

CENTER FOR HEALTH INFORMATION AND ANALYSIS

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**MASSACHUSETTS  
SYSTEM  
PROFILES**

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**TECHNICAL APPENDIX**

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DATA THROUGH  
FISCAL YEAR 2015

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FEBRUARY 2017



# Technical Appendix Overview

Multi-acute hospital systems included in *Financial Performance Summary: Acute Hospital Parent Organizations and Systems* were profiled based on financial performance and utilization metrics. Details for each of these metrics are included in this technical appendix.

The Center for Health Information and Analysis (CHIA) relied on the following primary data sources to present financial information: the Annual Massachusetts Hospital Cost Report (MA Hospital Cost Report), the Hospital Discharge Database (HDD), the Hospital Standardized Financial Statement Database, and Audited Financial Statements.

Unless otherwise noted, metrics included in this report are based on financial data reported by acute and non-acute hospitals from Fiscal Year (FY) 2015. Discharge data from FY15 included in the acute hospital analysis was reported by acute hospitals in the Hospital Discharge Database, unless otherwise noted. Descriptive information is from FY15.

## **Massachusetts Hospital Cost Report:**

The Massachusetts Hospital Cost Report is submitted each year by acute and non-acute hospitals and it contains data on costs, revenues, and utilization statistics. Hospitals are required to complete the MA Hospital Cost Report based on their respective fiscal year end.

## **Hospital Discharge Database (HDD):**

HDD data is submitted quarterly by acute hospitals and it contains patient-level data identifying charges, days, and diagnostic information for all acute inpatient discharges. CHIA used FY15 HDD data for the service metrics, which includes discharges between October 1, 2014 and September 30, 2015 for all acute hospitals.

## **Hospital Standardized Financial Statements:**

The Hospital Standardized Financial Statements are submitted quarterly and annually by acute hospitals. They contain information on the hospital's assets, liabilities, revenues, expenses, and profits or losses. They reflect only the hospital's financial information; they do not reflect financial information for any larger health system with which a hospital may be affiliated.

## **Audited Financial Statements:**

Audited Financial Statements are submitted annually by hospitals (or their parent organizations, if applicable). In addition to the financial figures that are found in the Hospital Standardized Financial Statements, the Audited Financial Statements contain an opinion from an independent auditor as well as notes from hospital or system management that elaborate on the financial performance and standing of the hospital or system during the fiscal year. Audited Financial Statements were used as the primary source for the multi-acute hospital system profiles.

## **Data Verification:**

CHIA surveyed payer representatives, acute and non-acute provider representatives, and other state agencies, to refine profile metrics and overall products for this year's publication.

Each year's MA Hospital Cost Report data and hospital and multi-acute hospital system financial statements were verified in accordance with respective reporting regulation requirements.

# Acute Hospitals

An **acute hospital** is a hospital that is licensed by the Massachusetts Department of Public Health and contains a majority of medical-surgical, pediatric, obstetric, and maternity beds.

## Multi-Acute Hospital System Affiliation and Location

Massachusetts hospitals are generally affiliated with a larger health system. Health systems may include multiple hospitals and/or provider organizations while others may have only one hospital with associated providers or provider organizations. Multi-acute hospital system membership identifies those health systems with more than one acute hospital. This information was derived from Audited Financial Statements.

Below is a list of Massachusetts multi-acute hospital systems and their acute hospital members as of the end of each system's fiscal year 2015:

