

CENTER FOR HEALTH INFORMATION AND ANALYSIS

---

**PERFORMANCE OF THE  
MASSACHUSETTS  
HEALTH CARE SYSTEM**

---

A FOCUS ON PROVIDER  
**QUALITY**

TECHNICAL APPENDIX

NOVEMBER 2016



---

# A Focus on Provider Quality

## TECHNICAL APPENDIX

### Table of Contents

Metrics: Health Care-Associated Infections (HAI) .....	4
Metrics: Patient Safety Indicators .....	5
Metrics: The Leapfrog Group .....	7
Metrics: 30-Day Post-Admission Mortality .....	8
Metrics: Skilled Nursing Facility Quality .....	9
Metrics: Prevention Quality Indicators (PQI) .....	10
Metrics: Hospital-wide Adult All-Payer Readmissions .....	11
Metrics: CMS Condition-Specific 30-Day Readmissions .....	12
Metrics: Hospital-Based Inpatient Psychiatric Services (HBIPS) .....	13
Metrics: Healthcare Effectiveness Data and Information Set (HEDIS) Measures .....	13
Metrics: Consumer Assessment of Healthcare Providers and Systems Clinician and Group Patient Centered Medical Home Survey (CG CAHPS) – Primary Care (Adult and Pediatrics) .....	17
Metrics: Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) .....	19
Metrics: CMS Hospital Effective Care Processes .....	20
2015 Hospital System Affiliations .....	24
2014 Hospital System Affiliations .....	26
2015 Parent Provider Group Affiliations .....	29



# Metrics: Health Care-Associated Infections (HAI)

Measure Steward: Centers for Disease Control and Prevention

CHIA Data Source: CMS Hospital Compare

Population: All Payers, All Ages

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Catheter-Associated Urinary Tract Infections (CAUTI)	Standardized Infection Ratio (SIR) of healthcare-associated, catheter-associated urinary tract infections (UTI) among patients in bedded inpatient care locations, except level II or level III neonatal intensive care units (NICUs).	Health record
Central-Line Associated Bloodstream Infection (CLABSI)	Standardized Infection Ratio (SIR) of healthcare-associated, central line-associated bloodstream infections (CLABSI) among patients in bedded inpatient care locations.	Health record
Hospital-Onset C. difficile	Standardized infection ratio (SIR) of hospital-onset CDI Laboratory-identified events (LabID events) among all inpatients in the facility, excluding well-baby nurseries and neonatal intensive care units (NICUs).	Health record
Hospital-Onset Methicillin-Resistant Staphylococcus Aureus (MRSA)	Standardized infection ratio (SIR) of hospital-onset unique blood source MRSA Laboratory-identified events (LabID events) among all inpatients in the facility.	Health record
SSI Surgical Site Infection: SSI Colon Surgery, SSI Abdominal Hysterectomy	Facility adjusted standardized infection ratio (SIR) of deep incisional and organ/space Surgical Site Infections (SSI) at the primary incision site among adult patients aged >= 18 years as reported through the CDC National Health and Safety Network (NHSN). This single prototype measure is applied to two operative procedures, colon surgeries and abdominal hysterectomies, and the measure yields separate SIRs for each procedure.	Health record

## Definition:

Performance on these measures is reported as a standardized infection ratio (SIR), or the ratio of the observed number of infections to the expected number of infections at a particular facility. The CDC adjusts the SIR for risk factors associated with differences in a facility's infection rates, like hospital type, medical school affiliation, and bed size for CLABSI and CAUTI, and patient and procedural differences for SSI. The pre-calculated SIRs for health care-associated infections were retrieved from CMS Hospital Compare. Where a hospital's performance is not included on Hospital Compare because of small numbers, missing data, or because the measure does not apply, the data is not included in the report.

The expected number of infections is calculated based on a national baseline rate from historical data. For CLABSI and SSI measures, the baseline is from 2006 to 2008. For CAUTI, the baseline is from 2009. For MRSA and C.

difficile infections, the baseline is 2010 to 2011. This baseline is then adjusted using the hospital characteristics described above.

## Metrics: Patient Safety Indicators

**Steward:** Agency for Health Research and Quality (AHRQ)

**CHIA Data Source:** CHIA Hospital Discharge Database

**Population:** All Payers, Ages Vary By Measure

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Pressure Ulcer Rate (PSI 03)	Stage III or IV pressure ulcers or unstageable (secondary diagnosis) per 1,000 discharges among surgical or medical patients ages 18 years and older.	Administrative data derived from health records
Iatrogenic Pneumothorax Rate (PSI 06)	Iatrogenic pneumothorax cases (secondary diagnosis) per 1,000 surgical and medical discharges for patients ages 18 years and older.	Administrative data derived from health records
Central Venous Catheter-Related Blood Stream Infection Rate (PSI 07)	Central venous catheter-related bloodstream infections (secondary diagnosis) per 1,000 medical and surgical discharges for patients ages 18 years and older or obstetric cases.	Administrative data derived from health records
Postoperative Hip Fracture Rate (PSI 08)	Postoperative hip fracture (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older.	Administrative data derived from health records
Postoperative Respiratory Failure Rate (PSI 11)	Postoperative respiratory failure (secondary diagnosis), prolonged mechanical ventilation, or reintubation cases per 1,000 elective surgical discharges for patients ages 18 years and older.	Administrative data derived from health records
Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)	Perioperative pulmonary embolism or deep vein thrombosis (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older.	Administrative data derived from health records
Accidental Puncture or Laceration Rate (PSI 15)	Accidental punctures or lacerations (secondary diagnosis) during procedure per 1,000 discharges for patients ages 18 years and older.	Administrative data derived from health records
Birth Trauma Rate – Injury to Neonate (PSI 17)	Birth trauma injuries per 1,000 newborns.	Administrative data derived from health records
Obstetric Trauma Rate – Vaginal Delivery With Instrument (PSI 18)	Third and fourth degree obstetric traumas per 1,000 vaginal deliveries.	Administrative data derived from health records
Obstetric Trauma Rate – Vaginal Delivery Without Instrument (PSI 19)	Third and fourth degree obstetric traumas per 1,000 vaginal deliveries.	Administrative data derived from health records

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Patient Safety for Selected Indicators (PSI 90)	<p>The weighted average of the reliability-adjusted observed-to-expected ratios (indirect standardization of the smoothed rates) for the following component indicators:</p> <ul style="list-style-type: none"> <li>• PSI 03 Pressure Ulcer Rate</li> <li>• PSI 06 Iatrogenic Pneumothorax Rate</li> <li>• PSI 07 Central Venous Catheter-Related Blood Stream Infection Rate</li> <li>• PSI 08 Postoperative Hip Fracture Rate</li> <li>• PSI 09 Perioperative Hemorrhage or Hematoma Rate</li> <li>• PSI 10 Postoperative Physiologic and Metabolic Derangement Rate</li> <li>• PSI 11 Postoperative Respiratory Failure Rate</li> <li>• PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate</li> <li>• PSI 13 Postoperative Sepsis Rate</li> <li>• PSI 14 Postoperative Wound Dehiscence Rate</li> <li>• PSI 15 Accidental Puncture or Laceration Rate</li> </ul>	Administrative data derived from health records

#### Calculation of PSIs and PSI 90:

Performance on each measure is expressed as a ratio of observed to expected rates of the related adverse event. The patient safety composite (PSI 90) is a composite of eleven measures. The composite is the weighted average of the observed-to-expected ratios of eleven component measures. Scores for individual PSIs and PSI 90 were calculated according to AHRQ specifications and AHRQ software version 5.0.3, and using data from CHIA's Hospital Discharge Database (HDD) for three state fiscal years (2013, 2014, and 2015). Hospitals with fewer than 30 cases in the denominator were not reported. National performance is based on data publicly available on CMS Hospital Compare.

