Massachusetts All-Payer Claims Database (APCD)

May 18, 2011



There is currently no single repository for health care claims data in MA

- Health care claims data are collected by several government entities in various formats and levels of completeness
 - Health Care Quality and Cost Council (to populate its website and to create public use or limited use datasets for research purposes)
 - Group Insurance Commission (to support its Clinical Performance Improvement Initiative)
 - Division of Insurance (to produce HMO utilization reports)
 - Department of Public Health (to inform post-parturn depression screening reporting)
 - Commonwealth Connector Authority (to access plan provider information for consumer website)
 - MassHealth
- Current claims data collection is limited
 - Does not include self-insured (approximately 34% of \$\$), Medicare (15%), and Medicaid (15%) claims
 - Does not include member benefit/coverage information



Overview of DHCFP efforts

 The Division of Health Care Finance and Policy (DHCFP), per M.G.L. c. 118G, §§ 6 and 6A, has broad authority to collect health care data

When	Milestone
April 2010	DHCFP issued a notice of public hearing and released draft regulations for both collection and release of health care claims data
May 2010	DHCFP held a public hearing on the proposed regulations
July 2010	DHCFP adopted final regulations
October 2010	DHCFP collected self-insured data for cost trends analyses
February 2011	Health care payers began submitting all health care claims data to DHCFP for November 2010, December 2010, and January 2011
March 2011	Payers are submitting regular data updates, on a monthly basis



Four phases of APCD development in Massachusetts

- Planning
- Implementation
- Information Production (analytics and extracts)
- Potential Ongoing Enhancements



Phase One: Planning (August 2008 – July 2010)

Key Highlights

- Established a collaborative process with stakeholders
- Aligned Massachusetts technical specifications for submissions with APCD efforts in other states, particularly in New England, where payers may be subject to compliance from multiple states
- Adopted final data collection and release regulations
- Prepared application for Medicare data
- Documented business requirements of other governmental agencies to meet their data needs
- Evaluated software tools for data analytic enhancements (High Risk, Episode, Preventable Readmissions, etc.)



APCDs link critical information across file types to create a single, comprehensive dataset

All-Payer Claims Database

Provider File

Service/prescribing provider

Name, Tax ID, Payer ID, NPI, Specialty code, City, State, Zip code

Billing provider Name, payer ID, NPI

Member File

Personal Health Info (encrypted)

Subscriber and member names and social security numbers

Patient demographics

Age, gender, relationship to subscriber

Claims File

Medical Claims
Pharmacy Claims
Dental Claims

Service information

Service and paid dates, paid amount, admission types, diagnosis and procedure information

Product File

Type of Product HMO, POS, Indemnity

Type of contract Single person, family

Coverage type
Self-funded, Individual,
Small group



Phase Two: Implementation (August 2010 – ongoing)

Key Highlights

- Built the technical system to collect claims data
- Purchased Episodic Treatment and Episodic Risk Group software
- Ensuring protection and de-identification of personal and sensitive information
 - Completed and passed a penetration test of the web portal service utilized for sending encrypted data files
 - Conducting a third-party SAS70 audit to validate the operational effectiveness of agency's security program and affirm full compliance with federal HIPAA rules and state laws
- Conducting daily technical assistance calls regarding data submission with payers
- Developing ISAs and MOUs with other governmental entities
- Integrating Medicare data into APCD
- Partnering with NAHDO and APCD Council to create data standards with ANSI X12 and NCPDP data standardization boards
- DHCFP is gearing up to receive all health care claims data for 2008, 2009, and 2010 from payers in May 2011



Phase Three: Information production

- DHCFP proposes a three-pronged approach to this phase:
 - Utilization of data for DHCFP's statutorily required analyses
 - Provision of data to other state governmental agencies for their statutorily required uses
 - Release of data to external entities for uses in public interest



Step 1: Utilization of data for DHCFP's statutorily required analyses

- Cost Analysis: DHCFP was granted authority to collect health care claims data in order to inform
 its annual study of "health care provider and payer costs and cost trends, factors contributing to
 cost growth within the Commonwealth's health care system, and relationship between provider
 costs and payer premium rates"
- Total Medical Expenses: Facilitate the calculation of claims-based total medical expenses (TME);
 broad participation from over 100 registered payers within the APCD may allow for more accurate tracking of medical spending
- Relative Prices: Facilitate future calculations of relative prices (RP) that compare how much a
 carrier would pay each provider for a standard mix of services across a standard mix of insurance
 products relative to other, similar providers in a carrier's network
- Other Research Efforts: Inform other efforts to monitor the Massachusetts health care delivery system, specifically in relation to quality and performance outcomes, and understand the impact of payment and delivery system reforms
- Internal analysis will serve as a critical step in refining data quality or completeness issues



Step 2: Provision of data to other governmental agencies for their statutorily required uses

- The APCD can serve as the central repository of health care claims data for Massachusetts state agencies
- Massachusetts payers will submit claims data to the APCD and DHCFP can provide the required data extracts to other agencies
 - This will eliminate duplicative data requests by state governmental entities and result in administrative simplification for payers
- There may need to be an interim transition period in which other agencies will continue collecting data while payers are also submitting to the APCD – this parallel process allows for validation of data quality
 - DHCFP is in active discussions with other state governmental agencies (HCQCC, GIC, DOI, MassHealth, Connector, DPH, DOR) to consolidate existing and future reporting requirements
- DHCFP intends to make data sets available for state governmental agencies to review by late 2011



Step 3: Release of data to external entities for uses in public interest

- DHCFP is committed to facilitating transparency within the Massachusetts health care delivery system
- The availability and release of all-payer claims data will enhance public and private research projects related to cost, medical service utilization, health care quality, and comparative effectiveness
- DHCFP intends to have data files made available through an application process
 - The timing of the release files will be dictated by the quality and completeness of the data submitted by payers
 - DHCFP is committed to thoroughly reviewing the integrity of the data before it is broadly disseminated in order to support analyses in the public interest



Phase Four: Potential ongoing enhancements Estimated timeframe: Calendar year 2013 onwards

- DHCFP can create pre-determined modules based on specific, common data uses
 - Traditional model for release is to create files based on tiers of data sensitivity. These allencompassing files are relatively easy to produce but require applicants to prepare and purchase technical hardware and software to support data intake and analysis
- DHCFP may provide enhanced data access through a web-based interface that
 would give applicants access to approved files and the ability to utilize analytic
 software tools, such as episodic treatment groupers (ETGs) and risk-adjustment
 software (DxCG), and tools to generate reports and dashboards for analysis
 - This web-based access is beneficial to those who otherwise would not have the IT infrastructure or resources to invest in expensive analytic tools and the experienced staff to manipulate data files
- DHCFP's analytic and technical staff could be made available, for an additional fee, to guide users of the data and help troubleshoot issues



Division of Health Care Finance and Policy

For more information, please visit:

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