has classified the majority of debt securities as Level 2 investments.

Equity Securities—Fair value estimates for publicly traded equity securities are based on quoted market prices and/or other market data for the same or comparable instruments and transactions in establishing the prices. Nonpublicly traded securities, primarily commingled funds, are classified as net asset value (NAV) investments. The classification of equity securities also includes bonds and other fixed-income instruments managed in commingled and mutual funds.

Derivatives—The estimated fair values of derivative financial instruments are based on quoted market prices and/or other market data for the same or comparable instruments and transactions in establishing the prices. Derivative financial instruments are recorded in long-term investments and other liabilities and accrued expenses in the consolidated balance sheets.

Grants and Pledges Receivable—The fair value of grant and pledges receivable has been estimated by management using the discounted cash flows method.

Hedge Funds and Private Equities—The estimated fair values of investments in private equity and hedge funds are based on the most-current financial statements issued by each fund adjusted for cash flows to and from the fund subsequent to the financial statement reporting date.

Long-Term Obligations—The carrying value of the System's variable-rate bonds and other obligations approximates the fair value. The fair value of the System's fixed-rate bonds is estimated based upon prices obtained from a third-party service routinely relied upon by securities professionals to provide an approximate fair value of these types of securities.

The System's policy is to recognize transfers between all levels as of the beginning of the reporting period. There were no significant transfers between Levels 1, 2, and 3 during the years ended December 31, 2016 and 2015.

Information about the fair value of the System's financial assets and liabilities, according to the valuation techniques the System used to determine its fair values, as of December 31, 2016 and 2015, is as follows (in thousands):

2016	Total	Level 1	Level 2	Level 3
Description:				
Trading securities:				
Cash equivalents	$ 27,414	$ 27,414	$ -	$ -
Debt securities:				
Asset-backed securities	777	-	777	-
Corporate debt securities	5,970	-	5,910	60
Government and agency debt securities	8,483	-	8,483	-
Nonagency mortgage-backed securities	-	-	-	-
Other debt securities	974	-	974	-
Equity securities:				
Collective funds—asset allocation	117,076	117,076	-	-
Collective funds—common stock	131,124	131,124	-	-
Collective funds—debt securities	88,105	88,105	-	-
Subtotal—trading securities	379,923	363,719	16,144	60
Available-for-sale securities:				
Cash equivalents	900,096	900,096	-	-
Debt securities:				
Short-term investments	272	-	272	-
Asset-backed securities	35,959	-	35,959	-
Corporate debt securities	59,691	-	59,691	-
Government and agency debt securities	101,884	-	101,884	-
Nonagency mortgage-backed securities	9,565	-	9,565	-
Other debt securities	6,877	-	6,877	-
Equity securities:				
Collective funds—asset allocation	94,598	94,598	-	-
Collective funds—common stock	42,809	42,809	-	-
Collective funds—debt securities	150,662	150,662	-	-
Common stock	22,994	22,994	-	-
Subtotal—available for sale securities	1,425,407	1,211,159	214,248	-
Derivative—asset	11,283	11,283	-	-
Subtotal—investments at fair value	1,816,613	$1,586,161	$ 230,392	$ 60
Grants and pledges receivables at fair value	22,718	$ -	$ 22,718	$ -
Cash	8,902			
Investments measured at NAV	179,853			
Equity method investments	116,727			
Hedge funds and private equities at cost	33,522			
Other	11,990			
Subtotal—investments recorded at cost, equity method or NAV	350,994			
Total	$2,190,325			
Asset classifications:				
Cash and cash equivalents	$ 828,444			
Short-term investments	272			
Assets limited as to use	1,036,486			
Long-term investments	325,123			
Total	$2,190,325			
Derivative—liability at fair value	$ (11,266)	$ (11,266)	$ -	$ -
Financial instruments disclosed but not measured at fair value:				
Private equity and hedge funds	$ 33,637	$ -	$ -	$33,637
Long-term obligations	$1,077,386	$ -	$1,077,386	$ -

2015	Total	Level 1	Level 2	Level 3
Investment class:				
Cash equivalents	$ 760,765	$ 760,765	$ -	$ -
Debt securities:				
Short-term investments	1,751	-	1,751	-
Asset-backed securities	43,478	-	43,478	-
Corporate debt securities	82,978	-	82,883	95
Government and agency debt securities	112,330	-	112,330	-
Nonagency mortgage-backed securities	21,382	-	21,382	-
Other debt securities	9,803	-	9,681	122
Equity securities:				
Collective funds—asset allocation	154,741	154,741	-	-
Collective funds—common stock	62,301	62,301	-	-
Collective funds—debt securities	159,329	159,329	-	-
Common stock	27,760	27,760	-	-
Derivative—asset	12,286	12,286	-	-
Total—investments at fair value	1,448,904	$1,177,182	$271,505	$ 217
Grants and pledges receivable at fair value	6,436	$ -	$ 6,436	$ -
Cash	32,713			
Investments measured at NAV	188,750			
Equity method investments	112,624			
Investments at cost	31,856			
Other	12,604			
Total—investments recorded at NAV, equity method, or other	378,547			
Total	$ 1,833,887			
Asset classification:				
Cash and cash equivalents	$ 688,878			
Short-term investments	1,751			
Assets limited as to use	771,543			
Long-term investments	371,715			
	$ 1,833,887			
Derivative—liability at fair value	$ (12,268)	$ (12,268)	$ -	$ -
Financial instruments disclosed but not measured at fair value:				
Private equity and hedge funds	$ 32,040	$ -	$ -	$32,040
Long-term obligations	$ 911,061	$ -	$911,061	$ -

Included in the above 2015 table are trading securities in the amount of $140,102,000. The remaining investments are considered available for sale.

