Origins & Uses of Minnesota’s All Payer Claims Data (MN APCD)

North Carolina Institute of Medicine
Task Force on All Payer Claims Data

August 26, 2016

Stefan Gildemeister
Director, Health Economics Program

Overview

- MN APCD:
  - What is it?
  - What can it do for health policy?
- Origins of the MN APCD
- Authority for using the MN APCD
- Examples from current uses
- Lessons & next steps
What is the MN All Payer Claims Data?

- Large-scale database that systematically collects and integrates claims data from different payers:
  - Enrollment information
  - Medical & pharmacy claims
  - Actual transaction prices
- Geographically rich detail on:
  - Diagnosed health conditions
  - Delivered health care services
- Some important limitations
  - Claims
  - Data thickness
  - Prices in claims ... are tricky

APCDs – A (Potentially) Qualitative Change For State Policy Research

- Standard approach:
  - Triangulating across multiple public data sources
  - Extrapolating from individual, often national, studies
  - Working on one population group (Medicaid, Medicare, commercial)
  - Collecting add’l data directly from providers, payers and individuals
- The value-add of MN’s APCD:
  - Geographically rich data
  - Ability to study care delivery:
    - Over time & across payers
    - Across the spectrum of health care providers
    - By analyzing actual transaction prices
  - Permits systemic analysis of health care delivery, population health, health care cost trends ... and more.
Why The Qualifier?

- Nationally, APCDs are not uncontroversial:
  - Privacy concerns (even with de-identified data)
  - Concerns over government holding this level of detail
  - Concerns over appropriate interpretation/use
  - Reporting burden (SCOTUS)
- Building and maintaining the data set is costly
- Guardrails around the use of the data can limit their usefulness

Data Composition and Use Context

- Some constraints:
  - Claims for payers not subject to Minnesota laws are currently excluded (Tricare, VA, Workers Compensation, Indian Health Services)
  - Medicare substance abuse data are missing from a certain point forward
  - When patients’ contact information differs over time, maintaining linkage can be challenging
- Claims ... are claims:
  - Only what is paid for is coded (dementia, Alzheimer disease)
  - Diagnosed prevalence
  - Some costs that are not service-specific are part of the claim (e.g., education funding)
  - Other costs that are services-specific may not be included in a claim (e.g., withholds, incentive payments)
Origins of the MN APCD

MN APCD: Origin & Its (Somewhat) Circuitous Path

Phase I
Development

Phase II
Provider Transparency

Phase III
Health Policy Research

Legislative Focus

- Provider transparency
- Public Health
- Quality measurement
- Delivery system reform
- Payment reform
Placement of the MN APCD & Context

- Because MN APCD was tied to health reform analytics and limited in use
  - Located in the Minnesota Department of Health
  - Managed by HEP with government IT support
- We developed a Data Services Center to support this effort
- Funded through an biennial legislative appropriation & supplemented through temporary federal funding
- Data submission required by statutes for entities that pay for health care services for MN residents (w/minimum claims volume)
  - Insurance carriers
  - Third-party administrators
  - Pharmacy Benefit Managers
- Governed by statute (62U.04) and administrative rule (4653)

MN APCD: Phase III
Data Access to the MN APCD, 2016

- Legislature took an intentionally cautious approach to providing access to the data
  - Users are MDH and its contractors
  - Only for certain authorized uses
- Momentum towards broader use:
  - 2014 workgroup discussed potential expanded use models – wide-ranging perspectives
  - 2015 workgroup provided input on creation of Public Use Files

Permitted Uses of the MN APCD Through 2019

- Currently no mechanism for external researchers to use data
- Access limited to MDH for specific, but broad authorized uses
- Limits on the granularity of published data (identifying of providers not permitted)
- Public Use File process begun in 2016
  - Three initial files
  - Evolving set of content and vintages of data
How Have We Prioritized our Work to Date?

- Established methods, rather than conduct R&D
- Doable projects for the available timeline (Aug ‘14 to Jul ‘16)
- Analysis aimed at broad audiences that establish a proof-of-concept
- Applied research that fills critical information gaps in health policy
- Kick the tires & assess data quality

MN APCD: Some Use Cases
Pain Management Services in MN: CRNAs

Number of Procedures (11,600) Performed by CRNAs (253)

<table>
<thead>
<tr>
<th>Percent of CRNAs</th>
<th>Percent of Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>25.7%</td>
<td>6.0%</td>
</tr>
<tr>
<td>21.3%</td>
<td>26.9%</td>
</tr>
<tr>
<td>22.1%</td>
<td>64.6%</td>
</tr>
<tr>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Potential Preventable Health Care Events


- Emergency Department Visits: 1.2 Million Visits, Cost: $1.3 Billion
- Hospital Admissions: 50,000 Hospital Stays, Cost: $373 Million
- Hospital Re-Admissions: 22,000 Hospital Stays, Cost: $237 Million

Factors that Can Help Prevent Use of These Services
- Timely access to high-quality care in outpatient settings
- Improved discharge planning & medication management
- Greater health and health system literacy
- Better coordination of care among providers and between patients, families and providers

Preliminary Study Findings

- More than one in three (35.4 percent) of insured Minnesota residents had at least one chronic condition (over 1.6 million individuals) in 2012.
- More than half of these residents had more than one chronic condition.