# Metrics: The Leapfrog Group

Steward: Varied

CHIA Data Source: The Leapfrog Group Hospital Survey

Population: All Payers, All Ages

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
NTSV Cesarean Section	Percent of cesarean sections for first-time pregnancy (nulliparous) that has reached 37th week or later (term) and consists of one fetus (singleton) in the head-down position (vertex).	Hospital Survey derived from health records
	Fully Meets Standard < = 23.9%	
	Substantial Progress > 23.9% and < = 27.0%	
	Some Progress > 27.0% and < = 33.3%	
	Willing to Report > 33.3%	
Elective Delivery Prior to 39 Completed Weeks Gestation	Percent of deliveries that were elective and not medically necessary prior to 39 completed weeks gestation.	Hospital Survey derived from health records
	Fully Meets Standard < = 5%	
	Substantial Progress > 5% and < = 10%	
	Some Progress > 10% and < = 15%	
	Willing to Report > 15%	
Rate of Episiotomy	Percent of vaginal deliveries (excluding those coded with shoulder dystocia) during which an episiotomy is performed.	Hospital Survey derived from health records
	Fully Meets Standard < = 5%	
	Substantial Progress > 5% and < = 10%	
	Some Progress > 10% and < = 15%	
	Willing to Report > 15%	
Antenatal Steroids	Percent of patients at risk of preterm delivery at >=24 and <34 weeks gestation that received antenatal steroids prior to delivering.	Hospital Survey derived from health records
Newborn Bilirubin Screening	Percent of newborns born at or beyond 35 completed weeks gestation who have a serum or transcutaneous bilirubin screen prior to discharge to identify risk of hyperbilirubinemia according to the Bhutani Nomogram.	Hospital Survey derived from health records
DVT Prophylaxis in Women Undergoing C-Sections	Percent of women undergoing cesarean delivery who received either fractionated or unfractionated heparin or heparinoid, or pneumatic compression devices prior to surgery.	Hospital Survey derived from health records

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Aortic Valve Replacement	Survival predictor for aortic valve replacement surgery.	Hospital Survey derived from health records
Pancreatic Resection	Survival predictor for pancreatic resection surgery.	Hospital Survey derived from health records
Computerized Physician Order Entry (CPOE)	<ul style="list-style-type: none"> <li>The percentage of medication orders entered electronically via a computer system that includes decision support software to reduce prescribing errors.</li> <li>Electronic system checks medication orders for common prescribing errors, such as incorrect dosage, incorrect medication, and drug interactions, and catches at least 50% of errors.</li> <li>For complete description of measure scoring, see: <a href="http://www.leapfroggroup.org/sites/default/files/Files/2016ScoringAlgorithm_hms_Final_Updated100316.pdf">http://www.leapfroggroup.org/sites/default/files/Files/2016ScoringAlgorithm_hms_Final_Updated100316.pdf</a></li> </ul>	Hospital Survey derived from health records
Bar Code Medication Administration (BCMA)	<ul style="list-style-type: none"> <li>Percentage of applicable units in which BCMA is implemented.</li> <li>Compliance with scanning patients and medications during administration.</li> <li>BCMA system includes decision support checks.</li> <li>Structures are in place to monitor and reduce workarounds.</li> <li>For complete description of measure scoring, see: <a href="http://www.leapfroggroup.org/sites/default/files/Files/2016ScoringAlgorithm_hms_Final_Updated100316.pdf">http://www.leapfroggroup.org/sites/default/files/Files/2016ScoringAlgorithm_hms_Final_Updated100316.pdf</a></li> </ul>	Hospital Survey derived from health records

### Definition:

Quality performance data were received from The Leapfrog Group as pre-calculated scores, including comparisons to standards defined by The Leapfrog Group. Participation in the Leapfrog Hospital survey is voluntary; where a hospital does not complete the survey or report on certain items in the survey, the data for that entity is also not included in the report. For more information on Leapfrog's scoring methods, see:

[http://www.leapfroggroup.org/sites/default/files/Files/2016ScoringAlgorithms\\_Final\\_Updated100316.pdf](http://www.leapfroggroup.org/sites/default/files/Files/2016ScoringAlgorithms_Final_Updated100316.pdf)

## Metrics: 30-Day Post-Admission Mortality

**Steward:** Centers for Medicare & Medicaid Services

**CHIA Data Source:** CMS Hospital Compare

**Population:** Medicare FFS, Age 65+



MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Pneumonia Hospitalization	Death rate for pneumonia patients within 30 days of hospital admission.	Claims and administrative data
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Heart Failure (HF) Hospitalization	Death rate for HF patients within 30 days of hospital admission.	Claims and administrative data
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Acute Myocardial Infarction (AMI) Hospitalization	Death rate for AMI patients within 30 days of hospital admission.	Claims and administrative data
Hybrid Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Acute Ischemic Stroke with Risk Adjustment for Stroke Severity	Death rate for stroke patients within 30 days of hospital admission.	Claims and administrative data
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Chronic Obstructive Pulmonary Disease (COPD) Hospitalization	Death rate for COPD patients within 30 days of hospital admission	Claims and administrative data
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Coronary Artery Bypass Grafting (CABG) Surgery	Death rate for CABG patients within 30 days of hospital admission.	Claims and administrative data

All scores for measures of 30-Day Post-Admission Mortality for hospitals were pre-calculated by and received from the Centers for Medicare & Medicaid Services. Thirty-day post-admission mortality rates are calculated based on three years of data (i.e., a hospital's 2013 mortality rate reflects mortality from 2011 through 2013).

## Metrics: Skilled Nursing Facility Quality

**Steward:** Centers for Medicare & Medicaid Services

**CHIA Data Source:** CMS Nursing Home Compare

**Population:** All Payer, All Ages

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Percent of Residents With Pressure Ulcers That Are New or Worsened (Short Stay)	Short-stay residents (100 days or fewer) for which a look-back scan indicates one or more new or worsening Stage II-IV pressure ulcers.	Minimum Data Set (MDS)

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Percent of High Risk Residents With Pressure Ulcers (Long Stay)	Long-stay residents (101 days or greater) at high risk for pressure ulcers, who have stage II-IV pressure ulcers.	Minimum Data Set (MDS)
Percent of Residents Who Self Report Moderate to Severe Pain (Short Stay)	Short-stay residents (100 days or fewer) who either report almost constant or frequent pain with at least one episode of moderate/severe pain, or report very severe/horrible pain of any frequency.	Minimum Data Set (MDS)
Percent of Residents Who Self Report Moderate to Severe Pain (Long Stay)	Long-stay residents (101 days or greater) who either report almost constant or frequent pain with at least one episode of moderate/severe pain, or report very severe/horrible pain of any frequency.	Minimum Data Set (MDS)

All quality measure scores for skilled nursing facilities were pre-calculated by and received from the Centers for Medicare & Medicaid Services.

**Note:**

The Management Minute Questionnaire (MMQ) is used to determine how much time staff spend with residents; more time is indicative of more complex patients. The high number of MMQ minutes suggests that Boston Home, Inc and Leonard Florence Center for Living serve residents with particularly complex needs.

