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

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

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Stefan Gildemeister
Director, Health Economics Program

MDH Minnesota Department of Health

MN APCD All Payer Claims Database

Health Economics Program

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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

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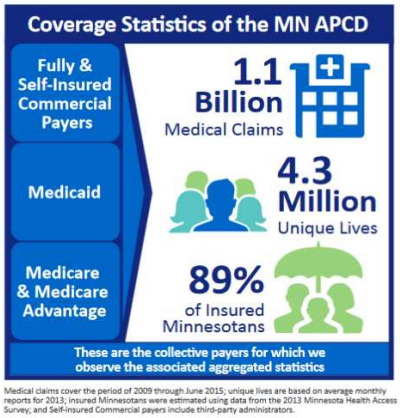
What is the MN All Payer Claims Data?

- 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



Overview of the MN APCD:
http://www.health.state.mn.us/healthreform/allpayer/mnapcdoverview.pdf

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 indivdiuals
- 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

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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)

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Origins of the MN APCD

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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

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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-part administrators
  - Pharmacy Benefit Managers
- Governed by statute (62U.04) and administrative rule (4653)

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MN APCD: Phase III

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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

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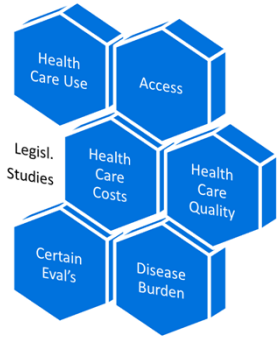
Permitted Uses of the MN APCD Through 2019

- 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



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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

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MN APCD: Some Use Cases

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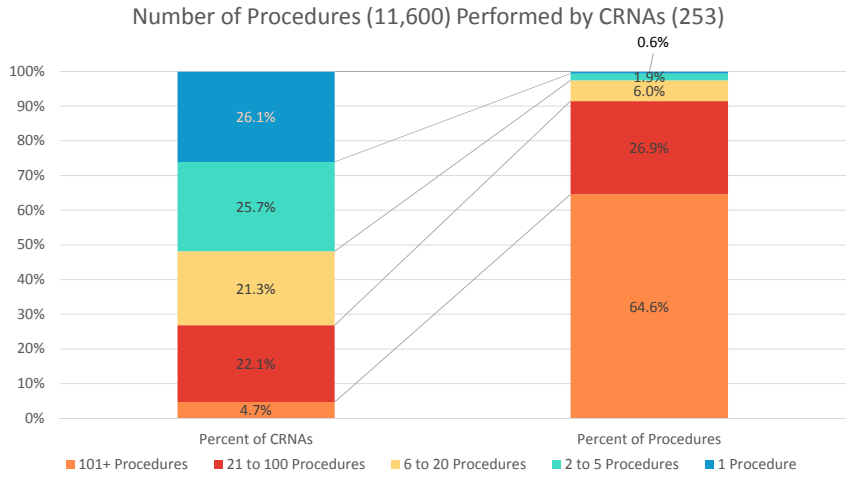
Pain Management Services in MN: CRNAs



MDH/Health Economics Program (2014), "Chronic Pain Procedures in Minnesota, 2010-2012," Report to the MN Legislature, Jan. 2015

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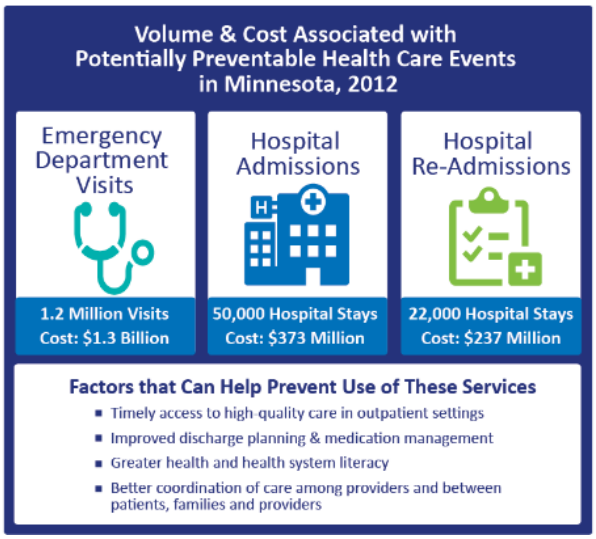
Potential Preventable Health Care Events



Source: MDH/Health Economics Program "Potentially Preventable Health Care Events in Minnesota," July 2015.