The fair value reconciliation of the Level 3 assets for the years ended December 31, 2016 and 2015, is as follows (in thousands):

	Corporate Debt Securities	Other Debt Securities	Total
Ending balance—December 31, 2014	$ 168	$ 115	$ 283
Total gains or losses for the period included in changes in net assets	76	7	83
Settlements	(149)	-	(149)
Ending balance—December 31, 2015	95	122	217
Total gains or losses for the period included in changes in net assets	(35)	(122)	(157)
Ending balance—December 31, 2016	$ 60	$ -	$ 60

The reconciliation of the amortized cost to fair value of available-for-sale securities as of December 31, 2016, is as follows (in thousands):

	Cost or Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
Cash and cash equivalents	$ 900,096	$ -	$ -	$ 900,096
Debt securities:				
Short-term investments	272	-	-	272
Asset-backed securities	36,013	81	(135)	35,959
Corporate debt securities	60,511	272	(1,092)	59,691
Government and agency debt securities	102,041	766	(923)	101,884
Nonagency mortgage-backed securities	9,974	7	(416)	9,565
Other debt securities	6,970	34	(127)	6,877
Equity securities:				
Collective funds—asset allocation	93,228	2,777	(1,407)	94,598
Collective funds—common stock	30,555	12,288	(34)	42,809
Collective funds—debt securities	155,144	85	(4,567)	150,662
Common stock	18,754	4,550	(310)	22,994
Total—available for sale securities	$ 1,413,558	$ 20,860	$ (9,011)	$ 1,425,407

The following summarizes the effect the derivative financial instruments had on the System's consolidated balance sheets and consolidated statements of operations and changes in net assets (in thousands):

Description	Financial Statement Location	2016	2015
Consolidated balance sheet:			
Fixed-income derivatives	Long-term investments	$ 11,283	$ 12,286
Fixed-income derivatives	Deferred compensation, postretirement, and other liabilities	$ (11,266)	$ (12,268)
Consolidated statements of operations and changes in net assets:			
Fixed-income derivatives	Investment income (loss)	$ (14)	$ 14

The effect of the derivative financial instruments reported on the consolidated statements of operations and changes in net assets is included in unrestricted net assets.

The total return on the investment portfolios for the years ended December 31, 2016 and 2015, consisted of the following (in thousands):

	2016	2015
Trading securities:		
Interest and dividend income	$ 6,408	$ -
Realized gains	2,049	-
Change in unrealized gains	9,519	-
Subtotal—trading securities	17,976	-
Available-for-sale securities:		
Interest and dividend income	32,912	11,832
Realized gains	2,420	17,813
Change in unrealized gains (losses)	12,653	(37,821)
Subtotal—available-for-sale securities	47,985	(8,176)
Total investment return	$ 65,961	$ (8,176)

Included in the above total return on investments are $913,000 of losses on trading securities for the year ended December 31, 2015. Also, included in the above total return on investments are $1,967,000 and $2,948,000 of impairment losses deemed other than temporary for the years ended December 31, 2016 and 2015, respectively.

Investment income for the years ended December 31, 2016 and 2015, consisted of the following (in thousands):

	2016	2015
The Foundation	$ 12,622	$ 12,928
Funds designated for malpractice and general liability	3,463	3,707
Funds designated for deferred compensation	7,458	(362)
Funds held under bond indenture agreements	1,573	1,459
Interest, dividends, and realized and unrealized gains from other unrestricted assets	22,240	7,303
Total investment income	$ 47,356	$ 25,035

Information about available-for-sale investment securities with gross unrealized losses as of December 31, 2016 and 2015, excluding those for which other-than-temporary impairment charges have been recognized, aggregated by investment category and length of time that the individual securities have been in a continuous unrealized loss position, as of December 31, 2016 and 2015, is summarized as follows (in thousands):

	Less than 12 Months		12 Months or More		Total	
December 31, 2016	**Fair Value**	**Gross Unrealized Losses**	**Fair Value**	**Gross Unrealized Losses**	**Fair Value**	**Gross Unrealized Losses**
Debt securities:						
Asset-backed securities	$ 15,451	$ (66)	$ 2,689	$ (67)	$ 18,140	$ (133)
Corporate debt securities	25,139	(339)	9,733	(743)	34,872	(1,082)
Government and agency debt securities	62,994	(680)	6,013	(212)	69,007	(892)
Nonagency mortgage-backed securities	3,852	(49)	4,055	(367)	7,907	(416)
Other debt securities	2,906	(43)	1,541	(82)	4,447	(125)
Equity securities:						
Collective funds—asset allocation	25,480	(195)	26,541	(911)	52,021	(1,106)
Collective funds—common stock	16,027	(452)	14,289	(1,369)	30,316	(1,821)
Collective funds—debt securities	-	-	131,794	(3,980)	131,794	(3,980)
Collective funds—private equity debt securities	8,004	(683)	9,516	(619)	17,520	(1,302)
	$ 159,853	$ (2,507)	$ 206,171	$ (8,350)	$ 366,024	$ (10,857)
December 31, 2015						
Debt securities:						
Asset-backed securities	$ 37,730	$ (242)	$ 2,025	$ (50)	$ 39,755	$ (292)
Corporate debt securities	41,992	(751)	21,490	(1,379)	63,482	(2,130)
Government and agency debt securities	63,440	(323)	6,443	(271)	69,883	(594)
Nonagency mortgage-backed securities	10,808	(232)	9,785	(741)	20,593	(973)
Other debt securities	4,248	(73)	958	(29)	5,206	(102)
Equity securities:						
Collective funds—asset allocation	45,955	(2,536)	23,080	(5,009)	69,035	(7,545)
Collective funds—common stock	78	(23)	-	-	78	(23)
Collective funds—debt securities	76,670	(2,279)	77,221	(5,056)	153,891	(7,335)
	$ 280,921	$ (6,459)	$ 141,002	$ (12,535)	$ 421,923	$ (18,994)