Average MMQ minutes for each of the seven nursing homes identified for long-stay high-risk pressure ulcer rates are below:

NURSING FACILITY	AVERAGE MMQ MINUTES
Boston Home, Inc (The)	252.4245
Don Orione Nursing Home	182.9210
German Center for Extended Care	220.3655
Heritage Hall South	183.7587
Kindred Transitional Care & Rehab-Country Estates	185.0538
Leonard Florence Center for Living	245.9270
Pine Knoll Nursing Home	202.4836

## Metrics: Prevention Quality Indicators (PQI)

**Steward:** Agency for Healthcare Research and Quality

**CHIA Data Source:** CHIA Hospital Discharge Database

**Population:** All Payers, Age varies by measure

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Asthma in Younger Adults Admission Rate (PQI 15)	Admissions for a principal diagnosis of asthma per 100,000 population, ages 18 to 39 years.	Administrative data
Chronic Obstructive Pulmonary Disease Admission Rate (PQI 5)	Admissions with a principal diagnosis of chronic obstructive pulmonary disease (COPD) or asthma per 100,000 population, ages 40 years and older.	Administrative data
Congestive Heart Failure Admission Rate (PQI 8)	Admissions with a principal diagnosis of heart failure per 100,000 population, ages 18 years and older.	Administrative data
Diabetes Short-Term Complications Admission Rate (PQI 1)	Admissions for a principal diagnosis of diabetes with short-term complications (ketoacidosis, hyperosmolarity, or coma) per 100,000 population, ages 18 years and older.	Administrative data
Low Birth Weight (PQI 9)	Low birth weight (< 2,500 grams) infants per 1,000 newborns.	Administrative data

### Definition:

The Prevention Quality Indicators were calculated according to the measure specifications from the Agency for Healthcare Research and Quality (AHRQ), and using AHRQ software version 5.0.3 data from CHIA's Hospital Discharge Database (HDD) for three fiscal years (2013, 2014, and 2015). County-level scores with numerators that fall below CHIA reporting thresholds have been suppressed.

The PQI rates included in this report and databook are observed rates and not risk-adjusted.

## Metrics: Hospital-wide Adult All-Payer Readmissions

**Steward:** Centers for Medicare & Medicaid Services

**CHIA Data Sources:** CHIA Hospital Discharge Database

**Populations:** All Payers, Ages 18+

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Hospital-Wide All-Cause Unplanned Readmission Measure (HWR) (All-Payer Measure)	This measure estimates the hospital-wide, all-cause, unplanned 30-day readmission rate for all-payer patients aged 18 and older.	Administrative data derived from health records

### Calculation/Definition:

The all-payer risk standardized readmission rates for patients 18+ years of age were calculated according to the measure specifications adopted from CMS, as submitted by the Center for Outcomes Research and Evaluation, Yale New Haven Health Services Corporation. CHIA's Hospital Discharge Database (HDD) was used for this analysis.

The measure reports a single summary risk-standardized readmission rate (RSRR), derived from the volume-weighted results of five clinically defined cohorts: surgery/gynecology, general medicine, cardiorespiratory, cardiovascular, and neurology. The risk standardization procedure controls for patient case mix and hospital service mix.

For more details, please see:

- Hospital-Wide Adult All-Payer Readmissions in Massachusetts: 2011-2014, February 2016: <http://www.chiamass.gov/assets/docs/r/pubs/16/chia-readmissions-report-2011-2014.pdf>
- Behavioral Health & Readmissions in Massachusetts Acute Care Hospitals, Technical Appendix, August 2016: <http://www.chiamass.gov/assets/docs/r/pubs/16/Behavioral-Health-Readmissions-2016-Technical-Appendix.pdf>

## Metrics: CMS Condition-Specific 30-Day Readmissions

**Steward:** Centers for Medicare & Medicaid Services

**CHIA Data Sources:** CMS Hospital Compare

**Populations:** Medicare FFS, Age 65+

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Acute myocardial infarction (AMI) 30-day readmission rate (READM-30-AMI)	Rate of readmission for heart attack patients	Claims and administrative data
Heart failure (HF) 30-day readmission rate (READM-30-HF)	Rate of readmission for heart failure patients	Claims and administrative data
Pneumonia (PN) 30-day readmission rate (READM-30-PN)	Rate of readmission for pneumonia patients	Claims and administrative data
30-day readmission rate following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) (READM-30-HIP-KNEE)	Rate of readmission after hip/knee replacement	Claims and administrative data
Coronary bypass graft (CABG) surgery 30-day readmission rate (READM-30-CABG)	Rate of readmission for CABG surgery patients	Claims and administrative data
Chronic obstructive pulmonary disease (COPD) 30-day readmission rate	Rate of readmission for COPD patients	Claims and administrative data

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
(READM-30-COPD)		
Stroke 30-day readmission rate (READM-30-STK)	Rate of readmission for stroke patients	Claims and administrative data

#### Definition:

All scores for measures of condition-specific 30-day readmissions for hospitals were pre-calculated by and received from the Centers for Medicare & Medicaid Services. The outcome is defined as unplanned readmission for any cause within 30 days of the discharge date for the index admission. Condition-specific 30-day readmission rates are calculated based on three years of performance (e.g. the 2013 readmission rate reflects readmissions from 2011 through 2013).

## Metrics: Hospital-Based Inpatient Psychiatric Services (HBIPS)

Steward: The Joint Commission

CHIA Data Source: CMS Hospital Compare

Population: All Payers, All Ages

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Patients Discharged on Multiple Antipsychotic Medications (HBIPS 4)	Percent of patients discharged from a hospital-based inpatient psychiatric setting on two or more antipsychotic medications.	Health record
Post Discharge Continuing Care Plan Created (HBIPS 6)	Percent of patients discharged from a hospital-based inpatient psychiatric setting with a continuing care plan created.	Health record
Post Discharge Continuing Care Plan Transmitted to Next Level of Care Provider Upon Discharge (HBIPS 7)	Percent of patients discharged from a hospital-based inpatient psychiatric setting with a continuing care plan provided to the next level of care clinician or entity.	Health record

## Metrics: Healthcare Effectiveness Data and Information Set (HEDIS) Measures

Steward: Agency for Healthcare Research and Quality

CHIA Data Source: Massachusetts Health Quality Partners

**Population:** Commercially insured members of five health plans in Massachusetts (Blue Cross Blue Shield of Massachusetts, Tufts Health Plan, Harvard Pilgrim Health Care, Fallon Community Health Plan, and Health New England). Age varies by measure.

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
HEDIS	Use of Imaging Studies for Low Back Pain	Percentage of adult patients ages 18 to 50 who did not get imaging tests within 28 days after being diagnosed with lower back pain. Imaging tests include X-rays, MRIs, and CT-scans. A higher score means that more patients did not get imaging tests during this time - which is good.	Claims
HEDIS	Appropriate Testing for Children with Pharyngitis	The percentage of children ages 2 to 18 who have a new sore throat, and are given a "strep test" or "throat culture" when the doctor prescribes penicillin or other antibiotic medicine.	Claims
HEDIS	Appropriate Treatment for Children with Upper Respiratory Infection	How often doctors do not prescribe antibiotic medicine (such as penicillin) for children ages 3 months to 18 years who are diagnosed with colds, sore throats, or other upper respiratory infections.	Claims
HEDIS	Antidepressant Medication Management – Effective Continuation Phase Treatment	The percentage of patients 18 years of age and older with a diagnosis of major depression and were treated with antidepressant medication, and who remained on an antidepressant medication treatment for at least 180 days.	Claims
HEDIS	Breast Cancer Screening	The percentage of women 50-74 years of age who had a mammogram to screen for breast cancer.	Claims
HEDIS	Cervical Cancer Screening	The percentage of women 21-64 years of age who were screened for cervical cancer using either of the following criteria: <ul style="list-style-type: none"> <li>• Women age 21-64 who had cervical cytology performed every 3 years.</li> <li>• Women age 30-64 who had cervical cytology/human papilloma virus (HPV) co-testing performed every 5 years.</li> </ul>	Claims
HEDIS	Chlamydia Screening in Women Ages 21-24	The percentage of women 21-24 years of age who are identified as sexually active and had at least one test for chlamydia during the measurement year.	Claims

