

**COMMONWEALTH OF MASSACHUSETTS**  
**HEALTH POLICY COMMISSION**

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**TECHNICAL APPENDIX B8**  
**DASHBOARD**

**ADDENDUM TO 2015 COST TRENDS REPORT**

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## 1 Summary

This technical appendix lays out the data sources and notes used by the Health Policy Commission (HPC) for the dashboard metrics.

## 2 Metrics

### 2.1 Measure 1-MA: Growth of THCE per capita (performance assessed relative to 3.6% benchmark)

Source: Centers for Health Information and Analysis Annual Report, 2015.

### 2.2 Measure 1-US: Growth of THCE per capita (performance assessed relative to 3.6% benchmark)

Source: Centers for Medicare and Medicaid Services National Health Expenditure Data, 2013-2014.

### 2.3 Measures 2, 2a: Growth in Premiums, Level of Premiums

Note: Premiums are for employees enrolled at a private-sector establishment that offers health insurance.

Source: Medical Expenditure Panel Survey, Insurance Component, 2012-2014.

### 2.4 Measure 3: Individuals with high out-of-pocket medical spending relative to income

Note: High out-of-pocket medical spending is defined by cases in which out-of-pocket medical expenses equaled 10 percent or more of income, or five percent or more of income if low-income (under 200% of Federal Poverty Level), not including health insurance premiums.

Based on: C. Solis-Roman, Robert F. Wagner School of Public Service, New York University, analysis of 2014 and 2015 Current Population Survey, Annual Social and Economic Supplement (U.S. Census Bureau, CPS ASES 2014, 2015).

Source: Commonwealth Foundation, Scorecard on State Health System Performance, 2015.

### 2.5 Measure 4: Readmission rate (Medicare 65+)

Note: 30-day hospital-wide, all-cause, risk-standardized readmission rate.

Source: CMS Medicare Geographic Variation Data Files, 2015.

### 2.6 Measure 4a: Readmission rate (All payer)

Note: 30-day hospital-wide, all-cause, risk-standardized readmission rate.

Source: Center for Health Information and Analysis Hospital-Wide Adult All-Payer Readmissions in Massachusetts: 2011-2013 (Report).

## 2.7 Measure 5, 5a - MA: ED utilization (per 1,000 persons), Behavioral health ED utilization (per 1,000 persons)

Note: We used the Outpatient Emergency Department (ED) Database from the Center of Information and Analysis (CHIA) for FY2010, FY2013, FY2014. Observations with non-Massachusetts zip codes, missing/unknown age or sex were excluded from this measure. American Community Survey 5-year population estimates for 2010 and 2013 were used to calculate the annual rates. For further information, see **Technical Appendix B4: “Avoidable Hospital Use.”**

Behavioral health rates were based on the Emergency Department Algorithm’s classification of mental health, alcohol and substance abuse diagnoses. All classifications are based on primary diagnosis. For further information, see **Technical Appendix B4: “Avoidable Hospital Use.”**

Source: HPC analysis of Center for Health Information and Analysis Emergency Department Data Base, 2010-2014.

## 2.8 Measures 5-US: ED utilization per 1,000 persons

Source: Kaiser Family Foundation State Health Facts, accessed 2015.

## 2.9 Measure 6-MA: Percentage of inpatient cases discharged to institutional PAC

Note: Institutional PAC is defined as discharges to “long-term care hospital”/“rehabilitation facility or hospital” and “rehabilitation hospital”/“skill nursing facility.” For further information, see **Technical Appendix B6: “Maximizing value in post-acute care.”**

Source: HPC analysis of Center for Health Information and Analysis Hospital Discharge Database, 2013-2014.

## 2.10 Measure 6-MA and US comparison: Percentage of inpatient cases discharged to institutional PAC

Note: Institutional PAC is defined as discharges to “skill nursing facility (SNF)”, “intermediate care facility (ICF)”, and “short-term hospital.” For further information, see **Technical Appendix B6: “Maximizing value in post-acute care.”**

Source: HPC analysis of HCUP Nationwide Inpatient Sample and State Inpatient Database, 2012.

## 2.11 Measure 7: At-risk adults without a routine doctor visit

Note: Measure defined as percentage of adults age 50 or older, or in fair or poor health, or ever told they have diabetes or pre-diabetes, acute myocardial infarction, heart disease, stroke, or asthma who did not visit a doctor for a routine checkup in the past two years.

Source: Commonwealth Foundation, Scorecard on State Health System Performance, 2015.

### 2.12 Measure 8: Percentage of primary care physicians practicing in certified PCMHs

Note: The numerator is all physicians practicing within a NCQA-recognized PCMH. The denominator is based on PCPs estimated by the American Association of Medical Colleges.

Source: HPC analysis of National Commission on Quality Assurance Clinician Directory and of American Association of Medical Colleges State Physician Workforce Database, 2014-2015.

### 2.13 Measure 9: Percentage of original Medicare members in APMs

Note: Original Medicare enrollment is based on Massachusetts enrollment data for the Medicare Shared Savings Program and Pioneer ACO program. For further information, see **Technical Appendix B7: “Alternative Payment Methods.”**

Source: HPC analysis of Centers for Medicare and Medicaid Services ACO performance data, 2013-2014.

### 2.14 Measures 10, 11, and 12: Percentage of commercial HMO/PPO/MassHealth members in APMs

Note: Data for commercial payers, including MassHealth MCOs, is collected by CHIA. MassHealth PCC data is provided to the HPC by MassHealth. See **Technical Appendix B7: “Alternative Payment Methods.”**

Source: HPC analysis of Center for Health Information and Analysis 2015 Annual Report: 2013-2014 Data Book and MassHealth personal communication, 2014.

### 2.15 Measure 13: Enrollment in tiered network products

Note: Tiered networks are defined by CHIA as “plans that segment provider networks by quality and/or cost measures, with varying levels of member cost-sharing.”

Source: HPC analysis of Center for Health Information and Analysis 2015 Annual Report: 2013-2014 Databook.

### 2.16 Measure 14: Percentage of discharges in top 5 systems

Note: Our analysis of the concentration of commercial inpatient discharges at the five highest-volume systems in Massachusetts used the FY 2012 and FY2014 MHDC hospital discharge databases. We used 2012 and 2014 discharge data, and HPC-defined hospital systems for these respective years. We included in our data only Massachusetts residents. Data are for acute hospital discharges, as federal hospitals, long-term care hospitals, psychiatric hospitals, and other specialty hospitals were excluded.

Source: HPC analysis of Center for Health Information and Analysis Hospital Discharge Database, 2012-2014.

### **2.17 Measure 15: Percentage of discharges from hospitals with relative price of 1.0 or above**

Our analysis used Relative Price (RP) data for years 2010 to 2014 provided by CHIA to calculate the percent of total discharges that came from hospitals with RP over 1.0 in each year. Our analysis utilized discharges reported by BCBS, HPHC, and THP. Within each payer, we limited the hospitals in our calculation to those with RP data reported for all five years from 2010 through 2014. We then calculated, by payer, the total discharges for hospitals with RP over 1.0 and the total discharges for all hospitals. Finally, we summed across all three payers the total discharges for hospitals with RP over 1.0, and divided by the sum of total discharges for all hospitals across all three payers.

Note: The discharge percentage is calculated with CHIA's Relative Price data. The relative price data were used to define the cohorts 1) hospitals with a relative price of 1.0 and 2) hospitals with a relative price below 1.0. The discharges found within the relative price data were counted for each cohort to develop the percentages.

Source: HPC analysis of Center for Health Information and Analysis Relative Price Data, 2009-2014.