In considering whether an investment is other-than-temporarily impaired, management considers its ability and intent to hold the investment, the severity of the decline in fair value, and the duration of the impairment, among other factors. Management has determined that it has the intent and ability to hold indefinitely the equity investments reflected in the above table and that the severity and duration of the impairment is insufficient to indicate an other-than-temporary impairment. Management has determined that it does not have the intent to sell the debt securities as of the financial statement date and it is not more likely than not that it will be required to sell the security before recovery of the entire amortized cost basis of the security.

The aggregate cost of the System's cost-method investments totaled $33,522,000 and $31,856,000 as of December 31, 2016 and 2015, respectively. Of the total cost-method investments, the System evaluated $19,292,000 and $18,021,000 of investments for impairment as the estimated cost of the investments exceeded the fair value as of December 31, 2016 and 2015, respectively. The System identified an unrealized loss of $1,438,000 and $1,927,000 as of December 31, 2016 and 2015, respectively. The System did not identify any events or changes in circumstances that may have had a significant adverse effect on the fair value of those investments. Based on the System's intent and ability to hold the investments for reasonable periods of time sufficient for forecasted recovery of fair value, the System does not consider the investments to be other-than-temporarily impaired as of December 31, 2016.

The fair value measurements of certain investments calculated based on NAV held as of December 31, 2016 and 2015, are as follows (there were no unfunded commitments at year-end):

December 31, 2016	**Fair Value (in thousands)**	**Redemption Frequency**	**Redemption Notice Period**
Collective funds—asset allocation [1]	$ 17,568	Monthly	9–30 days
Collective funds—common stock [2]	52,295	Daily, monthly	2–30 days
Collective funds—debt securities [3]	109,990	Daily, weekly, semimonthly, and monthly	0–30 days
Total	$ 179,853		

December 31, 2015	**Fair Value (in thousands)**	**Redemption Frequency**	**Redemption Notice Period**
Collective funds—asset allocation [1]	$ 12,902	Daily	0 days
Collective funds—common stock [2]	60,725	Daily, monthly	0–30 days
Collective funds—debt securities [3]	115,123	Daily, weekly, semimonthly, and monthly	0–30 days
Total	$ 188,750		

(1) Collective funds—asset allocation are investment funds that consist of diversified portfolios of debt, equity, and other assets often providing the money manager with discretion as to the allocation across the various assets.

(2) Collective funds—common stock are investment funds that invest substantially all their assets in the equity securities of publicly traded companies in the United States, developed international markets, and emerging international markets.

(3) Collective funds—debt securities are investment funds that invest substantially all their assets in debt securities, including government and corporate bonds, both domestic and foreign.

The book value and estimated fair value of bonds and notes held as of December 31, 2016, by contractual maturity, are listed as follows (in thousands):

Maturity	Book Value	Estimated Fair Value
Due in one year or less	$ 19,989	$ 19,989
Due in one year through five years	125,677	125,677
Due in five years through 10 years	28,496	28,496
Due after 10 years	56,290	56,290
Total	$ 230,452	$ 230,452

Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

5. ASSETS LIMITED AS TO USE

Assets limited as to use as of December 31, 2016 and 2015, consisted of the following (in thousands):

	2016	2015
Unrestricted assets limited as to use:		
The Foundation	$ 303,730	$ 297,992
Loan funds held by trustee	4,122	-
Funds designated for malpractice and general liability	81,051	79,709
Funds designated for deferred compensation	135,495	124,339
Funds held under bond indenture agreements	2,304	23,350
HAP statutory funds	14,337	14,335
Funds board designated for research, education, and other	251,499	28,431
Total unrestricted assets limited as to use	792,538	568,156
Temporarily restricted assets:		
Grant and other funds	121,652	97,588
Grants and pledges receivable	16,232	7,202
Total temporarily restricted assets	137,884	104,790
Permanently restricted assets:		
Grant and other funds	99,578	98,078
Grants and pledges receivable	6,486	519
Total permanently restricted assets	106,064	98,597
Total assets limited as to use	1,036,486	771,543
Less requirements for current liabilities	47,822	37,894
Noncurrent assets limited as to use	$ 988,664	$ 733,649

Temporarily restricted and permanently restricted grants and pledges receivable consist of the following as of December 31, 2016: amounts expected to be collected in 2017, $10,561,000; amounts expected to be collected in 2018 through 2021, $12,356,000; amounts expected to be collected in 2022 and thereafter, $343,000; and unamortized discount of $(542,000). All pledges are deemed collectible.

Onika maintains a reserve deposit of $11,073,000 and $9,973,000 as of December 31, 2016 and 2015, respectively, under a reinsurance trust agreement and an agency agreement. These amounts are included above in funds designated for malpractice and general liability. The HAP statutory funds are required by regulatory requirements.

6. JOINT VENTURE INVESTMENTS

The System maintains investments in nine unconsolidated affiliates with ownership interests ranging from 20% to 55%. All unconsolidated affiliates are accounted for under the equity method.

The income related to the investments accounted for under the equity method, included in other income, was $2,628,000 and $5,580,000 for 2016 and 2015, respectively.