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
HEDIS	Chlamydia Screening in Women Ages 16-20	The percentage of women 16-20 years of age who are identified as sexually active and had at least one test for chlamydia during the measurement year.	Claims
HEDIS	Comprehensive Diabetes Care – HbA1c Testing	The percentage of patients 18-75 years of age with type 1 or type 2 diabetes who had hemoglobin A1c (HbA1c) testing.	Claims
HEDIS	Comprehensive Diabetes Care – Medical Attention for Nephropathy	The percentage of patients 18-75 years of age with type 1 or type 2 diabetes who had medical attention for nephropathy.	Claims
HEDIS	Comprehensive Diabetes Care – LDL-C Screening	The percentage of patients 18-75 years of age with diabetes (type 1 and type 2) who had LDL-C screening.	Claims
HEDIS	Colorectal Cancer Screening	The percentage of adults 50-75 years of age who had appropriate screening for colorectal cancer.	Claims
HEDIS	Annual Monitoring for Patients on Persistent Medications – ACE Inhibitors or ARBs	The percentage of patients 18 years of age and older who received at least 180 treatment days of ambulatory medication therapy for select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent during the measurement year – ACE inhibitors or ARBs.	Claims
HEDIS	Annual Monitoring for Patients on Persistent Medications – Total Rate	The percentage of patients 18 years of age and older who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent during the measurement year – Total rate.	Claims
HEDIS	Asthma Medication Ratio	The percentage of patients 5-85 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of greater than or equal to 0.50 during the measurement year.	Claims
HEDIS	Use of Appropriate Medications for People with Asthma: Children Ages 5 to 11	The percentage of children 5-11 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.	Claims

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
HEDIS	Use of Appropriate Medications for People with Asthma: Patients ages 12 to 50	The percentage of patients 12-50 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.	Claims
HEDIS	Well-Child Visits in the First 15 Months of Life	The percentage of enrolled patients who turned 15 months old during the measurement year and who had six or more well-child visits with a PCP during their first 15 months of life.	Claims
HEDIS	Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	The percentage of patients 3-6 years of age who received one or more well-child visits with a PCP during the measurement year.	Claims
HEDIS	Well-Care Visits for Adolescents Ages 12-21	The percentage of patients 12-21 years of age who had at least one comprehensive well-care visit with a PCP or OB/GYN during the measurement year.	Claims
HEDIS	Follow-Up Care for Children Prescribed ADHD Medication – Initiation Phase	The percentage of children 6-12 years of age as of the Index Prescription Start Date, with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with a practitioner with prescribing authority during the 30 Day Initiation Phase.	Claims
HEDIS	Cholesterol Management for Patients with Cardiovascular Conditions – LDL-C Screening	The percentage of patients 18-75 years of age who were discharged alive for AMI, coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year, who had LDL-C screening during the measurement year.	Claims

#### Notes:

All scores for HEDIS measures in medical groups and Parent Provider Groups (PPGs) were pre-calculated by and received from the Massachusetts Health Quality Partners (MHQP). National comparison data on all HEDIS measures were received from the National Committee for Quality Assurance's Quality Compass dataset. MHQP refers to PPGs as networks. HEDIS measures that have insufficient numerators, denominators, or physician panel sizes fall below MHQP public reporting thresholds and are not included in the databook.



# Metrics: Consumer Assessment of Healthcare Providers and Systems Clinician and Group Patient Centered Medical Home Survey (CG CAHPS) – Primary Care (Adult and Pediatrics)

Steward: Agency for Healthcare Research and Quality

CHIA Data Source: Massachusetts Health Quality Partners, Patient Experience Survey (PES)

Population: Commercially insured members of five health plans in Massachusetts (Blue Cross Blue Shield of Massachusetts, Tufts Health Plan, Harvard Pilgrim Health Care, Fallon Community Health Plan, and Health New England). Adult patients' ages 18+, pediatric patients age 0 to 17.

## Adult Primary Care and Pediatric Patient Experience Survey Measures

MEASURE NAME	DESCRIPTION	PRIMARY DATA SOURCE
Organizational Access	Survey respondents' scoring of satisfaction with their ability to get timely appointments, care, and information.	Patient Reported Data/Survey
Office Staff	Survey respondents' scoring of their interactions with office staff.	Patient Reported Data/Survey
Coordination of Care	Survey respondents' scoring of their satisfaction with their providers' coordination of their care.	Patient Reported Data/Survey
Communication	Survey respondents' scoring of their satisfaction with their patient-providers' communication.	Patient Reported Data/Survey
Knowledge of Patient	Survey respondents' scoring of their satisfaction with how well doctors know them.	Patient Reported Data/Survey
Behavioral Health	Survey respondents' scoring of whether doctors talked to them about their mental health.	Patient Reported Data/Survey
Self-Management Support	Survey respondents' scoring of whether healthcare providers talked with them and their family about goals for good health and ways to meet these goals.	Patient Reported Data/Survey
Willingness to Recommend	Survey respondents reported YES, they would definitely recommend their doctor to family and friends.	Patient Reported Data/Survey
Growth and Development – PEDI Only	Survey respondents' scoring of whether doctors talked to them about how well their child was growing, moving, speaking, learning, and getting along with others.	Patient Reported Data/Survey
Health and Safety – PEDI Only	Survey respondents' scoring of whether doctors gave advice about keeping their child safe and healthy.	Patient Reported Data/Survey

---

All scores for measures of patient experience in medical groups were pre-calculated by and received from the Massachusetts Health Quality Partners (MHQP).

Patient Experience measures scores are rated on a scale from 0 to 100. Each survey response is converted to numeric format, with 100 as the most favorable response. Related questions are averaged to create a respondent-level score for each measure. The respondents' measure scores are then case mix adjusted before aggregating to the medical group level and a statewide score.

These measures reflect the experience of the adult or a parent or caregiver of a child who received care and who is a commercially insured member of one of five commercial carriers in the Commonwealth: BCBSMA, Fallon Community Health Plan, Harvard Pilgrim Health Care, Health New England, and Tufts Health Plan. This sample represents approximately 70% of the commercial population. The nine Provider Group Networks measured are those serving the five carriers' commercial members. These groups are: Atrius Health, Inc., Baycare Health Partners, Berkshire Health Systems, Beth Israel Deaconess Care Organization LLC, Lahey Health, New England Quality Care Alliance, Partners Community Health Care, Steward Health Care Network, and UMass Memorial Health Care, Inc.

MHQP does not report scores for practices or groups with insufficient sample size, but individuals from these small practices or groups are counted at more aggregated levels, once sufficient sample size is reached.