Multi-Acute Hospital System	Acute Hospital Member
<b>Baystate Health</b>	Baystate Franklin Medical Center Baystate Mary Lane Hospital Baystate Medical Center Baystate Noble Hospital Baystate Wing Hospital
<b>Berkshire Health Systems</b>	Berkshire Medical Center Fairview Hospital
<b>Cape Cod Healthcare</b>	Cape Cod Hospital Falmouth Hospital
<b>CareGroup</b>	Beth Israel Deaconess Hospital – Milton Beth Israel Deaconess Hospital – Needham Beth Israel Deaconess Hospital – Plymouth Beth Israel Deaconess Medical Center Mount Auburn Hospital New England Baptist Hospital
<b>Heywood Healthcare</b>	Athol Hospital Heywood Hospital
<b>Kindred Healthcare<sup>^</sup></b>	Kindred Hospital – Boston Kindred Hospital – Boston North Shore
<b>Lahey Health System</b>	Lahey Hospital & Medical Center Northeast Hospital Winchester Hospital
<b>Partners HealthCare System</b>	Brigham and Women's Hospital Brigham and Women's Faulkner Hospital Cooley Dickinson Hospital Martha's Vineyard Hospital Massachusetts General Hospital Nantucket Cottage Hospital Newton-Wellesley Hospital North Shore Medical Center
<b>Shriners Hospitals for Children<sup>^</sup></b>	Shriners Hospitals for Children – Boston Shriners Hospitals for Children – Springfield
<b>Steward Health Care System</b>	Morton Hospital Nashoba Valley Medical Center Steward Carney Hospital Steward Good Samaritan Medical Center Steward Holy Family Hospital Steward Norwood Hospital Steward Saint Anne's Hospital Steward St. Elizabeth's Medical Center

# Acute Hospitals

<b>UMass Memorial Health Care</b>	Clinton Hospital HealthAlliance Hospital Marlborough Hospital UMass Memorial Medical Center
<b>Tenet Healthcare<sup>^</sup></b>	MetroWest Medical Center Saint Vincent Hospital
<b>Wellforce</b>	Lowell General Hospital Tufts Medical Center

<sup>^</sup> Kindred Healthcare, Inc., Tenet Healthcare Corporation, and Shriners Hospitals for Children are multi-state health systems with a large presence outside of Massachusetts. Each owns two acute hospitals in Massachusetts (Kindred owns Kindred Hospital – Boston and Kindred Hospital – Boston North Shore; Tenet owns MetroWest Medical Center and Saint Vincent Hospital; Shriners owns Shriners Hospitals for Children – Boston and Shriners Hospitals for Children - Springfield).

# Multi-Acute Hospital Systems

These profiles consist of two sections: (1) a comparative graphic showing the eleven multi-acute hospital systems in Massachusetts drawn to scale based on operating revenue, and (2) individual pages for each system detailing the organizations that comprise the system.

The **Comparative Overview** is a proportional representation of the size of each system using operating revenue from the smallest system as the base.

- For example: in FY15, Berkshire Health Systems had approximately \$533 million in operating revenue, which is 66.9 times greater than Shriners Hospitals for Children's approximately \$8 million in operating revenue. Accordingly, Berkshire Health System's circle is presented with an area 66.9 times larger than Shriners Hospitals for Children's circle.

Organizations within each system profile are grouped into the following categories:

- **Acute Hospitals:** a hospital that is licensed by the Massachusetts Department of Public Health, which contains a majority of medical-surgical, pediatric, obstetric, and maternity beds.
- **Non-Acute Hospitals:** typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.
- **Physician Organizations:** A medical practice comprised of two or more physicians organized to provide patient care services.
- **Health Plans:** An organization that contracts or offers to provide, deliver, arrange for, pay for, or reimburse any of the costs of health care services.
- **Other Health Care Providers:** any organization within a system that is engaged in providing health care services and is not categorized as an acute hospital, a non-acute hospital, a physician organization, or a health plan.
- **Other Organizations:** all organizations that are not hospitals, physician organizations, health plans, or other health care providers. Operating revenue and net asset values were derived by adding up values for any organization in the financial statements not already categorized in the profile as a health care-related organization.

Some system financial statements reported to CHIA included the names and descriptions of organizations but did not include financial information for them. These organizations are presented in the profiles in text format, rather than being displayed within a circle like the other organizations.

Unless otherwise noted, metrics and descriptive information included in these profiles are based on financial data from FY15 reported by the systems.