The summarized financial information for unconsolidated affiliates as of December 31, 2016 and 2015, consisted of the following (in thousands):

	2016	2015
Net revenues	$ 110,832	$ 103,133
Net income	4,769	10,532
Total assets	65,851	54,154
Net assets	44,180	32,034

7. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment as of December 31, 2016 and 2015, consisted of the following (in thousands):

	2016	2015
Land and improvements	$ 81,823	$ 77,350
Building and improvements	1,504,524	1,377,669
Equipment	1,358,185	1,284,740
Construction in progress	81,758	21,073
Total	3,026,290	2,760,832
Less accumulated depreciation	1,599,591	1,515,158
Property, plant, and equipment	$ 1,426,699	$ 1,245,674

As of December 31, 2016, the following assets recorded under capital leases are included above: land and improvements of $614,000 with accumulated amortization of $233,000; building and improvements of $7,751,000 with accumulated amortization of $4,675,000.

As of December 31, 2015, the following assets recorded under capital leases are included above: land and improvements of $614,000 with accumulated amortization of $233,000; building and improvements of $7,603,000 with accumulated amortization of $4,256,000.

Internal-use software is included above in equipment and construction in progress. The net book value was $213,640,000 and $215,392,000 at December 31, 2016 and 2015, respectively.

8. CREDIT AGREEMENTS

The Corporation has a credit agreement through which up to $100,000,000 may be borrowed and committed at several interest rate options. The Corporation had no loan advances and letters of credit commitments of $8,090,000 and $8,412,000 as of December 31, 2016 and 2015, respectively. This credit agreement expires on April 28, 2017. The Corporation has a commitment agreement and is finalizing a renewal under similar terms.

The Corporation has a credit agreement through which up to $50,000,000 may be borrowed and committed at several interest rate options. The Corporation had no loan advances or letters of credit commitments as of December 31, 2016 and 2015. This credit agreement expires on April 30, 2018.

The Corporation has a credit agreement through which up to $75,000,000 may be borrowed and committed at several interest rate options. The Corporation had loan advances outstanding of $24,167,000 and $29,167,000 and no letters of credit commitments as of December 31, 2016 and 2015, respectively. Loan advances are recorded in short-term borrowings in the consolidated balance sheets. This credit agreement was repaid on February 14, 2017, and expired on February 15, 2017. The Corporation has a commitment agreement and is finalizing a renewal under similar terms.

9. MEDICAL CLAIMS LIABILITY (REPORTED AND UNREPORTED)

Activity from HAP, Alliance, and MHP, included in medical claims liability, is summarized as follows (in thousands):

	2016	2015
Balance—beginning of year	$ 211,934	$ 181,003
Addition due to HPM acquisition	68,041	-
Incurred related to:		
Current year	1,816,623	1,747,646
Prior year	(11,865)	(31,186)
Total incurred	1,804,758	1,716,460
Paid related to:		
Current year	1,634,875	1,544,992
Prior year	227,748	140,537
Total paid	1,862,623	1,685,529
Balance—end of year	$ 222,110	$ 211,934

Changes in actuarial estimates of claims unpaid reported as “incurred related to prior year” in the schedule above reflect revisions in estimates of medical cost trends and changes in claims processing patterns. Given the inherent variability of such estimates, the actual liability could differ significantly from amounts provided.

10. MALPRACTICE AND GENERAL LIABILITY

The System provides professional and general liability insurance through a combination of self-insurance, claims-made coverage reinsured through Onika, and excess coverage purchased from commercial carriers and Caymich Insurance Company, Ltd. ("Caymich"). Caymich is an offshore captive insurance company domiciled in the Cayman Islands that provides pooled-risk coverage to its members. Effective August 1, 2016, the System became a 21.734% member in Caymich.

Allegiance Health had a wholly owned captive insurance company, Cascades Insurance Company Ltd. ("Cascades"). The financial results of Cascades were merged into Onika effective April 1, 2016.

The System estimates a range of loss for known claims and unreported incidents and has recorded a liability based on its assessment of the most likely amount of loss in the range. The liability of $132,507,000 and $125,068,000 as of December 31, 2016 and 2015, respectively, has been discounted using a discount factor of 4% as of December 31, 2016 and 2015. Segregated funds included in assets limited as to use have been established to settle claims subject to self-insurance. Earnings related to these assets of $3,463,000 and $3,707,000 are included in investment income in December 31, 2016 and 2015, respectively.

11. PENSION AND OTHER POSTRETIREMENT BENEFIT PLANS

The System has qualified defined benefit pension plans covering certain employees. The funding policies are to contribute annually amounts necessary to meet or exceed the minimum funding requirements of the Employee Retirement Income Security Act of 1974. Contributions are intended to provide not only for benefits attributed to service to date, but also for those expected to be earned in the future.

Effective December 31, 2010, the System permanently froze the pension plan. Effective January 1, 2011, the System instituted a defined contribution supplemental retirement savings account for each participant in the frozen pension plan as well as employees hired after December 31, 2010. The System's contribution to this plan is based on each participant's age and years of service. Allegiance Health Group and Affiliates also sponsors defined contribution plans that include nonelective and matching contributions. The expense related to these plans was approximately $24,570,000 and $24,761,000 in 2016 and 2015, respectively.

Effective December 31, 2011, HAP permanently froze the final average pay defined benefit formula for all nonrepresented participants in the HAP pension plan. Effective January 1, 2012, HAP instituted a cash balance defined benefit formula for all nonrepresented participants and also for the UAW Local 600 Union Office/Nonexempt Bargaining unit participants hired on or after January 1, 2012, and for the UAW Local 600 Union Sales and Labor unit participants hired on or after April 1, 2012. Effective March 19, 2016, the cash balance benefit for those participants in UAW Local 600 Union Office/Nonexempt Bargaining was frozen and no additional pay credits will be credited. HAP also maintains a "safe-harbor" 401(k) plan that provides for up to a 3.5% matching employer contribution, for those participants who defer at least 6% of their earnings to the plan. The HAP 401(k) plan also has a secondary account for certain bargaining unit groups that provides an annual employer contribution (only) of 3% to 7% of eligible earnings.

