Using Transparent Prescription Drug Data to Generate Policy Insight

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PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

- Mathematica

- Medical Industry Leadership Institute, University of Minnesota (UMN)

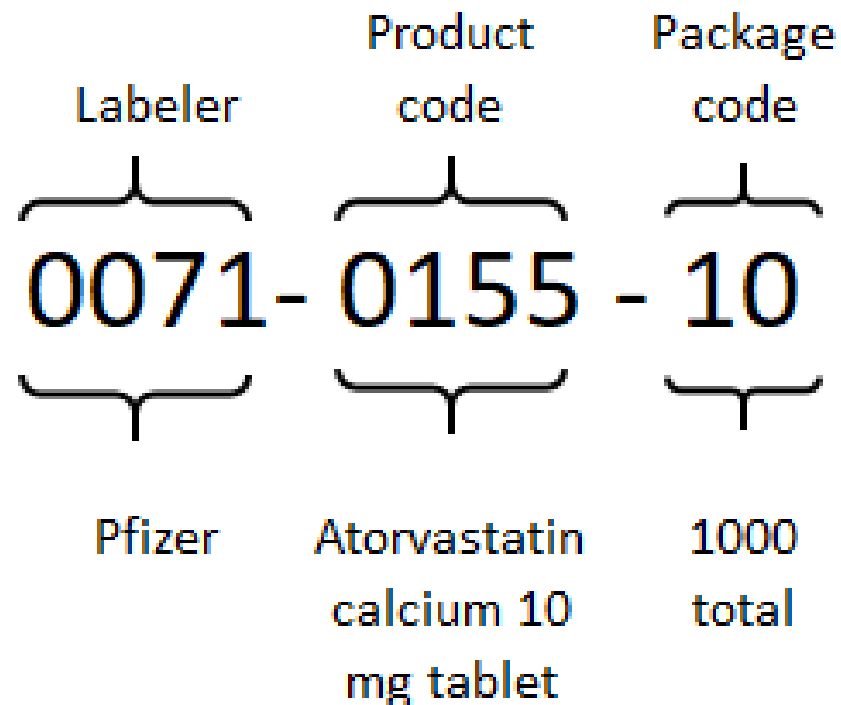- Health Economics Program, Minnesota Department of Health (MDH)

- Publicly available summary data from the Minnesota All Payer Claims Database (MN APCD)
  - ➤ Within statutory guardrails
  - ➤ Relevant to current health policy topics
  - ➤ Free to download online
  - ➤ Accessible via user friendly spreadsheets

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PUF Development – A Policy Driven Approach

- Convene stakeholders from diverse settings to preview PUF designs and offer feedback to maximize PUF utility

    ➢ How would you envision using these PUFs?

    ➢ What analyses are of greatest public interest?

    ➢ How could these PUFs be used to help guide policy makers?

