COMMONWEALTH OF MASSACHUSETTS
HEALTH POLICY COMMISSION

DATA SOURCES
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Summary

This technical appendix lays out the data sources used by the Commission in its cost trends July 2014 supplement.

1 National Health Expenditures Accounts

Organization: Centers for Medicare & Medicaid Services

Year(s) of data used: 2009

Description of data: The National Health Expenditures Accounts aims to quantify the complete set of health expenditures in the U.S. in a comprehensive, multidimensional, and consistent way. Health spending is measured in a comprehensive yet mutually exclusive structure to allow accounting for the full set of spending. The data presented in this report as health expenditures are from the "Personal Health Care, Goods and Services" category, which includes spending for all medical goods and services that are rendered and used during the process of treating conditions and diseases for specific people. Additional spending to support the health care industry, such as cost of administration for the insurance industry, public health activity, investment in research, structures and equipment, is not included in this figure at the state-level. The data are available by state of residence as well as aggregated nationally, which allows each state to compare its spending to other states and to the national average. The sources CMS uses to build this dataset include the American Hospital Association, Census Bureau's Economic Census, and the Census Bureau's Service Annual Survey. More information on the data source is available from http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/dsm-12.pdf


2 Nationwide Inpatient Sample (NIS)

Organization: Healthcare Cost and Utilization Project (Agency for Healthcare Research and Quality)

Year(s) of data used: 2011

Description of data: The Healthcare Cost and Utilization Project (HCUP) is a family of databases and related software tools and products developed through a Federal-State-Industry partnership and sponsored by AHRQ. HCUP databases are derived from administrative data and contain encounter-level, clinical and nonclinical information including all-listed diagnoses and procedures, discharge status, patient demographics, and charges for all patients, regardless of payer (e.g., Medicare, Medicaid, private insurance, uninsured). The HCUP databases are based on the data collection efforts of organizations in participating States that maintain statewide data
systems and are Partners with AHRQ. The Nationwide Inpatient Sample (NIS) is the largest publicly available all-payer hospital inpatient care database in the United States. Researchers and policymakers use NIS data to identify, track, and analyze trends in health care utilization, access, charges, quality, and outcomes.

Available from: http://www.hcup-us.ahrq.gov/nisoverview.jsp

3 Center for Health Information and Analysis

3.1 Total Medical Expenses

Organization: Center for Health Information and Analysis

Year(s) of data used: 2009 - 2012

Description of data: Total Medical Expenses (TME) represents the full amount paid to providers for health care services delivered to a payer’s covered enrollee population (payer and enrollee cost-sharing payments combined). TME covers all categories of medical expenses and all non-claims related payments to providers, including provider performance payments. On an annual basis, the 10 largest commercial payers file TME reports with the Center for Health Information and Analysis (CHIA).

Available from: http://www.mass.gov/chia/researcher/chia-publications.html

3.2 All-Payers Claims Database

Organization: Center for Health Information and Analysis

Year(s) of data used: 2010 to 2012

Description of data: The Massachusetts All-Payer Claims Database (APCD) is an essential resource with which researchers can examine health care spending and the evolution of health care and health insurance markets. The APCD contains medical, pharmacy, and dental claims from all payers that insure Massachusetts residents, as well as information about member, insurance product, and provider characteristics. It does not include payments that occur outside of the claims system, such as supplemental payments related to quality incentives or alternative payment methods, nor does it include self-pay spending that consumers incur outside of their insurance coverage.

For the 2014 mid-year cost trends report, we used a sample that consists of claims for the state’s Medicare Fee-For-Service and three largest commercial payers – Blue Cross Blue Shield of Massachusetts (BCBS), Harvard Pilgrim Health Care (HPHC), and Tufts Health Plan (THP) – who represent 80 percent of the commercial market. Medicare claims analyses do not include expenditures by Medicare Advantage plans. Our analyses incorporated claims-based medical expenditures for Medicare and commercial payers, but not pharmacy spending, payments made
outside the claims system, or MassHealth spending. Examination of APCD data from MassHealth is ongoing, and MassHealth claims analyses will be included in future work by the Commission.

Available from: http://www.mass.gov/chia/researcher/hcf-data-resources/apcd/

3.3 Alternative Payment Methods Baseline Report (data appendix)
Organization: Center for Health Information and Analysis

Year(s) of data used: 2012

CHIA’s baseline report on alternative payment methods (APMs) and its data appendix examines the extent of their use in the Massachusetts commercial market. The report also describes the prevalence of APMs among the various insurance products, between Massachusetts regions, and within physician groups in Massachusetts that manage the members’ care. CHIA will continue to monitor and report on the use of APMs in Massachusetts in future reports.