The System has a retirement savings plan under which certain employees may make a onetime irrevocable election indicating whether or not they will participate. This plan requires employee and employer contributions of 2% and 2.5%, respectively, of base wages up to the social security wage limit. For wages in excess of the social security wage limit, contributions are 4% and 5% of base wages for the employee and employer, respectively. The retirement savings plan also has a secondary account that provides an annual employer contribution (only) that ranges from 1.75% to 2.75% of eligible earnings to participants accounts. The expense related to this plan was approximately $36,344,000 and $33,392,000 in 2016 and 2015, respectively.

The System also provides postretirement health care and life insurance benefits to certain employees who met minimum age and years of service requirements as of December 31, 2006. These employees are also required to meet certain eligibility requirements at the time of retirement. Benefits to employees may require employee contributions or be provided in the form of a fixed-dollar subsidy.

The System's primary investment objective for the pension plans is to ensure sufficient funds are available to meet the plan's benefit and expense obligations and to maintain compliance with regulatory funding requirements. The plan is managed with a long-term duration and liability investment perspective with the goal to achieve risk-adjusted returns on plan assets and plan liabilities. The investment program shall be broadly diversified among asset classes and manager strategies with the total return for the overall plan exceeding the pension plan's investment policy index returns. The allocation percentage of the fair value of total plan assets held as of the measurement dates, December 31, 2016 and 2015, is shown below:

	Target	**2016**	**2015**
Cash and cash equivalents	2 %	2 %	1 %
Global asset allocation	20	18	21
Stock and stock funds	37	45	40
Bonds and bond funds	33	34	36
Alternative assets	8	1	2
Total	100 %	100 %	100 %

In 1989, the System entered into a master retirement trust agreement. This master retirement trust agreement combined several trust agreements of the System's subsidiaries, including HAP, into a single trust agreement. All of the System's pension plan assets, excluding Allegiance Health Group and Affiliates, are held by the master trust fund.

The following tables present information about the fair value of the total plan assets as of December 31, 2016 and 2015, according to the valuation techniques the System used to determine its fair values as described in Note 4 (in thousands):

The System—2016	**Level 1**	**Level 2**	**Level 3**	**Total**
Investment class:				
Cash equivalents	$ 9,339	$ -	$ -	$ 9,339
Debt securities:				
Asset-backed securities	-	1,896	-	1,896
Corporate debt securities	-	4,012	-	4,012
Government and agency debt securities	-	3,465	-	3,465
Nonagency mortgage-backed securities	-	521	-	521
Other debt securities	-	348	-	348
Equity securities:				
Collective funds—asset allocation	60,152	-	-	60,152
Collective funds—common stock	65,276	-	-	65,276
Collective funds—debt securities	61,849	-	-	61,849
Collective funds—private equity and hedge funds	-	-	7,375	7,375
Common stock	25,497	-	-	25,497
Total investments measured at fair value	$ 222,113	$ 10,242	$ 7,375	239,730
Investments measured at NAV				218,584
Total				$ 458,314

The System—2015	**Level 1**	**Level 2**	**Level 3**	**Total**
Investment class:				
Cash equivalents	$ 5,525	$ -	$ -	$ 5,525
Debt securities:				
Asset-backed securities	-	1,771	-	1,771
Corporate debt securities	-	4,082	-	4,082
Government and agency debt securities	-	2,727	-	2,727
Nonagency mortgage-backed securities	-	1,162	-	1,162
Other debt securities	-	367	-	367
Equity securities:				
Collective funds—asset allocation	84,091	-	-	84,091
Collective funds—common stock	43,829	-	-	43,829
Collective funds—debt securities	60,382	-	-	60,382
Collective funds—private equity and hedge funds	-	-	9,841	9,841
Common stock	27,172	-	-	27,172
Total investments measured at fair value	$ 220,999	$ 10,109	$ 9,841	240,949
Investments measured at NAV				225,512
Total				$ 466,461

There were no significant transfers between Levels 1, 2, and 3 during the years ended December 31, 2016 and 2015.

The fair value reconciliation of the Level 3 assets for the years ended December 31, 2016 and 2015, is as follows (in thousands):

The System	**Hedge Funds**	**Private Equity Funds**	**Total**
Closing balance—December 31, 2014	$ 3	$ 12,331	$ 12,334
Total gains or losses for the period included in changes in net assets	-	656	656
Purchases and settlements:			
Purchases	-	1,030	1,030
Settlements	(3)	(4,176)	(4,179)
Closing balance—December 31, 2015	-	9,841	9,841
Total gains or losses for the period included in changes in net assets	-	(96)	(96)
Purchases and settlements:			
Purchases	-	435	435
Settlements	-	(2,805)	(2,805)
Closing balance—December 31, 2016	$ -	$ 7,375	$ 7,375

Allegiance Health Group and Affiliates has a noncontributory defined benefit plan that covers substantially all of their employees. The plan year-end was June 30, 2016, but a valuation was completed as of December 31, 2016. This plan requires annual contributions sufficient to meet the minimum funding standards of the Employee Retirement Income Security Act of 1974.