# Metrics: Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Steward: Agency for Healthcare Research and Quality

CHIA Data Source: CMS Hospital Compare

Populations: All Payers, Ages 18+

MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
Cleanliness of Hospital Environment	Patient response to the individual HCAHPS survey question about the cleanliness of their hospital room during their stay.	Patient Reported Data/Survey
Communication about Medicines	A composite of responses to HCAHPS survey questions about how providers communicated about medications during the hospital stay.	Patient Reported Data/Survey
Communication with Doctors	A composite of responses to HCAHPS survey questions about how doctors communicated during the hospital stay.	Patient Reported Data/Survey
Communication with Nurses	A composite of responses to HCAHPS survey questions about how nurses communicated during the hospital stay.	Patient Reported Data/Survey
Discharge Information	A composite of responses to HCAHPS survey questions about the care instructions given to them by a provider at discharge.	Patient Reported Data/Survey
Overall Hospital Rating	Overall patient rating of the hospital, based on the recent admission, on a scale from 0 (lowest) to 10 (highest).	Patient Reported Data/Survey
Recommend the Hospital	Would the patient recommend the hospital, based on the recent admission.	Patient Reported Data/Survey
Pain Management	A composite of responses to HCAHPS survey questions about how their pain was controlled during their stay.	Patient Reported Data/Survey
Quietness of Hospital Environment	Patient response to the individual HCAHPS survey question about the quietness of their hospital room at night.	Patient Reported Data/Survey
Responsiveness of Hospital Staff	A composite of responses to HCAHPS survey questions about if help was provided when it was needed during the hospital stay.	Patient Reported Data/Survey
Care Transition	A composite of responses to HCAHPS survey questions about how patients understood the care instructions they received at discharge.	Patient Reported Data/Survey

## Definition:

All HCAHPS scores were retrieved from CMS Hospital Compare as pre-calculated percentages. Where a hospital's performance is not included on Hospital Compare because of small numbers, missing data, or because the measure does not apply, the measure is also not included in the report. For more information on CMS's methods, see:

[http://www.hcahpsonline.org/Files/October\\_2016\\_Star%20Ratings\\_Tech%20Notes.pdf](http://www.hcahpsonline.org/Files/October_2016_Star%20Ratings_Tech%20Notes.pdf)

The accompanying databook also includes HCAHPS "top-box" scores for 2011, 2012 and 2013. These scores reflect the percentage of respondents that gave the most positive response to HCAHPS survey items. Higher scores indicate better patient-reported experiences. For more information on CMS's methods, see:

<http://www.hcahpsonline.org/SummaryAnalyses.aspx>

## Metrics: CMS Hospital Effective Care Processes

Measure Steward: Centers for Medicare & Medicaid Services

CHIA Data Source: CMS Hospital Compare

Populations: All Payers, Ages 18+

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
Hospital Process	Timing of receipt of primary percutaneous coronary intervention (PCI) (AMI 8a)	Percentage of acute myocardial infarction (AMI) patients who received primary PCI during the hospital stay with a time from hospital arrival to PCI of 90 minutes or less.	Claims and health record
Hospital Process	Aspirin prescribed at discharge (AMI 2)	Percentage of acute myocardial infarction (AMI) patients without aspirin contraindications who were prescribed aspirin at hospital discharge.	Claims and health record
Hospital Process	Statin prescribed at discharge (AMI 10)	Percentage of acute myocardial infarction (AMI) patients who were prescribed a statin medication at hospital discharge.	Claims and health record
Hospital Process	Fibrinolytic therapy received within 30 minutes of hospital arrival (AMI 7a)	Percentage of acute myocardial infarction (AMI) patients who received fibrinolytic therapy during the hospital stay with a time from hospital arrival to fibrinolysis of 30 minutes or less.	Claims and health record
Hospital Process	Venous thromboembolism (VTE) patients with anticoagulation overlap therapy (VTE 3)	Percentage of patients with confirmed VTE who received an overlap of parenteral anticoagulation and warfarin therapy.	Claims and health record

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
Hospital Process	Hospital acquired potentially preventable venous thromboembolism (VTE 6)	Percentage of patients diagnosed with confirmed VTE during hospitalization (not present at admission) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date.	Claims and health record
Hospital Process	Intensive Care Unit (ICU) venous thromboembolism (VTE) prophylaxis (VTE 2)	Percentage of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the ICU or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer).	Claims and health record
Hospital Process	Venous thromboembolism (VTE) prophylaxis (VTE 1)	Percentage of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.	Claims and health record
Hospital Process	Warfarin therapy discharge instructions for Venous thromboembolism (VTE) patients (VTE 5)	Percentage of patients diagnosed with confirmed VTE that were discharged to home, home care, court/law enforcement, or home on hospice care on warfarin with written discharge instructions that all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.	Claims and health record
Hospital Process	Heart failure patients given an evaluation of left ventricular systolic function (LVS) (HF 2)	Percentage of heart failure patients with documentation in the hospital record that left ventricular systolic (LVS) function was evaluated before arrival, during hospitalization, or is planned for after discharge.	Claims and health record
Hospital Process	ACEI or ARB for left ventricular systolic dysfunction (LVSD) (HF 3)	Percentage of HF patients with LVSD and without ACEI or ARB contraindications who were prescribed an ACEI or ARB at hospital discharge.	Claims and health record
Hospital Process	Discharge instructions for heart failure patients (HF 1)	Percentage of heart failure (HF) patients who were discharged home with written instructions or educational material given to patient or caregiver at discharge or during the hospital stay addressing all of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen.	Claims and health record
Hospital Process	Pneumonia patients given the most appropriate initial antibiotic(s) (PN 6)	Percentage of pneumonia patients 18 years of age or older selected for initial receipts of antibiotics for community-acquired pneumonia (CAP).	Claims and health record

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
Hospital Process	Pneumonia patients whose initial emergency room blood culture was performed prior to the administration of the first hospital dose of antibiotics (PN 3b)	Percentage of pneumonia patients whose initial emergency room blood culture specimen was collected prior to first hospital dose of antibiotics.	Claims and health record
Hospital Process	Anticoagulation therapy for atrial fibrillation/flutter (STK 3)	Percentage of ischemic stroke patients with atrial fibrillation/flutter who were prescribed anticoagulation therapy at hospital discharge.	Claims and health record
Hospital Process	Stroke patients discharged on statin medication (STK 6)	Percentage of ischemic stroke patients who were prescribed statin medication at hospital discharge.	Claims and health record
Hospital Process	Stroke education (STK 8)	Percentage of ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and symptoms of stroke.	Claims and health record
Hospital Process	Venous thromboembolism (VTE prophylaxis) (STK 1)	Percentage of ischemic or hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission.	Claims and health record
Hospital Process	Immunization for influenza (IMM 2)	Percentage of acute care hospitalized inpatients age 6 months and older who were screened for season influenza immunization status and were vaccinated prior to discharge if indicated.	Claims and health record
Hospital Process	Children's asthma care: Relievers for inpatient asthma (CAC 1)	Percentage of use of relievers in pediatric patients admitted for inpatient treatment of asthma.	Claims and health record
Hospital Process	Children's asthma care: Systematic corticosteroids for inpatient asthma (CAC 2)	Percentage of use of systemic corticosteroids in pediatric patients admitted for inpatient treatment of asthma.	Claims and health record
Hospital Process	Children's asthma care: Home management plan of care (HMPC) document given to patient/ caregiver (CAC 3)	Percentage of assessment that there was documentation in the medical record that a home management plan of care (HMPC) document was given to the pediatric asthma patient/caregiver.	Claims and health record