3.4 HCF-1 cost reports
Organization: Center for Health Information and Analysis

Year(s) of data used: 2011

CHIA uses the information submitted on the HCF-1 form as the basis for computing per diem rates of payment for Nursing Facilities that care for publicly-aided patients. In addition, CHIA uses this data for informational purposes to support public policy initiatives. All Nursing Facilities that provide care to publicly-aided patients must file form HCF-1 on the accrual basis. These reports comprise balance sheets and income statements that accurately reflect the complete financial condition of the facility, realty trust, management company or other reporting entity and also show total allowable expenses. The report also provides a vehicle to claim allowable fixed costs and costs that were generated through the entities that report on the forms HCF-2-NH (reality company report) and HCF-3 (management and/or central office report).


4 Bureau of Labor Statistics Employment and Wage Data by Area and Occupation

Organization: Bureau of Labor Statistics

Year(s) of data used: 2001, 2009, 2012
**Description of data:** BLS publishes wage data by area and occupation on an annual basis. The BLS wage data by area and occupation are measured from the National Compensation Survey, Occupational Employment Statistics Survey, or the Current Population Survey.

**Available from:** [http://www.bls.gov/bls/blswage.htm](http://www.bls.gov/bls/blswage.htm)

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**5 American Community Survey**

**Organization:** U.S. Census Bureau

**Year(s) of data used:** 2009 to 2012

**Description of data:** The American Community Survey from the United States Census Bureau is a survey that collects demographic data (age, sex, race, household structure, income, health insurance, education, etc.) from communities around the United States. Because the survey data are collected from a sample of people who choose to participate and share their responses, the American Community Survey is stronger for providing population distributions of characteristics, in measures like percentages, means, medians and rates. Summary data from the survey is released annually, in 1-year, 3-year average, and 5-year average formats, where the output values are averages over the period prior to the release year. The 1-year data are the most current, but the least precise due to smallest sample size. The 3-year and 5-year data can both be helpful for studying smaller populations where a 1-year sample size is not large enough to be significant, but both have the tradeoff of being less current than the 1-year data.

**Available from:** [http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml)

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**6 The American Hospital Association Annual Survey**

**Organization:** The American Hospital Association

**Year(s) of data used:** 2011-2012

**Description of data:** The American Hospital Association’s (AHA’s) Annual Survey Database provides a comprehensive snapshot of U.S. hospitals based on primary survey data from the AHA Annual Survey of Hospitals, AHA membership data, and U.S. Census Bureau identifiers. The database includes up to 1,000 data fields covering operation information on 6,500 hospitals related to organizational structure, facility and service lines, inpatient and outpatient utilization, expenses, physician arrangements, staffing, corporate and purchasing affiliations, teaching status, geographic indicators, and cross-reference identifiers (Medicare Provider Number and NPI), among other indicators for analysis. The database is used primarily by health policy researchers in academic, government, and private organizations.

**Available from:**
7 The Henry J. Kaiser Family Foundation State Health Facts

Organization: The Henry J. Kaiser Family Foundation

Year(s) of data used: 2009 to 2012

Description of data: State Health Facts is a project of the Henry J. Kaiser Family Foundation (KFF) and provides open access to current and easy-to-use health data for all 50 states, the District of Columbia, and the United States; as well as counties, territories, and other geographies. State Health Facts is comprised of more than 800 health indicators and provides users with the ability to map, rank, trend, and download data. Data come from a variety of public and private sources, including Kaiser Family Foundation reports, public websites, government surveys and reports, and private organizations. The data is generally available by state as well as at a national level which allows researchers to compare and analyze certain indicators state-by-state, and to the national average.

Available from: http://kff.org/statedata/

8 Massachusetts Health Data Consortium Discharge Database

Organization: Massachusetts Health Data Consortium

Year(s) of data used: 2009-2012

Description of data: The Inpatient Discharge Database contains the most typical information about a discharge, such as the patient's age, sex, diagnoses, procedures, location of care, type of admission, and DRG groups. Additionally, the database contains a number of lookup tables for data elements such as hospitals, payers, and ICD9 Codes.

Available from: http://www.mahealthdata.org

9 Medicaid Statistical Information System (MSIS)

Organization: Centers for Medicare & Medicaid Services

Year(s) of data used: 2010

States submit Medicaid eligibility and claims program data quarterly to CMS through the Medicaid Statistical Information System (MSIS). The data include one file which contains eligibility and demographic characteristics for each person enrolled in Medicaid at any time during the quarter, and four separate files of claims adjudicated for payment during the quarter for long-term care services, drugs, inpatient hospital stays and all other types of services. The state-submitted data include over 65 million eligibility records and over 3 billion claims records per year. For purposes of this report, MSIS data was used to calculate MassHealth spending and enrollment trends by service category and eligibility group. 2010 MSIS data does not include all data for all MassHealth covered populations.
10 Medicaid and CHIP Program Statistics (MACStats)

Organization: Medicaid and CHIP Payment and Access Commission

Year(s) of data used: 2011

MACStats includes state-specific information about program enrollment, spending, eligibility levels, optional Medicaid benefits covered, and the federal medical assistance percentage (FMAP), as well as an overview of cost-sharing permitted under Medicaid and the dollar amounts of common federal poverty levels (FPLs) used to determine eligibility for Medicaid and CHIP. It also provides information that places these programs in the broader context of state budgets and national health expenditures.