Prescription Drug PUFs

Labeler — Product code — Package code

0071 - 0155 - 10

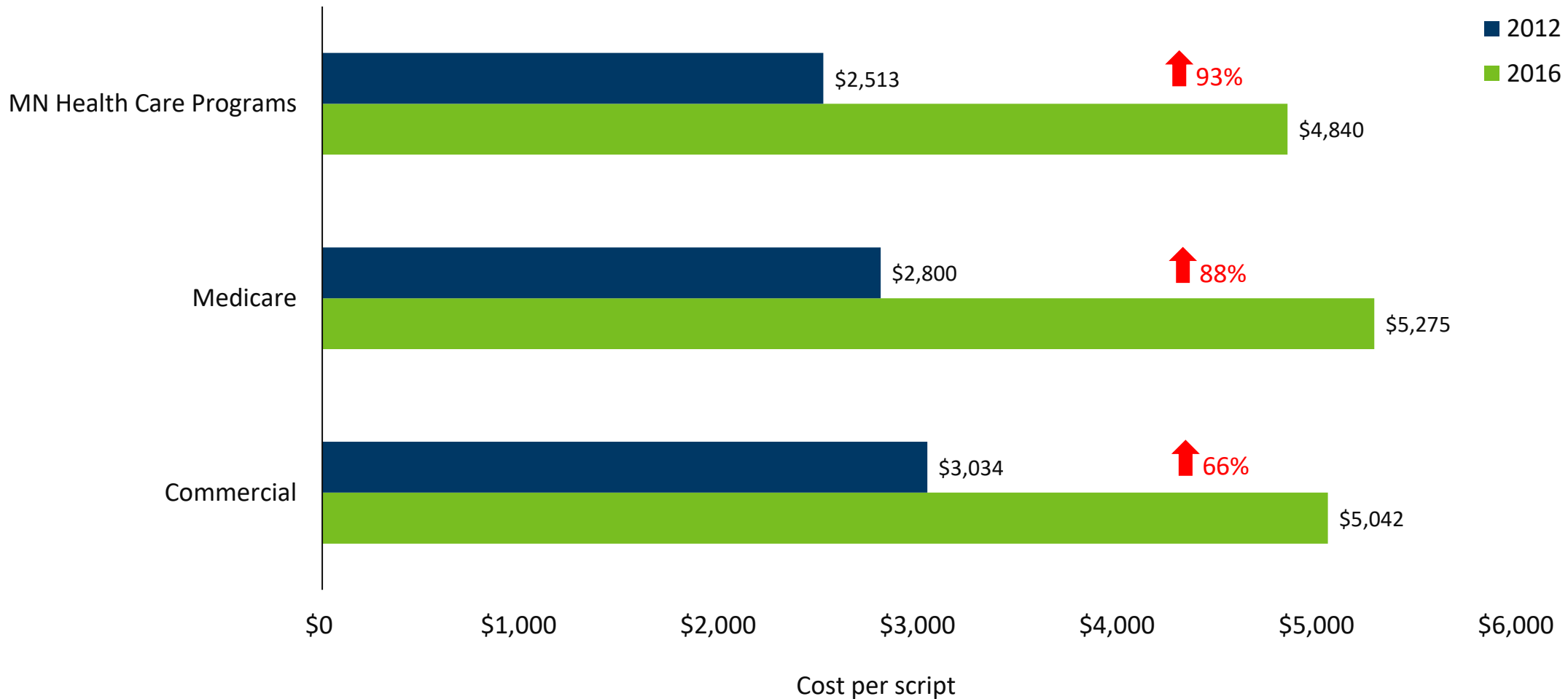Pfizer — Atorvastatin calcium 10 mg tablet — 1000 total

- Two PUFs containing over 95% of pharmacy claims and their associated spending in the MN APCD for 2012 and 2016

  ➢ 1,700+ non-proprietary drug names

  ➢ 11,000+ 2-segment National Drug Codes (NDC's)

- User guide with meta-data, example calculations, and data considerations

- Data Short-Take with select use cases

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- Prescription counts

- Member counts

- Means, medians, and standard deviations for amounts and quantities

- Reference data from the FDA National Drug Code Directory

Example Use Cases

Growth in the Five-Year Cost per Script of Humira, by Payer

Cost per script

Legend: 2012 (dark blue), 2016 (green)

Payer	2012	2016	Growth
MN Health Care Programs	$2,513	$4,840	↑ 93%
Medicare	$2,800	$5,275	↑ 88%
Commercial	$3,034	$5,042	↑ 66%

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Demographics of Commercially Insured Individuals Prescribed Epinephrine (2016)