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
Surgical Care Improvement Project	Prophylactic antibiotic received within 1 hour prior to surgical incision (SCIP-Inf-1a)	Percentage of surgical patients with prophylactic antibiotics initiated within one hour prior to surgical incision. Patients who received vancomycin or a fluoroquinolone for prophylactic antibiotics should have the antibiotics initiated within two hours prior to surgical incision. The extended window is due to the longer infusion time required for these antibiotics.	Claims and health record
Surgical Care Improvement Project	Prophylactic antibiotic selection for surgical patients (SCIP-Inf-2a)	Percentage of surgical patients who received prophylactic antibiotics consistent with current guidelines (specific to each type of surgical procedure).	Claims and health record
Surgical Care Improvement Project	Urinary catheter removed on Postoperative Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero (SCIP-Inf-9)	Percentage of surgical patients with urinary catheter removed on Postoperative Day 1 or Postoperative Day 2 with day of surgery being day zero.	Claims and health record
Surgical Care Improvement Project	Surgery patients who received appropriate venous thromboembolism prophylaxis within 24 hours prior to surgery to 24 hours after surgery (SCIP-VTE-2)	Percentage of surgery patients who received appropriate venous thromboembolism (VTE) prophylaxis within 24 hours prior to Surgical Incision Time to 24 hours after Surgery End Time.	Claims and health record
Surgical Care Improvement Project	Surgery patients on beta-blocker therapy prior to arrival who received a beta-blocker during the perioperative period (SCIP-Card-2)	Percentage of surgery patients on beta-blocker therapy prior to admission who received a beta-blocker during the perioperative period. The perioperative period for the SCIP Cardiac measures is defined as 24 hours prior to surgical incision through discharge from post-anesthesia care/recovery area.	Claims and health record
Surgical Care Improvement Project	Prophylactic antibiotics discontinued within 24 hours after surgery end time (SCIP-Inf-3a)	Percentage of surgical patients whose prophylactic antibiotics were discontinued within 24 hours after surgery end time.	Claims and health record
Surgical Care Improvement Project	Cardiac surgery patients with controlled 6 A.M. postoperative blood glucose (SCIP-Inf-4)	Percentage of cardiac surgery patients who had controlled 6 A.M. blood glucose ( < 200 mg/dL) on postoperative day one (POD 1) and postoperative day two (POD 2) with Surgery End Date being postoperative day zero (POD 0).	Claims and health record

SET	MEASURE NAME AND ID	DESCRIPTION	PRIMARY DATA SOURCE
Surgical Care Improvement Project	Surgery patients with recommended venous thromboembolism (VTE) prophylaxis ordered (SCIP-VTE-1)	Percentage of surgery patients for whom recommended VTE prophylaxis was ordered anytime from hospital arrival to 48 hours after Surgery End Time.	Claims and health record
Surgical Care Improvement Project	Surgery patients with perioperative temperature management (SCIP-Inf-10)	Percentage of surgery patients for whom either active warming was used intraoperatively for the purpose of maintaining normothermia or who had at least one body temperature $\geq 96.8$ degrees F recorded within the 30 minutes immediately prior to or the 15 minutes immediately after Anesthesia End Time.	Claims and health record

### Definition:

All process measure scores were retrieved from CMS Hospital Compare as pre-calculated percentages. Where a hospital's performance is not included on Hospital Compare because of small numbers, missing data, or because the measure does not apply, the data is not included in the report.

## 2015 Hospital System Affiliations

2014 HOSPITAL SYSTEM	SYSTEM ABBREVIATED NAME	HOSPITAL
Baystate Health	Baystate	Baystate Medical Center
Baystate Health	Baystate	Baystate Franklin Medical Center
Baystate Health	Baystate	Baystate Mary Lane Hospital
Baystate Health	Baystate	Baystate Wing Memorial Hospital
Berkshire Health Systems	Berkshire	Fairview Hospital
Berkshire Health Systems	Berkshire	Berkshire Medical Center
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Medical Center - Needham
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Hospital – Plymouth
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Medical Center - Milton
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Medical Center
Campus of Lowell General	Non-Affiliated	Saints Medical Center
Cape Cod Health Care	Cape Cod	Cape Cod Hospital
Cape Cod Health Care	Cape Cod	Falmouth Hospital



2014 HOSPITAL SYSTEM	SYSTEM ABBREVIATED NAME	HOSPITAL
Heywood Health	Heywood	Athol Memorial Hospital
Heywood Health	Heywood	Heywood Hospital
Lahey Health Systems	Lahey	Winchester Hospital
Lahey Health Systems	Lahey	Northeast Hospital
Lahey Health Systems	Lahey	Lahey Clinic
Non-Affiliated	Non-Affiliated	Anna Jaques Hospital
Non-Affiliated	Non-Affiliated	Signature Healthcare Brockton
Non-Affiliated	Non-Affiliated	Boston Children's Hospital
Non-Affiliated	Non-Affiliated	Dana Farber Cancer Institute
Non-Affiliated	Non-Affiliated	Emerson Hospital
Non-Affiliated	Non-Affiliated	Harrington Memorial Hospital
Non-Affiliated	Non-Affiliated	Holyoke Medical Center
Non-Affiliated	Non-Affiliated	Lawrence General Hospital
Non-Affiliated	Non-Affiliated	Lowell General Hospital
Non-Affiliated	Non-Affiliated	Massachusetts Eye and Ear Infirmary
Non-Affiliated	Non-Affiliated	Milford Regional Medical Center
Non-Affiliated	Non-Affiliated	Mt. Auburn Hospital
Non-Affiliated	Non-Affiliated	New England Baptist Hospital
Non-Affiliated	Non-Affiliated	Tufts Medical Center
Non-Affiliated	Non-Affiliated	Noble Hospital
Non-Affiliated	Non-Affiliated	South Shore Hospital
Non-Affiliated	Non-Affiliated	Sturdy Memorial Hospital
Non-Affiliated	Non-Affiliated	Boston Medical Center
Non-Affiliated	Non-Affiliated	Cambridge Health Alliance
Non-Affiliated	Non-Affiliated	Hallmark Health
Non-Affiliated	Non-Affiliated	Southcoast Hospitals Group
Non-Affiliated	Non-Affiliated	Mercy Medical Center
Non-Affiliated	Non-Affiliated	Taunton State Hospital
Non-Affiliated	Non-Affiliated	Bournewood Hospital
Non-Affiliated	Non-Affiliated	Dr John C Corrigan Mental Health Center
Non-Affiliated	Non-Affiliated	Cape Cod & Islands Community Mental Health Center
Non-Affiliated	Non-Affiliated	Worcester State Hospital
Non-Affiliated	Non-Affiliated	Baldpate Hospital
Non-Affiliated	Non-Affiliated	Walden Behavioral Care, Llc
Non-Affiliated	Non-Affiliated	Dr Solomon Carter Fuller Mental Health Center
Partners HealthCare System	Partners	Brigham and Women's Hospital

2014 HOSPITAL SYSTEM	SYSTEM ABBREVIATED NAME	HOSPITAL
Partners HealthCare System	Partners	Cooley Dickinson Hospital
Partners HealthCare System	Partners	Brigham and Women's Faulkner Hospital
Partners HealthCare System	Partners	Martha's Vineyard Hospital
Partners HealthCare System	Partners	Massachusetts General Hospital
Partners HealthCare System	Partners	Nantucket Cottage Hospital
Partners HealthCare System	Partners	Newton-Wellesley Hospital
Partners HealthCare System	Partners	North Shore Medical Center
Partners HealthCare System	Partners	McLean Hospital Corporation
Steward Health Care Systems	Steward	Steward Norwood Hospital
Steward Health Care Systems	Steward	Steward Carney Hospital
Steward Health Care Systems	Steward	Steward Nashoba Valley Medical Center
Steward Health Care Systems	Steward	Steward Holy Family Hospital at Merrimack Valley
Steward Health Care Systems	Steward	Steward Holy Family Hospital
Steward Health Care Systems	Steward	Steward Morton Hospital and Medical Center
Steward Health Care Systems	Steward	Steward Quincy Medical Center
Steward Health Care Systems	Steward	Steward St. Anne's Hospital
Steward Health Care Systems	Steward	Steward St. Elizabeth's Medical Center
Steward Health Care Systems	Steward	Steward Good Samaritan Medical
Tenet/Vanguard	Tenet/Vanguard	St. Vincent Hospital
Tenet/Vanguard	Tenet/Vanguard	MetroWest Medical Center
UMass Memorial Health Care	UMass	Health Alliance Hospital
UMass Memorial Health Care	UMass	Clinton Hospital
UMass Memorial Health Care	UMass	Marlborough Hospital
UMass Memorial Health Care	UMass	UMass Memorial Medical Center