All revenue and net asset information is sourced from each system's parent organization and affiliates' FY15 consolidated Audited Financial Statements.

Unless otherwise noted, each system's total **Operating Revenue** and **Net Assets** equal the sum of the components displayed in the individual system profiles, less any intercompany eliminations.

**Consolidating Eliminations** are intercompany transactions that are eliminated during the financial consolidation process. Eliminations were totaled from operating revenue and net asset information in the Audited Financial Statement from each system. The total of the operating revenue and net assets after accounting for eliminations may not sum to the overall system operating revenue and net asset values displayed on each profile due to rounding.

# Multi-Acute Hospital Systems

**Data Verification:**

Data verification reports including each system's reported data were sent to each system. Changes made as a result of the data verification process include revisions to the descriptions of some organizations and additional financial information details for certain organizations.

# Multi-Acute Hospital Systems: At a Glance

**Operating revenue** is revenue earned from services associated with patient care, including academic research. It excludes revenue earned from non-operating activities, such as gains associated with the sale of property or income from investments.

**Net assets** reflect the difference between total assets and total liabilities. It is the not-for-profit equivalent of Owner's Equity.

**Total profit/loss** (often presented in hospital financial statements as "Excess of revenues over expenses") and **total margin** are measures of the system's overall financial performance, the former being in dollars and the latter a percentage. CHIA standardized the calculation of total margins to account for the varied presentation of financial statement reporting among health systems.

- **Total profit/loss** was derived from "Excess of revenues over expenses" or "Net profit/loss" figures reported in each system's consolidated Audited Financial Statements.
- **System calculation:** Total Margin = Total Profit/Loss ÷ (Operating Revenue + Non-Operating Gains/Losses)

**Employee** statistics show the approximate number of employees in the system.

**Acute Hospital Discharges** is the sum total of the reported discharges from the component acute hospitals in the system, sourced from the MA Hospital Cost Report.

**Acute Hospital Discharges per Zip Code** is the sum of patients from that zip code discharged from component acute hospitals of the system, sourced from the HDD. Data from zip codes with 25 or fewer system discharges are suppressed.

**Alternative Payment Methods (APM) Adoption** shows the percentage of members with primary care physicians who were engaged in Alternative Payment contracts, and compares the system rate to the statewide rate. A "Not Reported" indicates that providers in this system did not meet the reporting threshold for APM. For APM, payers report providers managing at least 36,000 member months within a given insurance category. For this report, provider organizations were associated with systems based upon payer reporting of APM data. As such, affiliations reflect unique payer-provider contracts, and may differ from the financial relationships reported in financial statements.

APM Adoption rates exclude traditional Medicare (including members with primary care physicians in accountable care organizations), Dual Eligibles, and Commonwealth Care. For more information on reporting requirements for APM, please see the data specifications, available from <http://www.chiamass.gov/apm-rp-tme-payer-data-reporting-resources/> (last accessed February 10, 2017).

Below is the list of entities that are included in the APM Adoption rates for each system:

System	Entities
Partners HealthCare System	Partners Community HealthCare, Inc. (PHO)
CareGroup	Beth Israel Care Organization (BIDCO); Beth Israel Deaconess Medical Center
UMass Memorial Health Care	UMass Memorial Health Care; UMass Memorial Medical Center
Steward Health Care System	Steward Network Services, Inc.
Baystate Health	Baystate Health Partners, Inc.; Baystate Medical Center; Baystate Medical Practice PHO
Lahey Health System	Lahey Hospital & Medical Center; Winchester Hospital
Wellforce	New England Quality Care Alliance; Tufts Medical

# Multi-Acute Hospital Systems: At a Glance

	Center; Lowell General PHO
<b>Cape Cod Healthcare</b>	Cape Cod Preferred Physicians
<b>Tenet Healthcare Corporation</b>	Not Reported
<b>Berkshire Health Systems</b>	Not Reported
<b>Heywood Healthcare</b>	Heywood PHO
<b>Kindred Healthcare</b>	Not Reported
<b>Shriners Hospitals for Children</b>	Not Reported

# Multi-Acute Hospital Systems: Metric Descriptions

The **Percentage of Massachusetts Acute Hospitals** section shows the proportion of total discharges and inpatient/outpatient revenue at each system in relation to all acute hospitals in Massachusetts. Specialty hospitals were included when preparing these calculations. This information was calculated using data from annual 403 Cost Reports.