Available from: http://www.macpac.gov/macstats

11 Genworth 2014 Cost of Care Survey

Organization: Genworth

Year(s) of data used: 2014

Genworth’s 2014 Cost of Care Survey, conducted by CareScout®, covers over 14,800 long term care providers publishes costs in 440 regions based on the 381 U.S. Metropolitan Statistical Areas (MSAs). MSA definitions are established by the U.S. Office of Management and Budget and include approximately 85 percent of the U.S. population.


12 Medicare & Medicaid Statistical Supplement

Organization: Centers for Medicare & Medicaid Services

Year(s) of data used: 2010 & 2011

The CMS Office of Information Products and Data Analysis (OIPDA) produces an annual Medicare and Medicaid Statistical Supplement report that provides detailed statistical information on Medicare, Medicaid, and other CMS programs. The Supplement includes 115 tables and 67 charts describing health expenditures for the entire U.S. population, characteristics of the Medicare and Medicaid covered populations, use of services, and expenditures under these programs. This CMS report is published annually in electronic form and is available for each year from 2001 through present.
13 Long Term Care Minimum Data Set (MDS)

Organization: Centers for Medicare & Medicaid Services

Year(s) of data used: 2011

The Long-Term Care Minimum Data Set (MDS) is a standardized, primary screening and assessment tool of health status that forms the foundation of the comprehensive assessment for all residents in a Medicare and/or Medicaid-certified long-term care facility. The MDS contains items that measure physical, psychological and psychosocial functioning. The items in the MDS give a multidimensional view of the patient’s functional capacities and helps staff to identify health problems.


14 MedPAC Medicare Data Book, 2012

Organization: Medicare Payment Advisory Commission (MedPAC)

Year(s) of data used: 2012

The Data Book includes information on national health care and Medicare spending, Medicare and dual-eligible beneficiary demographics, Medicare quality, and Medicare beneficiary and other payer liability. It also includes data regarding various provider types, such as data on Medicare spending, beneficiary utilization of the service, number of providers, volume, length of stay, and Medicare profit margins. The Data Book also covers the Medicare Advantage and Part D drug programs.


15 Report on Medicaid Funding for Nursing Home Care, 2012

Organization: American Health Care Association

Year(s) of data used: 2010 & 2011

The American Health Care Association (AHCA) reports on levels of Medicaid reimbursement by state based on audited or desk-reviewed cost reports for nursing home providers in different states.
16 National Survey on Drug Use and Health

*Organization:* Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality

*Year(s) of data used:* 2008-2011, & 2013

The National Survey on Drug Use and Health (NSDUH) provides national and state-level data on the use of tobacco, alcohol, illicit drugs (including non-medical use of prescription drugs) and mental health in the United States. NSDUH is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the U.S. Public Health Service in the U.S. Department of Health and Human Services (DHHS).

The NSDUH estimates prevalence of behavioral health conditions based on survey results from a population of non-institutionalized civilian residents. Because of the survey nature of the instrument, the presence of mental illness is imputed from the presence of psychological distress (based on Kessler-6 questions), functional impairment due to mental health problems (based on WHODAS questions), suicidal thoughts, and major depressive episodes.

A statistical model calibrated on the results of clinical interviews conducted with 5,000 NSDUH respondents between 2008 and 2010 then imputes the likelihood of having any mental illness (AMI) or serious mental illness (SMI) based on the presence of the aforementioned factors.

More information on the NSDUH methodology is available from SAMHSA at: [http://www.samhsa.gov/data/NSDUH/2k12State/Methodology/NSDUHsaeMethodology2012.htm](http://www.samhsa.gov/data/NSDUH/2k12State/Methodology/NSDUHsaeMethodology2012.htm)

Available from: [http://www.samhsa.gov/data/NSDUH.aspx](http://www.samhsa.gov/data/NSDUH.aspx)

17 Online Survey, Certification, and Reporting (OSCAR) database

*Organization:* Centers for Medicare & Medicaid Services

*Year(s) of data used:* 2011

Online Survey, Certification and Reporting (OSCAR) is a data network maintained by the Centers for Medicare and Medicaid Services (CMS) in cooperation with the state long-term care surveying agencies. OSCAR is a compilation of all the data elements collected by surveyors during the inspection survey conducted at nursing facilities for the purpose of certification for participation in the Medicare and Medicaid programs. OSCAR is the most comprehensive source...
of facility level information on the operations, patient census and regulatory compliance of nursing facilities. The OSCAR database includes the nursing home operational characteristics and aggregate patient characteristics for each facility.