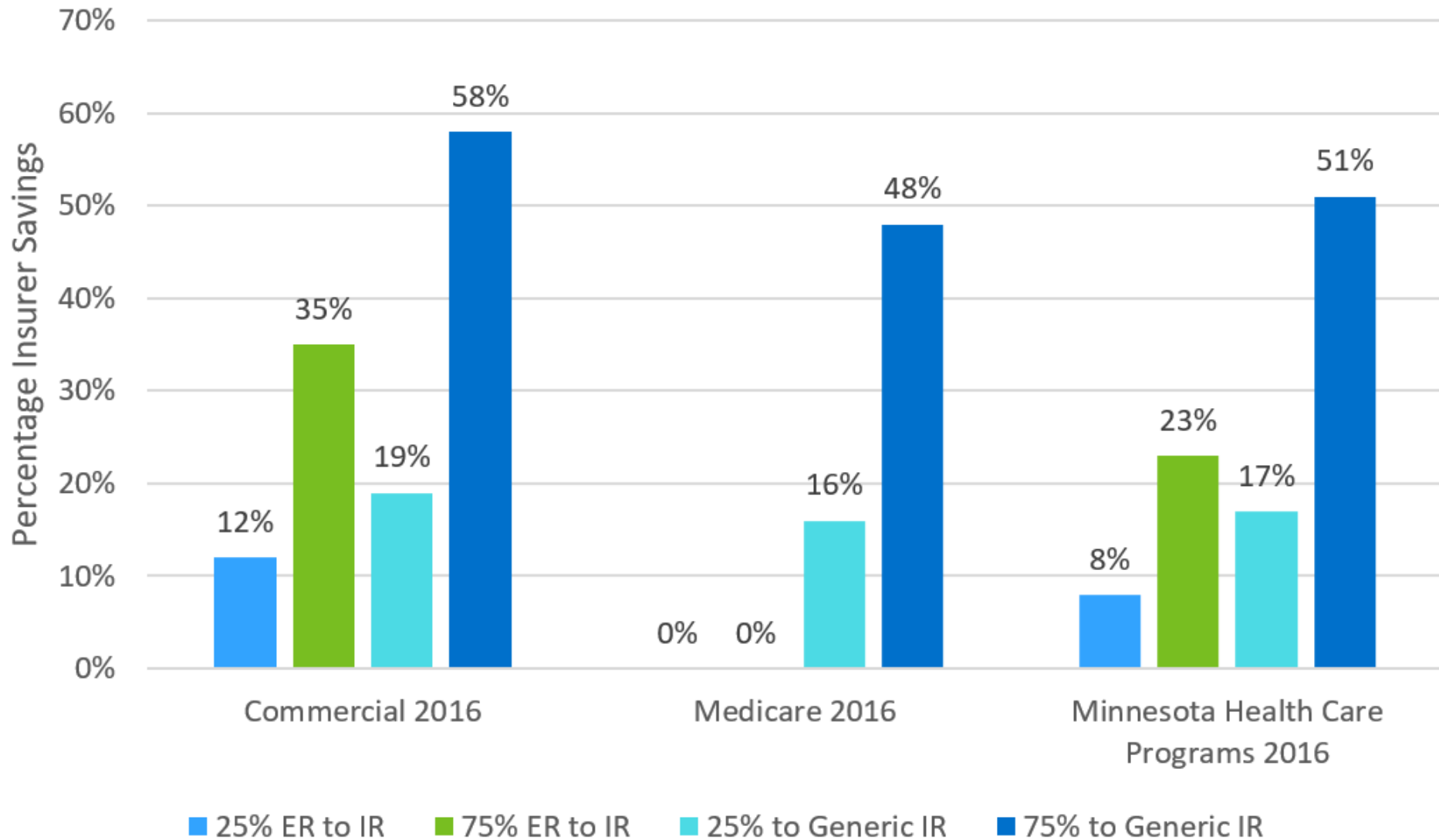| Patient characteristic	% of Scripts
Age	
<19 years	49.4%
19 to 44 years	22.1%
45 to 64 years	25.4%
65+ years	3.1%
Sex	
Female	52.8%
Male	47.2%
RUCA class	
Urban core	73.3%
Suburban	12.1%
Micropolitan	6.4%
Rural/small town	8.2%

Interdisciplinary Health Data Competition

- Open to all graduate and professional-degree seeking students at UMN

- Exploratory analysis of new PUFs

- Generate innovative insights and ideas for policy action

- Judged on relevance, analysis, and innovation

Select Team Topics

- Economic burden of extended-release drugs

- Medicaid over-the-counter prescription spending

- Cost of diabetes treatment

- Impact of COVID-19 on commonly prescribed respiratory drugs

- Disparity between cardiovascular prescription utilization and coverage

- Impact of generic drug options

The Economic Burden of Extended Release Pharmaceuticals in Minnesota

- Broad APCD use has more impact

- Policy makers rely on high quality data

- Policies need robust analyses to ensure they are working as intended

- Prescription Drug Price Transparency Act

  - ➤ Requires manufacturers to justify and report price increases

- Alec Smith Insulin Affordability Act

  - ➤ Creates access to emergency insulin

  - ➤ Program for long-term insulin supplies for low income Minnesotans, uninsured, and under insured

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Thank you

Health Economics Program: www.health.state.mn.us/healtheconomics
MN APCD Public Use files: https://www.health.state.mn.us/data/apcd/publicusefiles/index.html

MN APCD

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