<table>
<thead>
<tr>
<th>No Chronic Condition</th>
<th>1 Chronic Condition</th>
<th>2 Chronic Conditions</th>
<th>3 or More Chronic Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>65%</td>
<td>35%</td>
<td>21%</td>
<td>37%</td>
</tr>
</tbody>
</table>

No Chronic Condition: 65%
At Least One Chronic Condition: 35%

Health Care Spending in Minnesota, With & Without Chronic Conditions, 2012

- The presence of chronic conditions contributes significantly to annual per-person health care spending.
- On average, spending for health care services and prescription drugs for Minnesota residents in 2012 was about $5,550.
- Spending for residents who did not have a chronic condition was approximately $1,560.
- Residents who had at least one chronic condition spent an average of $12,840 on health care.

Average spending: $5,550
Spending for patients who used services: $6,372
Spending for patients who used services & had no chronic disease: $1,560
Spending for patients who used services & had chronic disease: $12,840
Spending for Multiple Chronic Conditions, 2012

- People with at least one chronic condition (about 35.4 percent of Minnesotans) accounted for the vast majority of health care spending in 2012, or 83.1 percent.
- Each additional chronic condition added an additional annual amount of $4,000 to $6,000 to residents' total healthcare spending in 2012.

MDH/Health Economics Program analysis of data from the Minnesota All Payer Claims Dataset, 2015

Spending on Prescription Drugs in Minnesota

Source: Analysis by the PRIME Institute, University of Minnesota using the Minnesota All Payer Claims Database (MN APCD) data from 2009 to 2013.
Cost Drivers in MN’s Commercial Market, 2011 to 2013

Pediatric Health Care Use in MN, 2013 to 2014
(Systematic Coefficient of Variation, MN Counties)

Lessons & Next Steps

Lessons:
Developing & Maintaining the MN APCD

- Creating APCDs can be complex, time-consuming, and costly - but good data models exist
- Early decisions about variables and de-identification are important
- A strong use case helps data quality
- Partnership is critical – but economic interests of stakeholders matter
- Compelling communication about the value of the data analysis/applications is essential

Lessons from the Use of Data for Research

- Engagement w/stakeholders (clinicians, trade associations, advocacy organizations & media) is essential:
  - To getting the story told - appreciating the value of the findings
  - Understanding the politics of data use
  - Scaling it to delivery system reform implementation
- Marketing & branding is important
- Methodological rigor and the ability to “telling a story” helps w/critics and getting coverage
- Poorly written headlines sometimes give you the most tweets
- And, yes, social media matters
Next Steps

- **Work in Process:**
  - Pediatric health care use (small area variation on 13 measures)
  - Individual/small group market:
    - Should MN elect to operate its own risk adjustment process?
    - What are the related health policy questions?
  - Low value services

- **New Work:**
  - Research collaboratives: e.g. analysis of readmissions for heart failure w/RARE Campaign
  - Variation in prices/spending for certain services/procedures
  - Study on the cost of cancer
  - Seek community input to prioritize new study topics
The Effect of Gobeille vs. Liberty Mutual on the MN APCD

- SCOTUS:
  - States cannot require that ERISA-covered entities to have their data submitted to APCDs by regulated entities
  - Nothing prevents those employers from voluntarily sharing data

- Options:
  - Employer reaction: unclear, but MDH is working with trade associations on making the use case more clear
  - Department of Labor’s role in maintaining flow of data: evolving
  - Statistical tools to adjust for missing data: stay tuned

Contact Information

- MDH – Health Economics Program
  - [www.health.state.mn.us/healtheconomics](http://www.health.state.mn.us/healtheconomics)
- Minnesota All Payer Claims Data (MN APCD)
  - [www.health.state.mn.us/healthreform/allpayer/](http://www.health.state.mn.us/healthreform/allpayer/)
- Minnesota Health Care Market Statistics
  - [www.health.state.mn.us/divs/hpsc/hep/chartbook](http://www.health.state.mn.us/divs/hpsc/hep/chartbook)

- Contacts
  - Stefan Gildemeister ([stefan.gildemeister@state.mn.us](mailto:stefan.gildemeister@state.mn.us)) 651-201-3554
  - Leslie Goldsmith ([leslie.goldsmith@state.mn.us](mailto:leslie.goldsmith@state.mn.us)) 651-201-4076