Allegiance Health Group and Affiliates invests the majority of the assets in this plan in a diversified portfolio consisting of asset classes that attempt to maximize returns while minimizing volatility. The allocation percentages of the fair value of total plan assets held as of the December 31, 2016, measurement date is shown below:

	Target	**2016**
Equity investments	44 %	44 %
Fixed-income investments	31	31
Other investments	25	25
Total	100 %	100 %

The following tables present information about the fair value of the total plan assets as of December 31, 2016, according to the valuation techniques used to determine its fair values as described in Note 4 (in thousands):

Allegiance Health Group and Affiliates—2016	**Level 1**	**Level 2**	**Level 3**	**Total**
Investment class:				
Equity securities:				
Collective funds—asset allocation	$ 19,793	$ -	$ -	$ 19,793
Collective funds—common stock	57,777	-	-	57,777
Collective funds—debt securities	24,991	871	-	25,862
Collective funds—private equity and hedge funds	-	-	16,779	16,779
Total investments measured at fair value	$ 102,561	$ 871	$ 16,779	120,211
Investments measured at NAV				12,642
Total				$ 132,853

There were no significant transfers between Levels 1, 2, and 3 during the year ended December 31, 2016.

The fair value reconciliation of the Level 3 assets for the year ended December 31, 2016, is as follows (in thousands):

Allegiance Health Group and Affiliates	**Private Equity and Hedge Funds**
Opening balance—April 1, 2016	$ 14,858
Total gains or losses for the period included in changes in net assets	1,243
Purchases and settlements:	
Purchases	1,014
Sales	(336)
Closing balance—December 31, 2016	$ 16,779

The expected long-term rate of return on System plan assets is established based on management's expectations of asset returns for the investment mix in the plans, considering historical experience, current economic environment, and forecasted risk/reward assumptions. The expected returns of various asset categories are blended to derive one long-term assumption.

The System is expected to contribute $33,337,000 to the pension plans in 2017.

The System is expected to make a $4,682,000 contribution to the postretirement health care plans in 2017.

Information regarding the projected benefit obligation and assets of the pension and postretirement benefit plans for the System as of and for the years ended December 31, 2016 and 2015, is as follows (in thousands):

	Pension Benefits		Postretirement Benefits	
	2016	**2015**	**2016**	**2015**
Change in benefit obligation:				
Benefit obligation—beginning of year	$ 612,945	$ 644,748	$ 66,457	$ 86,477
Service cost	17,107	7,726	744	1,094
Interest cost	30,572	24,241	2,816	3,269
Actuarial loss (gain)	16,041	(17,315)	(165)	(19,914)
Benefits paid	(30,415)	(20,135)	(4,706)	(5,168)
Medicare Part D subsidy	-	-	725	699
Settlements	(26,465)	(26,320)	-	-
Acquisition of Allegiance Health Group and Affiliates	175,030	-	-	-
Plan changes	26	-	-	-
Benefit obligation—end of year	794,841	612,945	65,871	66,457
Change in plan assets:				
Fair value of assets—beginning of year	466,461	522,597	-	-
Actual return on assets	38,609	(17,003)	-	-
Employer contributions	11,444	7,322	4,706	5,168
Benefits paid	(30,415)	(20,135)	(4,706)	(5,168)
Settlements	(26,465)	(26,320)	-	-
Acquisition of Allegiance Health Group and Affiliates	131,533	-	-	-
Fair value of assets—end of year	591,167	466,461	-	-
Amounts included in the consolidated balance sheets:				
Total accrued liability	$ 203,674	$ 146,484	$ 65,871	$ 66,457
Current liability	$ 3,015	$ 2,107	$ 4,583	$ 4,883
Long-term liability	$ 200,659	$ 144,377	$ 61,288	$ 61,574

Lump-sum settlements of $26,465,000 and $26,320,000 were made during the years ended December 31, 2016 and 2015, respectively. As a result of total lump-sum settlements exceeding the sum of service costs and interest costs, the System recognized a settlement loss of $7,095,000 and $4,887,000 during 2016 and 2015, respectively.

In accordance with FASB ASC Topic 715-20, *Compensation—Retirement Benefits*, all previously unrecognized actuarial losses are reflected in the consolidated balance sheets. Pension and postretirement plan benefit items not yet recognized as a component of periodic pension and postretirement plan expense, but included within unrestricted net assets, as of and for the years ended December 31, 2016 and 2015, are as follows (in thousands):

	Pension Benefits		Postretirement Benefits	
	2016	2015	2016	2015
Unrecognized prior service credit	$ (3,244)	$ (4,679)	$ (649)	$ (2,438)
Unrecognized net actuarial loss	164,000	157,127	(8,608)	(8,605)
Total	$ 160,756	$ 152,448	$ (9,257)	$ (11,043)

An estimated $1,404,000 in prior service credit and $9,950,000 in net actuarial loss will be included as components of periodic pension plan expense in 2017. An estimated $649,000 in prior service credit and $160,000 in net actuarial gain will be included as components of period postretirement medical plan expense in 2017.

The accumulated benefit obligation was $780,121,000 and $606,988,000 as of December 31, 2016 and 2015, respectively.