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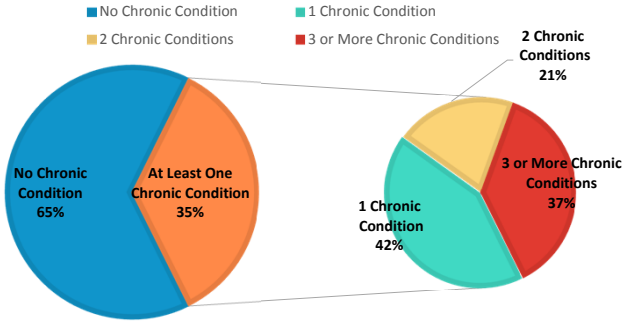
Preliminary Study Findings

- 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.



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

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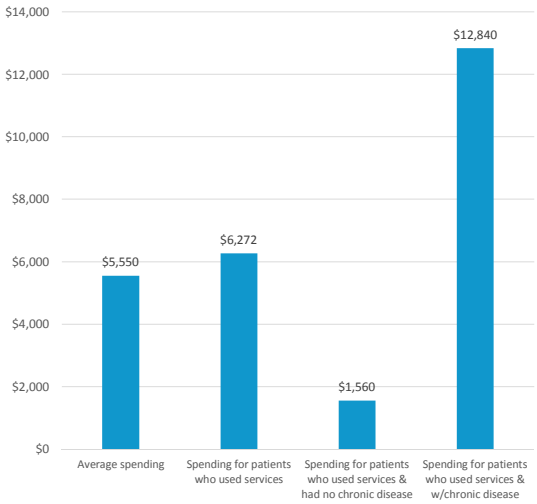
Health Care Spending in Minnesota, With & Without Chronic Conditions, 2012



- 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.

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

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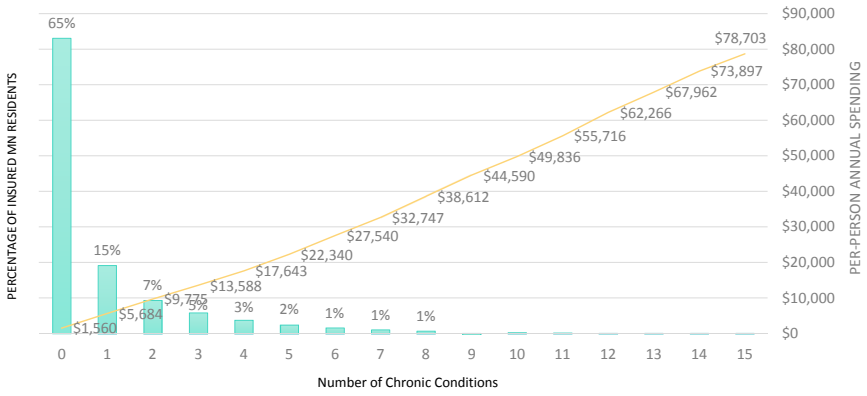
Spending for Multiple Chronic Conditions, 2012

- 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

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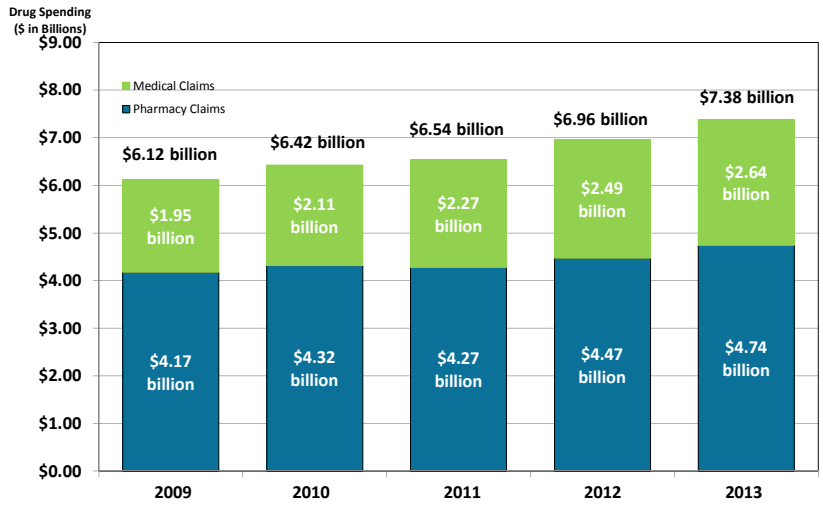
Spending on Prescription Drugs in Minnesota



Source: Analysis by the PRIME Institute, University of Minnesota using the Minnesota All Payer Claims Database (MN APCD) data from 2009 to 2013.

