Using the Minnesota All Payer Claims Database to Measure Investment in Primary Care

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Acknowledgments

- Health Economics Program
  - Project Lead/Analyst
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  - Collaborator and Co-author
    - Stefan Gildemeister
Overview

▪ Understanding primary care in Minnesota
  ▪ Investment in primary care
  ▪ Utilization of primary care

▪ Policy goals
  ▪ Optimal care
    ▪ Patient experience and outcomes
    ▪ Population health
  ▪ Spending
Primary care orientation is associated with higher quality care. An emphasis on specialty care can lead to:

- Fragmented, uncoordinated care and
- Poorer outcomes

How to measure investment in primary care?

- The portion of health care dollars that go to primary care
- However, there is no “standard” metric for defining and measuring primary care spending
  - Also, no benchmarks
Some states have legislation directing reporting of primary care spending (as a proportion of all medical spending)

- Washington
- Oregon
- Rhode Island

Approach and methods vary, e.g.,

- Definition of primary care provider (PCP)
- +/- Pharmacy $ in denominator
- +/- Non-claims data
First Round

How do we measure primary care investment in Minnesota?

• And how do we interpret the results?

Build upon the Milbank effort

Sought to replicate the RAND specs of the analysis

Leveraged the MN APCD for a preliminary analysis

Focused initially on 2014 commercial market space

Deeper Dive

Expand to all payers, 2013-2015

What else do we want to know about primary care in MN?

How are other states approaching this?

Further thinking about policy goals
Population: Minnesota residents in the MN All Payer Claims Database (MN APCD) with at least one month of medical enrollment between the years of 2013-2015

Primary Care Provider Definition (narrow to broad definitions):
- Nine generalist specialties in broad definition

Measures:
- Percent Total Spending on Primary Care Providers
  - $$ on primary care/ $$ for all health care
- Total Number of Primary Care Visits per Enrolled Member per Year

Groups:
- Type of Insurance - Private vs. Public
- Age
- Resource Use - Collapsed Resource Utilization Bands from Version 12.0 of the Johns Hopkins ACG System
### Percentage of Spending on Primary Care

Average per Month* Primary Care Spending as a Percentage of Total Health Care Spending, Minnesota All Payer Claims Data (APCD), 2013-2015

<table>
<thead>
<tr>
<th></th>
<th>PCP-A (Narrow)</th>
<th>PCP-B</th>
<th>PCP-C (Broad)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>4.1%</td>
<td>5.9%</td>
<td>6.8%</td>
</tr>
<tr>
<td><strong>Private Insurance</strong></td>
<td>6.0%</td>
<td>8.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td><strong>Public Insurance</strong></td>
<td>2.8%</td>
<td>4.0%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

* Spending for members divided by total months of enrollment for each year.

Abbreviations: PCP Primary Care Providers

Source: Minnesota All Payer Claims Data, 2013-2015
PCP Visits and Spend by Insurance Type

Mean Number of PCP* Visits per 100 Members per Year by Insurance Type

- Private: 233.3
- Public: 453.1

Mean Spend per PCP* Visit by Insurance Type

- Private: $218.7
- Public: $101.7

* Broad definition

Source: MDH analysis of Minnesota All Payer Claims Data, 2013-2015
### PCP Percentage of Spend and Visits by Age

#### Percentage of Spending on PCP* by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>PCP Percentage of Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 years old</td>
<td>17.9%</td>
</tr>
<tr>
<td>Between 5 and 9 years</td>
<td>12.0%</td>
</tr>
<tr>
<td>Between 10 and 14 years</td>
<td>10.1%</td>
</tr>
<tr>
<td>Between 15 and 17 years</td>
<td>8.1%</td>
</tr>
<tr>
<td>Between 18 and 24 years</td>
<td>9.0%</td>
</tr>
<tr>
<td>Between 25 and 34 years</td>
<td>10.5%</td>
</tr>
<tr>
<td>Between 35 and 44 years</td>
<td>8.3%</td>
</tr>
<tr>
<td>Between 45 and 54 years</td>
<td>6.1%</td>
</tr>
<tr>
<td>Between 55 and 64 years</td>
<td>5.3%</td>
</tr>
<tr>
<td>Between 65 and 74 years</td>
<td>4.5%</td>
</tr>
<tr>
<td>Between 75 and 84 years</td>
<td>4.0%</td>
</tr>
<tr>
<td>85 years or older</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

#### PCP* Visits by Age per 100 Members per Year

<table>
<thead>
<tr>
<th>Age Group</th>
<th>PCP Visits per 100 Members per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 years old</td>
<td>476.2</td>
</tr>
<tr>
<td>Between 5 and 9 years</td>
<td>219.9</td>
</tr>
<tr>
<td>Between 10 and 14 years</td>
<td>195.7</td>
</tr>
<tr>
<td>Between 15 and 17 years</td>
<td>211.2</td>
</tr>
<tr>
<td>Between 18 and 24 years</td>
<td>222.3</td>
</tr>
<tr>
<td>Between 25 and 34 years</td>
<td>286.0</td>
</tr>
<tr>
<td>Between 35 and 44 years</td>
<td>271.4</td>
</tr>
<tr>
<td>Between 45 and 54 years</td>
<td>275.6</td>
</tr>
<tr>
<td>Between 55 and 64 years</td>
<td>321.6</td>
</tr>
<tr>
<td>Between 65 and 74 years</td>
<td>395.6</td>
</tr>
<tr>
<td>Between 75 and 84 years</td>
<td>550.9</td>
</tr>
<tr>
<td>85 years or older</td>
<td>695.6</td>
</tr>
</tbody>
</table>

* Broad definition

Source: MDH analysis of Minnesota All Payer Claims Data, 2013-2015
PCP Percentage of Spend and Visits by Illness Burden

**Percentage of Spending on PCP* by Illness Burden**

- **High**: 2.9%
- **Medium**: 8.2%
- **Low**: 18.5%

**Mean Number of Visits per 100 Members per Year for PCP* by Illness Burden**

- **High**: 1,173.2
- **Medium**: 426.3
- **Low**: 145.1

* Broad definition

Source: MDH analysis of Minnesota All Payer Claims Data, 2013-2015
Key Findings

- During 2013-2015, primary care spending as a percentage of total health care spending among insured Minnesotans was 6.8 percent, using the broad definition of primary care provider.

- Primary care spending as a percentage of total health care spending was lower among Minnesotans with public insurance compared to those with private commercial insurance.
  - However, residents with public insurance had more primary care visits than those with private insurance.
  - In addition, public insurance paid less per primary care visit than private insurance.

- Older Minnesotans and those with a greater burden of illness had lower primary care spending as a percentage of total health care spending, but had more primary care visits than younger and healthier residents.
Consider other sources of data in addition to MN APCD (claims only) to more fully capture primary care spending and investments

As advocates and policy makers consider access, delivery and spending on primary care, focusing solely on primary care spending as a percentage of total health care spending provides an incomplete picture of investment in primary care

- What additional measures help to complete the picture?
  - How will COVID-19 impact these measures?

- What amount of primary care is optimal, for which groups, and how do we achieve this without increasing overall spending on health care?

Next steps: More conversations with MDH colleagues and stakeholders
Thank You

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Health Economics Program: [www.health.state.mn.us/healtheconomics](https://www.health.state.mn.us/healtheconomics)

MN All Payer Claims Data: [https://www.health.state.mn.us/data/apcd/index.html](https://www.health.state.mn.us/data/apcd/index.html)
For PCP providers, broad definition which included OB/GYNs, there was a small peak in percentage of spend and mean number of claims during prime child-bearing years.