Information regarding the net benefit cost of the pension and postretirement benefit plans for the System as of and for the years ended December 31, 2016 and 2015, is as follows (in thousands):

	Pension Benefits		Postretirement Benefits	
	2016	2015	2016	2015
Net pension benefit cost:				
Service cost	$ 17,107	$ 7,726	$ 744	$ 1,094
Interest cost	30,572	24,241	2,816	3,269
Expected return on assets	(41,468)	(37,933)	-	-
Amortization of prior service credit	(1,409)	(1,409)	(1,788)	(1,793)
Amortization of actuarial loss	4,933	4,980	(164)	292
Settlement cost	7,095	4,887	-	-
Net benefit cost	$ 16,830	$ 2,492	$ 1,608	$ 2,862
Assumptions are as follows:				
Discount rate—benefit obligation	3.85–4.15%	3.90–4.35%	4.05–4.15%	4.40–4.50%
Discount rate—benefit cost	3.90–4.35%	3.90 %	4.40–4.50%	3.90 %
Expected return on plan assets	6.80–7.28%	7.25 %	N/A	N/A

The nonfrozen pension plans utilized a range of 3–5% for the rate of compensation increase in estimating both the projected benefit obligation and the net benefit cost as of and for the years ended December 31, 2016 and 2015. The HAP plan used an age-related scale in estimating both the projected benefit obligation and the net benefit cost for that plan as of and for the years ended December 31, 2016 and 2015.

The expected future pension benefits to be paid for each of the next five years and in the aggregate for the succeeding five years thereafter are as follows: $65,179,000 in 2017, $64,681,000 in 2018, $67,062,000 in 2019, $64,898,000 in 2020, $63,230,000 in 2021, and $284,681,000 thereafter.

The expected future other postretirement benefits, net of Medicare Part D subsidy to be paid for each of the next five years and in the aggregate for the succeeding five years thereafter are as follows: $4,682,000 in 2017, $4,506,000 in 2018, $4,494,000 in 2019, $5,112,000 in 2020, $5,113,000 in 2021, and $24,224,000 thereafter.

The expected future Medicare Part D subsidy for each of the next five years and in the aggregate for the succeeding five years thereafter is as follows: $750,000 in 2017, $778,000 in 2018, $835,000 in 2019, $228,000 in 2020, $219,000 in 2021, and $920,000 thereafter.

The medical inflation assumption is 7.1% in 2017 for Blue Cross Blue Shield of Michigan Medical, grading down to 5% in 2033 and after; 7.6% in 2017 for HAP full network, grading down to 5% in 2033 and after; and 11.7% in 2017 for HAP preferred network, grading down to 5% in 2033 and after. The prescription drug inflation assumption is 7.6% in 2017, grading down to 5% in 2033 and after.

The health care cost trend rate assumptions have a significant effect on the amounts reported for the postretirement plan. A one-percentage-point change in assumed health care cost trends would have effects on the amounts as follows:

	One-Percentage-Point Increase	**One-Percentage-Point Decrease**
Effect on postretirement benefit obligation	4.81 %	(4.00)%
Effect on total of service cost and interest cost components	4.15	(3.46)

12. LONG-TERM OBLIGATIONS

Long-term obligations as of December 31, 2016 and 2015, consisted of the following (in thousands):

	2016	2015
Revenue and refunding bonds Series 2016, fixed rate, maturing serially through 2042, interest rates of 3.25% to 5.00%; term due 2041, interest rate of 5.00%; term due 2046, interest rate of 4.00%	$ 853,030	$ -
Revenue and refunding bonds Series 2014, variable interest rate, maturing serially through 2042	-	145,850
Revenue and refunding bonds Series 2009, fixed rate, maturing serially through 2020, interest rates of 5.00% to 5.50%; term due 2024, interest rate of 5.25%; term due 2029, interest rate of 5.625%; and term due 2039, interest rate of 5.75%	-	297,255
Revenue and refunding bonds Series 2006A, fixed rate, maturing serially through 2027, interest rates of 4.80% to 5.00%; term due 2032, interest rate of 5.25%; term due 2038, interest rate of 5.00%; and term due 2046, interest rate of 5.25%	-	362,740
Taxable term loan, maturing 2021, variable interest rate, 1.42% at December 31, 2016	38,035	-
Tax-exempt loan, fixed interest rate of 2.07%, maturing 2020	44,184	54,670
Other obligations (interest rates from 3.16% to 4.80%)	5,089	4,182
Deferred issuance costs on bonds	(6,591)	(5,718)
Unamortized discount on bonds	-	(7,479)
Unamortized premium on bonds	111,257	8,318
Total	1,045,004	859,818
Less current portion	15,967	24,702
Total long-term obligations	$ 1,029,037	$ 835,116

On September 28, 2016, the System issued $853,030,000 in Series 2016 hospital revenue refunding bonds (“Series 2016”) and entered into a taxable term loan of $38,035,000. The Series 2016 bonds were issued at a premium of $112,649,000. The proceeds were used to cash defease or refund all its existing tax-exempt bonds, plus accrued interest, and to pay certain issuance costs. The System recognized a loss on refinancing of $58,742,000. Escrow accounts were established for the refunded bonds in amounts sufficient to cover interest, principal, and call premiums. These refundings were recorded as a legal defeasance.

The 2016 Master Indenture contains financial covenants relating to permitted debt, permitted encumbrances, permitted dispositions of cash and other assets, permitted guarantees, and permitted mergers and reorganizations. The System has no knowledge of any default in the performance of the terms, covenants, provisions, or conditions of the 2016 Master Indenture.

The approximate principal requirements on long-term obligations for the next five years and thereafter are as follows: $15,967,000 in 2017, $17,831,000 in 2018, $16,852,000 in 2019, $17,350,000 in 2020, $51,543,000 in 2021, and $820,795,000 thereafter.

13. CAPITAL LEASE OBLIGATIONS

The System has capital lease agreements for buildings. The capital lease obligations require payments in future years as follows (in thousands):

Years Ending December 31	
2017	$ 2,416
2018	2,443
2019	2,443
2020	2,443
2021	2,443
Later years	3,714
Total minimum lease payments	15,902
Less interest (interest rates from 8.25% to 57.11%)	11,586
Obligations under capitalized lease, including $30 due within one year	$ 4,316

14. COMMITMENTS AND CONTINGENCIES

The System has entered into various operating lease agreements, which expire through 2035 and include varying renewal options. Rental expense under such leases was approximately $49,287,000 and $41,392,000 for the years ended December 31, 2016 and 2015, respectively.