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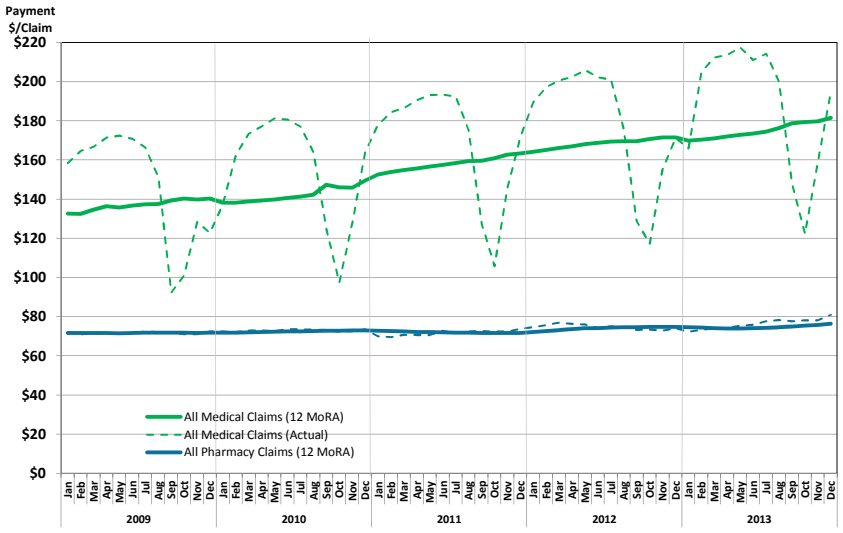
Average Cost Per Claim



Source: Analysis by the PRIME Institute, University of Minnesota using the Minnesota All Payer Claims Database (MN APCD) data from 2009 to 2013.

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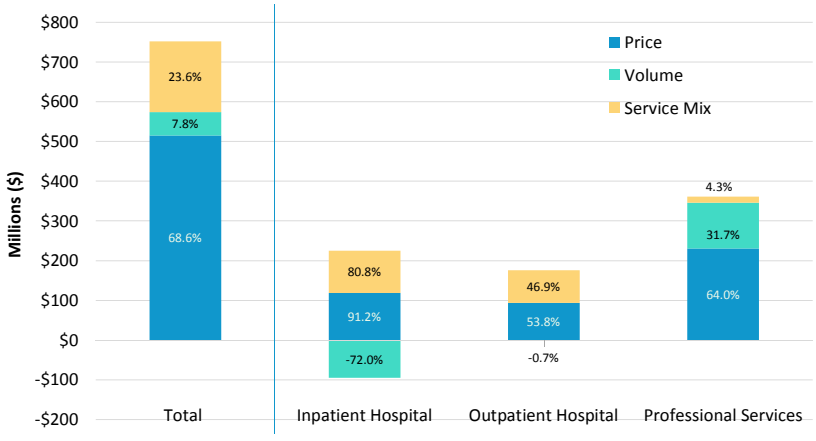
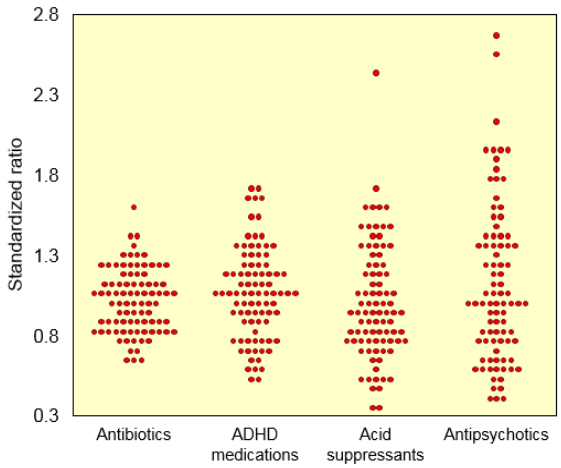
Cost Drivers in MN's Commercial Market, 2011 to 2013



Source: Mathematica Policy Research analysis of Minnesota commercial all-payer claims data, in: MDH/Health Economics Program "Minnesota Health Care Spending and Projection: 2013", Report to the Minnesota Legislature, March 2016.

Pediatric Health Care Use in MN, 2013 to 2014

(Systematic Coefficient of Variation, MN Counties)



Source : MDH/Health Economics preliminary analysis of Minnesota All Payers Claims Data (MN APCD), Sept. 2015, forthcoming: Pediatric Health Care Use in Minnesota, 2013 to 2014.

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Lessons & Next Steps

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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

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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

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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

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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

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Contact Information

- MDH – Health Economics Program
  - www.health.state.mn.us/healtheconomics
- Minnesota All Payer Claims Data (MN APCD)
  - www.health.state.mn.us/healthreform/allpayer/
- Minnesota Health Care Market Statistics
  - www.health.state.mn.us/divs/hpsc/hep/chartbook
- Contacts
  - Stefan Gildemeister (stefan.gildemeister@state.mn.us) 651-201-3554
  - Leslie Goldsmith (leslie.goldsmith@state.mn.us) 651-201- 4076

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