**Percent of Discharges** is the number of inpatient discharges.

- **Data Source:** MA Hospital Cost Report
- **System Calculation:** Discharge Percent = Total discharges across all acute hospitals in a system divided by total statewide acute hospitals' discharges multiplied by 100

**Percent of Inpatient Revenue**<sup>1</sup> reflects each system's inpatient net patient service revenue (NPSR) as a percentage of total inpatient NPSR reported by Massachusetts acute hospitals in FY15.

- **Data Source:** MA Hospital Cost Report
- **System Calculation:** Inpatient NPSR Percent = Total inpatient NPSR across all acute hospitals in system divided by total statewide acute hospitals' inpatient NPSR multiplied by 100

**Percent of Case Mix Adjusted Discharges (CMADs)** reflects each system's CMADs as a percentage of total CMADs reported by Massachusetts acute hospitals in 2015.

- **Data Source:** MA Hospital Cost Report
- **System Calculation:** CMADs Percent = Total CMADs across all acute hospitals in a system divided by total statewide acute hospitals' CMADs multiplied by 100

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<sup>1</sup> Inpatient premium revenue were considered in calculating the system percentages of inpatient revenue, but no difference was found in the rounded percentages when premium revenue was included compared to when premium revenue was not included.

# Multi-Acute Hospital Systems: Other Organizations

Financial information for **Other Organizations** includes revenue and net assets from organizations that did not appear to fit into the other categories (acute hospital, non-acute hospital, health plan, etc.). It includes parent-level entities as well as the organizations listed below within each system. Descriptions for these organizations were sourced directly from Audited Financial Statements.

## **Baystate Health, Inc.**

- Baystate Administrative Services, Inc., a management support entity
- Baystate Total Home Care, Inc., a not-for-profit entity that holds, leases, and manages real estate on behalf of Baystate Medical Center
- Baystate Health Foundation, Inc., a charitable organization
- Baystate Health Insurance Company, Ltd., a captive insurance company
- Ingraham Corporation, a holding company for Baystate Health Ambulance

## **Berkshire Health Systems, Inc.**

- BHS Management Services, Inc., a corporation that provides management services to Berkshire's affiliates
- Berkshire Indemnity Company SPC, LTD., a segregated portfolio within Berkshire Insurance Company SPC, LTD., a captive insurance entity
- Tri-State Medical Management Corporation, a corporation that manages a physician office location for the benefit of Fairview Hospital

## **Cape Cod Healthcare, Inc.**

- Cape Health Insurance Company, a captive insurance company
- Cape Cod Hospital Medical Office Building, a for-profit provider of leased and subleased space to Cape Cod Hospital and related affiliations
- Cape Cod Healthcare Foundation, Inc., a not-for-profit corporation organized to provide development and fundraising support to Cape Cod Healthcare and affiliates.

## **CareGroup, Inc.**

- Jordan Health Systems, Inc., a not-for-profit management corporation
- New England Baptist Clinical Integration Organization, a limited liability company
- Milton Hospital Foundation, Inc., is the parent organization of Beth Israel Deaconess Hospital – Milton and Community Physician Associates
- Atlantic Medical Management, Inc., a for-profit management corporation that existed through December 31, 2013
- Jordan Community Accountable Care Organization, Inc., a for-profit accountable care organization

## **Heywood Healthcare, Inc.**

- Heywood Hospital Realty Corporation, a not-for-profit corporation that owns medical office buildings
- Heywood Healthcare Charitable Foundation, a not-for-profit corporation for all fundraising initiatives