The aggregate remaining lease payments required under operating leases with noncancelable terms in excess of one year as of December 31, 2016, approximate $187,445,000. The approximate payment requirements under these leases for each of the five years ending after December 31, 2016, are $33,720,000, $30,221,000, $25,097,000, $18,477,000, and $16,444,000, respectively.

The percentage of labor subject to collective bargaining agreements is 3.07% and 2.13% as of December 31, 2016 and 2015, respectively. The percentage of labor subject to collective bargaining agreements that will expire within one year is 0.20% and 0.62% as of December 31, 2016 and 2015, respectively.

The System is party to lawsuits incidental to its operations, including the HAP litigation related to the ASR NCI holder discussed in Note 1. HAP has engaged independent external experts and obtained a fair market value evaluation of the ASR business that supports its calculation of the Put Option. HAP and its counsel believe that the ultimate disposition of the contingency related to the ASR NCI holder, as well as any other such litigation, will not have a material effect on the consolidated financial position of the System.

The health care industry is subject to numerous and complex laws and regulations of federal, state, and local governments. Compliance with these laws and regulations, specifically those relating to the Medicare and Medicaid programs, can be subject to review and interpretation, as well as future regulatory enforcement actions, such as fines, penalties, and repayment of previously billed and collected revenues. Management believes that the System is in substantial compliance with current laws and regulations.

15. UNRESTRICTED NET ASSETS

Changes in consolidated unrestricted net assets attributable to the System and the noncontrolling interests for the years ended December 31, 2016 and 2015, are as follows (in thousands):

	Henry Ford Health System	Noncontrolling Interests	Total
Unrestricted net assets—December 31, 2014	$ 1,300,569	$ 8,440	$ 1,309,009
Excess of revenue over expenses from consolidated operations	72,073	2,861	74,934
Change in net unrealized gains and losses on investments	(30,780)	1	(30,779)
Net assets released from restrictions for capital	3,911	-	3,911
Distributions to noncontrolling interests	-	(2,134)	(2,134)
Pension and other postretirement net adjustments	(10,748)	-	(10,748)
Increase in unrestricted net assets	34,456	728	35,184
Unrestricted net assets—December 31, 2015	1,335,025	9,168	1,344,193
Excess of revenue over expenses from consolidated operations	275,605	2,715	278,320
Change in net unrealized gains and losses on investments	9,202	-	9,202
Net assets released from restrictions for capital	6,395	-	6,395
Acquisition of noncontrolling interests	(22,834)	(4,890)	(27,724)
Distributions to noncontrolling interests	-	(3,858)	(3,858)
Pension and other postretirement net adjustments	(10,094)	-	(10,094)
Increase (decrease) in unrestricted net assets	258,274	(6,033)	252,241
Unrestricted net assets—December 31, 2016	$ 1,593,299	$ 3,135	$ 1,596,434

16. ENDOWMENTS

The System's endowments consist of various funds established for specific purposes. The assets are managed in a custodial account. The account uses a targeted asset allocation of 42% stock and stock funds, 25% bond and bond funds, 18% global asset allocation, and 15% alternative assets. The annual spending appropriation from the endowments is determined by the average of the beginning balance for each of the three previous years multiplied by a 5% spending factor. The endowment corpus is maintained in perpetuity for donor-restricted endowments.

Endowment net assets as of December 31, 2016 and 2015, are composed of the following (in thousands):

December 31, 2016	Unrestricted Net Assets	Permanently Restricted Net Assets	Total
Donor-restricted endowment funds	$ -	$ 106,064	$ 106,064
Board-designated endowment funds	303,730	-	303,730
Total endowment funds	$ 303,730	$ 106,064	$ 409,794
December 31, 2015			
Donor-restricted endowment funds	$ -	$ 98,597	$ 98,597
Board-designated endowment funds	297,992	-	297,992
Total endowment funds	$ 297,992	$ 98,597	$ 396,589

Changes in endowment net assets for the years ended December 31, 2016 and 2015, are summarized as follows (in thousands):

	Unrestricted Net Assets	Permanently Restricted Net Assets	Total
Endowment net assets—December 31, 2014	$ 324,974	$ 96,771	$ 421,745
Investment return	(8,682)	2,864	(5,818)
Contributions and other	-	3,413	3,413
Annual spending appropriation	(18,300)	(4,451)	(22,751)
Endowment net assets—December 31, 2015	297,992	98,597	396,589
Investment return	21,938	3,503	25,441
Contributions and other	-	7,908	7,908
Acquisition of Allegiance Health Group and Affiliates	-	721	721
Annual spending appropriation	(16,200)	(4,665)	(20,865)
Endowment net assets—December 31, 2016	$ 303,730	$ 106,064	$ 409,794

17. FUNCTIONAL EXPENSES

Total expenses categorized by functional classifications for the years ended December 31, 2016 and 2015, were as follows (in thousands):

	2016	2015
Health care services	$ 4,895,810	$ 4,260,668
Management and general	712,382	681,223
Total expenses	$ 5,608,192	$ 4,941,891

18. SUBSEQUENT EVENTS

Pursuant to FASB ASC Topic 855-10, *Subsequent Events—Overall*, the System has evaluated subsequent events through April 13, 2017, the date the consolidated financial statements were issued. As a result of this evaluation, the System has no subsequent events to disclose.

* * * * * *