Web Tools for Data Analysis

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Association of Public Data Users (APDU)
2014 Annual Conference
Web Tools for Data Analysis

- The Age of Data
- The Center for Health Information and Analysis (CHIA)
- Session Overview
The Age of Data

The home of the U.S. Government’s open data
Here you will find data, tools, and resources to conduct research, develop web and mobile applications, design data visualizations, and more.

GET STARTED
SEARCH OVER 108,606 DATASETS

BROWSE TOPICS

Agriculture  Climate  Education  Energy  Finance  Geospatial

Global Development  Health  Jobs & Skills  Public Safety  Science & Research  Weather

MORE TOPICS

108,606 Datasets
The Age of Data

➢ More publicly available data than ever
  • Easier to access
  • More accessible formatting

➢ More programs and tools for analysis
  • Increasingly available online with cloud storage

➢ Greater firm/ organization/ agency buy-in
  • Importance of investing in data collection, verification, clean-up, analysis, meaningful use, and effective communication

➢ BUT ALSO greater expectation – by internal and external stakeholders – for data-driven performance evaluation and results
The Center for Health Information and Analysis

- Founded as part of Massachusetts’ 2012 Chapter 224 cost-transparency and cost-containment health care reforms

- CHIA’s mission is to:
  
  “Monitor the Massachusetts health care system and to provide reliable information and meaningful analysis for those seeking to improve health care quality, affordability, access, and outcomes.”

- Steward of Massachusetts All Payer Claims Database (MA APCD)

- Collectors, users, and disseminators of payer (insurer) and provider (hospitals, physician group) data

http://www.mass.gov/chia/

Twitter: @Mass_CHIA
The Center for Health Information and Analysis

All Payer Claims Data
Member Eligibility
Insurance Product
Medical Claims
Dental Claims
Pharmacy Claims
Provider Use

Alternative Payment Methodology (APM) Adoption Data

Health Insurer Membership Data

MA Household Survey
MA Employer Survey

Hospital & Community Health Center Cost Data

Health Care Premiums, Cost-Sharing, & Benefit Level Data

Hospital Financial Performance Data

Total Medical Expenses (TME) Data

Long Term Care Data

Acute Hospital Case Mix Data
Inpatient
Observation
Emergency Room
The Center for Health Information and Analysis

CHIA Collected Data from Payers, Providers, & Sister Agencies

External, Publicly Available Data

Sensitive Data Withheld

Data Released for public use
- Standalone Files
- Report DataBooks
The Center for Health Information and Analysis

“The Annual Report on the Performance of the Massachusetts Health Care System”
The Center for Health Information and Analysis

“The Annual Report on the Performance of the Massachusetts Health Care System”

http://www.mass.gov/chia/
Total Health Care Expenditures per capita grew by +2.3%, below the health care cost growth benchmark.

Per capita health care expenditures grew faster than inflation from 2012-2013 but growth in THCE was slower than overall per capita economic growth and the health care cost growth benchmark set by the Legislature and the Health Policy Commission.

+2.3% THCE Growth
$7,550 Per Capita

+3.6% Cost Growth Benchmark
+2.6% Growth of GSP Per Capita
+1.5% Overall Inflation


http://www.mass.gov/chia/
About ten cents of every premium dollar went to non-medical spending, but surpluses were only a fraction of the remainder.

Components of Massachusetts Payer Retention 2013

Premium revenues that are not spent on medical care are used by payers to cover expenses in the broad categories of general administration, broker commissions, premium taxes and fees, and consumer rebates, with the remainder representing surplus (profit) during a given year.

66% General Administration

1% Rebates

3% Surplus

24% Commissions

6% Premium Taxes and Fees

Statewide Average MLR: .90

Source: Oliver Wyman analysis of submitted federal COI data for eight payers.

http://www.mass.gov/chia/
The Center for Health Information and Analysis

“Annual Report on the Performance of the Massachusetts Health Care System”

http://www.mass.gov/chia/
The Center for Health Information and Analysis

➢ “Annual Report” Used 17 different data sources
  • Four (4) CHIA collected, payer-reported data sources
  • Six (6) other MA collected and reported data sources
  • Seven (7) US collected and reported data sources
The Center for Health Information and Analysis

Information on the Performance of the Massachusetts Health Care System

The Center for Health Information and Analysis (CHIA) monitors a wide variety of health system indicators in Massachusetts. CHIA’s most recent report analysis — The Annual Report on the Performance of the Massachusetts Health Care System — includes a first-ever calculation of the Commonwealth’s Total Health Care Expenditures (THCE). THCE is a measure of total statewide spending for health care in the Commonwealth. The report includes specific health care expenditures for Massachusetts residents from public and private sources. The findings from this report will inform the Health Policy Commission’s 2014 Health Care Cost Trends Hearing, scheduled for October 6 and 7.

Key Findings: In 2013, the Massachusetts health care system performed favorably on a number of indicators. Notably, the overall per capita growth in Total Health Care Expenditures (THCE) was below the Commonwealth’s 2013 health care cost growth benchmark. Furthermore, commercial premium levels and member out-of-pocket cost sharing did not increase from 2012, while benefits levels remained steady.

Annual Report on the Performance of the Massachusetts Health Care System (Published September 2013)

- Annual Report on the Performance of the Massachusetts Health Care System (PDF) | Word
- Executive Summary (PDF) | Word

- Annual Report Supplements
  - Supplement 1: Total Health Care Expenditures (PDF) | Word
  - Supplement 2: Commercial Insurance Premiums and Benefit Levels (PDF) | Word
  - Supplement 3: Member Medical Cost-Sharing (PDF) | Word
  - Supplement 4: Commercial Total Medical Expenditures (PDF) | Word
  - Supplement 5: Managing Physician Group Total Medical Expenditure and Quality (PDF) | Word
  - Supplement 6: Commercial Payment Use of Non-Medical Funds (PDF) | Word
  - Supplement 7: MassHealth and Commonwealth Care Expenditures (PDF) | Word
  - Supplement 8: Medicare Expenditures for Massachusetts Beneficiaries (PDF) | Word
  - Supplement 9: Other Public Health Care Programs (PDF) | Word
  - Supplement 10: Commercial Payment Methods (PDF) | Word
  - Supplement 11: Alternative Payment Methods (PDF) | Word

- Data Books
  - Data Book 1: Total Health Care Expenditures (Excel)
  - Data Book 2: Total Medical Supported by Payer and Physician Group (Excel)
  - Data Book 3: Alternative Payment Methods (Excel)
  - Data Book 4: Managing Physician Group (Excel)
  - Data Book 5: Coverage and Costs (Excel)

- Press Release: CHIA REPORTS ON PERFORMANCE OF THE MASSACHUSETTS HEALTH CARE SYSTEM

- Massachusetts Total Health Care Expenditure Methodology (Published, December, 2013)
  - White Paper (PDF) | Word
  - Data Appendix (Excel)


“Annual Report on the Performance of the Massachusetts Health Care System”

Five (5) DataBooks
Session Overview

“Web Tools for Data Analysis”

- “Medical Expenditure Panel Survey (MEPS) Web-based Analytical Tools”
  • Steven Cohen, Director, Center for Financing, Access, and Cost Trends, US Agency for Healthcare Research and Quality

- “Census Explorer and other Census.gov Tools”
  • Nesreen Khashan, Data Dissemination Specialist, US Census Bureau

- “Empowering County Leaders with Interactive Data Tools”
  • Nick Lyell, Senior Research Associate, National Association of Counties (NACo)