## **Kindred Healthcare, Inc.**

- Includes all other national business

## **Lahey Health System, Inc.**

- Lahey Health Shared Services, Inc., a supporting corporation with the purpose of providing administrative support to the System and its affiliates
- Winchester Community Accountable Care Organization, Inc. (WCACO), an accountable care organization

# Multi-Acute Hospital Systems: Other Organizations

- Lahey Clinical Performance Accountable Care Organization, LLC, a corporation organized to operate an accountable care organization and participate in the Federal Medicare Shared Savings Program
- Winchester Healthcare Enterprises, Inc., is an organization that owns and manages enterprises that complement and enhance the financial viability of the Winchester Healthcare system. Enterprise owns 50 percent of Winchester Highland Management LLC, which provides managed care information to Winchester Hospital, Highland Healthcare Associates IPA, Inc., and other clients.
- Lahey Clinic Insurance Company, Ltd., a captive reinsurance company
- Lahey Clinical Performance Network, LLC, a corporation organized to contract with payers on behalf of participating providers and/or care units that are part of the System
- Lahey Clinic Foundation, Inc., a corporation organized to hold capital assets, investments, debt, and infrastructure costs
- Addison Gilbert Society, Inc., a charitable organization
- Winchester Healthcare Indemnification LTD, a Winchester Hospital captive insurance company, which in FY15 is part of Lahey Clinic Insurance Company, Ltd.
- Winchester Healthcare Management, Inc., is the parent corporation of an integrated health care delivery system in Winchester, Massachusetts
- Winchester Hospital Foundation, Inc., a company organized for the purpose of fundraising and philanthropic activities
- Reading Nominee Trust, a company organized for the purposes of ownership and management of medical office condominiums
- Northeast Health System, Inc., a corporation that functioned as the holding company for Northeast Hospital Corp. and the Northeast affiliates until July 1, 2014
- Lahey Clinic Canadian Foundation, a Canadian foundation that performs fundraising activities directed at citizens and residents of Canada

## **Shriners Hospitals for Children**

- Includes all other national business

## **Steward Health Care System, LLC**

- Steward Health Care Network, Inc., an accountable care organization that also negotiates and monitors managed care contracts
- Tailored Risk Assurance Company, Ltd., a captive insurance company
- Steward Imaging and Radiology Holdings, an LLC which manages Steward PET imaging, which operates a mobile PET imaging service at several hospitals.
- Steward St. Elizabeth's Realty
- Steward New England Initiatives
- Steward Valley Regional Ventures
- Steward Fall River Management

## **Tenet Healthcare Corporation**

- Includes all other national business

## **UMass Memorial Health Care, Inc.**

- UMass Memorial Realty, Inc., a real estate company
- UMass Memorial Health Ventures, Inc., a joint venture interest holder that includes UMass's interest in Fairlawn Rehabilitation Hospital
- HealthAlliance Realty, Inc., a company organized to manage and maintain real estate
- Marlborough Hospital's Affiliate: Controlled Entity
- UMass Memorial Accountable Care Organization, rewards ACO's that lower their growth in health care costs while meeting performance standards on quality.

# Multi-Acute Hospital Systems: Other Organizations

- Central New England HealthAlliance, Inc., the parent organization of HealthAlliance Hospitals, Inc.

## **Wellforce Inc.**

- New England Quality Care Alliance, Inc. (NEQCA) and Affiliate
- Tufts Medical Center Real Estate Company, Inc., a real estate company operated by Tufts Medical Center Obligated Group
- Cameron M. Neely Foundation for Cancer Care, Inc.
- Tufts Medical Center Indemnity Company Ltd., a captive insurance company
- Provider Network Alliance, a network with NEQCA of contracted hospitals, physicians, ancillary health providers, and other health care practitioners
- LGH Services and Affiliates
- New England Long-Term Care, Inc.



For more information, please contact:

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