## 2014 Hospital System Affiliations

2015 HOSPITAL SYSTEM	SYSTEM ABBREVIATED NAME	HOSPITAL
Baystate Health	Baystate	Baystate Medical Center
Baystate Health	Baystate	Baystate Franklin Medical Center
Baystate Health	Baystate	Baystate Mary Lane Hospital
Baystate Health	Baystate	Baystate Wing Memorial Hospital
Berkshire Health Systems	Berkshire	Fairview Hospital

2015 HOSPITAL SYSTEM	SYSTEM ABBREVIATED NAME	HOSPITAL
Berkshire Health Systems	Berkshire	Berkshire Medical Center
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Medical Center - Needham
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Hospital – Plymouth
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Medical Center - Milton
Beth Israel Deaconess Medical Center and Member Affiliated Hospitals	BIDMC & Affiliates	Beth Israel Deaconess Medical Center
Cape Cod Health Care	Cape Cod	Cape Cod Hospital
Cape Cod Health Care	Cape Cod	Falmouth Hospital
Heywood Health	Heywood	Athol Memorial Hospital
Heywood Health	Heywood	Heywood Hospital
Lahey Health Systems	Lahey	Winchester Hospital
Lahey Health Systems	Lahey	Northeast Hospital
Lahey Health Systems	Lahey	Lahey Clinic
Non-Affiliated	Non-Affiliated	Anna Jaques Hospital
Non-Affiliated	Non-Affiliated	Signature Healthcare Brockton
Non-Affiliated	Non-Affiliated	Boston Children's Hospital
Non-Affiliated	Non-Affiliated	Dana Farber Cancer Institute
Non-Affiliated	Non-Affiliated	Emerson Hospital
Non-Affiliated	Non-Affiliated	Harrington Memorial Hospital
Non-Affiliated	Non-Affiliated	Holyoke Medical Center
Non-Affiliated	Non-Affiliated	Lawrence General Hospital
Non-Affiliated	Non-Affiliated	Massachusetts Eye and Ear Infirmary
Non-Affiliated	Non-Affiliated	Milford Regional Medical Center
Non-Affiliated	Non-Affiliated	Mt. Auburn Hospital
Non-Affiliated	Non-Affiliated	New England Baptist Hospital
Non-Affiliated	Non-Affiliated	Noble Hospital
Non-Affiliated	Non-Affiliated	South Shore Hospital
Non-Affiliated	Non-Affiliated	Sturdy Memorial Hospital
Non-Affiliated	Non-Affiliated	Boston Medical Center
Non-Affiliated	Non-Affiliated	Cambridge Health Alliance
Non-Affiliated	Non-Affiliated	Hallmark Health
Non-Affiliated	Non-Affiliated	Southcoast Hospitals Group
Non-Affiliated	Non-Affiliated	Mercy Medical Center
Non-Affiliated	Non-Affiliated	Taunton State Hospital
Non-Affiliated	Non-Affiliated	Bournewood Hospital
Non-Affiliated	Non-Affiliated	Dr John C Corrigan Mental Health Center

2015 HOSPITAL SYSTEM	SYSTEM ABBREVIATED NAME	HOSPITAL
Non-Affiliated	Non-Affiliated	Cape Cod & Islands Community Mental Health Center
Non-Affiliated	Non-Affiliated	Worcester State Hospital
Non-Affiliated	Non-Affiliated	Baldpate Hospital
Non-Affiliated	Non-Affiliated	Walden Behavioral Care, Llc
Non-Affiliated	Non-Affiliated	Dr Solomon Carter Fuller Mental Health Center
Partners HealthCare System	Partners	Brigham and Women's Hospital
Partners HealthCare System	Partners	Cooley Dickinson Hospital
Partners HealthCare System	Partners	Brigham and Women's Faulkner Hospital
Partners HealthCare System	Partners	Martha's Vineyard Hospital
Partners HealthCare System	Partners	Massachusetts General Hospital
Partners HealthCare System	Partners	Nantucket Cottage Hospital
Partners HealthCare System	Partners	Newton-Wellesley Hospital
Partners HealthCare System	Partners	North Shore Medical Center
Partners HealthCare System	Partners	Mclean Hospital Corporation
Steward Health Care Systems	Steward	Steward Norwood Hospital
Steward Health Care Systems	Steward	Steward Carney Hospital
Steward Health Care Systems	Steward	Steward Nashoba Valley Medical Center
Steward Health Care Systems	Steward	Steward Holy Family Hospital at Merrimack Valley
Steward Health Care Systems	Steward	Steward Holy Family Hospital
Steward Health Care Systems	Steward	Steward Morton Hospital and Medical Center
Steward Health Care Systems	Steward	Steward Quincy Medical Center
Steward Health Care Systems	Steward	Steward St. Anne's Hospital
Steward Health Care Systems	Steward	Steward St. Elizabeth's Medical Center
Steward Health Care Systems	Steward	Steward Good Samaritan Medical
Tenet/Vanguard	Tenet/Vanguard	St. Vincent Hospital
Tenet/Vanguard	Tenet/Vanguard	MetroWest Medical Center
UMass Memorial Health Care	UMass	Health Alliance Hospital
UMass Memorial Health Care	UMass	Clinton Hospital
UMass Memorial Health Care	UMass	Marlborough Hospital
UMass Memorial Health Care	UMass	UMass Memorial Medical Center
Wellforce	Wellforce	Saints Medical Center
Wellforce	Wellforce	Lowell General Hospital
Wellforce	Wellforce	Tufts Medical Center

## 2015 Parent Provider Group Affiliations

Source: Massachusetts Health Quality Partners

PARENT PROVIDER GROUP	PARENT PROVIDER GROUP ABBREVIATION	MEDICAL GROUP
Atrius Health	Atrius	Reliant Medical Group (formerly Fallon Clinic)
Atrius Health	Atrius	Dedham Medical Associates
Atrius Health	Atrius	South Shore Medical Center
Atrius Health	Atrius	Southboro Medical Group (SMG)
Atrius Health	Atrius	Granite Medical
Atrius Health	Atrius	Harvard Vanguard Medical Associates
Baycare Health Partners	Baycare	Holyoke Pediatric Associates
Baycare Health Partners	Baycare	Springfield Medical Associates, Inc.
Baycare Health Partners	Baycare	Chestnut Medical Associates, Inc.
Baycare Health Partners	Baycare	Fairview Pediatrics
Baycare Health Partners	Baycare	George F. Vitek, M.D. , & Assoc. P.C.
Baycare Health Partners	Baycare	Ludlow Pediatrics, Inc.
Baycare Health Partners	Baycare	Pediatric Associates of Hampden County
Baycare Health Partners	Baycare	Pediatric Services of Springfield
Baycare Health Partners	Baycare	Pioneer Valley Pediatrics, Inc.
Baycare Health Partners	Baycare	Redwood Pediatric & Adolescent Medicine
Baycare Health Partners	Baycare	Valley Medical Associates, P.C.
Baycare Health Partners	Baycare	Baystate Medical Practices
Baycare Health Partners	Baycare	West Brookfield Family Practice
Baycare Health Partners	Baycare	Endocrine Associates Of Western Mass
Baycare Health Partners	Baycare	Orchard Medical Associates, LLC
Baycare Health Partners	Baycare	Baystate Wing Hospital Corporation
Baycare Health Partners	Baycare	Mercy Medical Group
Baycare Health Partners	Baycare	Cardiology & Internal Medicine Associates
Baycare Health Partners	Baycare	Sumner Pediatrics
Baycare Health Partners	Baycare	Valley Pulmonary & Medical Associates
Baycare Health Partners	Baycare	Noble Medical Group
Berkshire Health Systems	Berkshire	Williamstown Medical Associates
Berkshire Health Systems	Berkshire	Berkshire Faculty Services
Beth Israel Deaconess Care Organization LLC	BIDCO	Cambridge Health Alliance
Beth Israel Deaconess Care Organization LLC	BIDCO	Beth Israel Deaconess Medical Center
Beth Israel Deaconess Care Organization LLC	BIDCO	Affiliated Physicians Inc., Groups
Beth Israel Deaconess Care	BIDCO	Beth Israel Deaconess Affiliated Community Health

PARENT PROVIDER GROUP	PARENT PROVIDER GROUP ABBREVIATION	MEDICAL GROUP
Organization LLC		Centers
Beth Israel Deaconess Care Organization LLC	BIDCO	Beth Israel Deaconess Healthcare
Beth Israel Deaconess Care Organization LLC	BIDCO	Milton
Beth Israel Deaconess Care Organization LLC	BIDCO	Jordan Physician Associates
Lahey Health	Lahey	Lahey Health Primary Care
New England Quality Care Alliance	NEQCA	Highland Healthcare Associates IPA - NEQCA
New England Quality Care Alliance	NEQCA	Merrimack Valley IPA - NEQCA
New England Quality Care Alliance	NEQCA	Tufts Medical Center Physicians - NEQCA
New England Quality Care Alliance	NEQCA	Woburn Pediatric Associates, LLP - NEQCA
New England Quality Care Alliance	NEQCA	Primary Care Medical Assoc. of Norwood - NEQCA
New England Quality Care Alliance	NEQCA	Plymouth Bay Primary Care - NEQCA
New England Quality Care Alliance	NEQCA	Milton Primary Care - NEQCA
New England Quality Care Alliance	NEQCA	Cape Physicians, LLC - NEQCA
New England Quality Care Alliance	NEQCA	Southcoast Physicians Network
New England Quality Care Alliance	NEQCA	MetroWest Accountable Health Care Organization, LLC - NEQCA
New England Quality Care Alliance	NEQCA	PediSouth LCO, LLC - NEQCA
New England Quality Care Alliance	NEQCA	Healthcare South, PC - NEQCA
Non-Affiliated	Non-Affiliated	Acton Medical Associates
Non-Affiliated	Non-Affiliated	Athol Memorial Hospital Physicians
Non-Affiliated	Non-Affiliated	Berkshire Medical Group
Non-Affiliated	Non-Affiliated	Boston Medical Center Mgt Service
Non-Affiliated	Non-Affiliated	Signature Medical Group
Non-Affiliated	Non-Affiliated	New England Baptist CIO
Non-Affiliated	Non-Affiliated	CMIPA (Central Massachusetts Independent Physician Assoc.)
Non-Affiliated	Non-Affiliated	Connecticut River Internists,LLP
Non-Affiliated	Non-Affiliated	Cooley Dickinson PHO
Non-Affiliated	Non-Affiliated	East Boston Neighborhood Health Center
Non-Affiliated	Non-Affiliated	Harrington HHPO
Non-Affiliated	Non-Affiliated	Heywood Hospital And Heywood PHO
Non-Affiliated	Non-Affiliated	Valley Health Partners PHO at Holyoke Medical Center
Non-Affiliated	Non-Affiliated	Choice Plus Network
Non-Affiliated	Non-Affiliated	Lowell General PHO
Non-Affiliated	Non-Affiliated	Mount Auburn Cambridge IPA (MACIPA)
Non-Affiliated	Non-Affiliated	Noble Health Alliance

PARENT PROVIDER GROUP	PARENT PROVIDER GROUP ABBREVIATION	MEDICAL GROUP
Non-Affiliated	Non-Affiliated	Northeast PHO, Inc.
Non-Affiliated	Non-Affiliated	The Pediatric Physicians' Organization at Children's
Non-Affiliated	Non-Affiliated	Physicians of Cape Cod, Inc.
Non-Affiliated	Non-Affiliated	Riverbend Medical Group
Non-Affiliated	Non-Affiliated	South Shore Physicians Hospital Organization (SSPHO)
Non-Affiliated	Non-Affiliated	Sturdy Memorial Hospital & Associates
Non-Affiliated	Non-Affiliated	Valley Medical Group, P.C.
Non-Affiliated	Non-Affiliated	Family Practice Associates
Non-Affiliated	Non-Affiliated	Family Health Center of Worcester
Non-Affiliated	Non-Affiliated	Brockton Neighborhood Health Center
Non-Affiliated	Non-Affiliated	Adams Internists PC
Non-Affiliated	Non-Affiliated	Berkshire Pediatric Associates
Non-Affiliated	Non-Affiliated	Lee Family Practice PC
Non-Affiliated	Non-Affiliated	Harbor Health Services, Inc.
Partners Community Health Care (PCHI)	PCHI	Affiliated Pediatric Practices (APP)
Partners Community Health Care (PCHI)	PCHI	Brigham And Women's Physicians Organization
Partners Community Health Care (PCHI)	PCHI	Cape Ann Medical Center
Partners Community Health Care (PCHI)	PCHI	Charles River Medical Associates, P.C.
Partners Community Health Care (PCHI)	PCHI	Emerson Hospital And Emerson PHO
Partners Community Health Care (PCHI)	PCHI	Tri-County Medical Associates
Partners Community Health Care (PCHI)	PCHI	Massachusetts General Hospital Physicians Organization
Partners Community Health Care (PCHI)	PCHI	North Shore Health System, Inc.
Partners Community Health Care (PCHI)	PCHI	Pentucket Medical Associates (PMA)
Partners Community Health Care (PCHI)	PCHI	Newton-Wellesley PHO, Inc.
Partners Community Health Care (PCHI)	PCHI	Hallmark Melrose Wakefield
Partners Community Health Care (PCHI)	PCHI	PMG Physician Associates, P.C.
Partners Community Health Care (PCHI)	PCHI	Hallmark The Lawrence Organization
Steward Health Care Network	Steward	Prima CARE, PC

PARENT PROVIDER GROUP	PARENT PROVIDER GROUP ABBREVIATION	MEDICAL GROUP
Steward Health Care Network	Steward	Hawthorn Medical Associates
Steward Health Care Network	Steward	Compass Medical, P.C.
Steward Health Care Network	Steward	Cape Cod Preferred Physicians
Steward Health Care Network	Steward	Steward Health Care Network
Steward Health Care Network	Steward	Steward Medical Group
UMass Memorial Health Care, Inc.	UMass	UMass Memorial Community Medical Group
UMass Memorial Health Care, Inc.	UMass	UMass Independent Practices
UMass Memorial Health Care, Inc.	UMass	UMass Memorial Medical Center-Based Practices
UMass Memorial Health Care, Inc.	UMass	Edward M. Kennedy Community Health Center





For more information, please contact:

## CENTER FOR HEALTH INFORMATION AND ANALYSIS

501 Boylston Street  
Boston, MA 02116

[www.chiamass.gov](http://www.chiamass.gov)  
[@Mass\\_CHIA](https://twitter.com/Mass_CHIA)

(617) 701-8100