All Payer Claims Datasets: Applications to Study Health Care Organization and Economic and Quality Outcomes

Annetta R. Zhou, PhD
Post-doctoral Researcher
National Bureau of Economic Research

Maria de Jesus Diaz Perez, PhD
Director of Public Reporting
Center for Improving Value in Health Care (CIVHC)

The Comparative Health System Performance Initiative project

Objectives

- •Classify and characterize types of health systems and compare their performance in terms of clinical and cost outcomes.
- •Identify characteristics of high-performing health systems.
- •Evaluate the role of PCOR in health system performance.
- •Disseminate findings broadly to help diffuse PCOR evidence across health systems nationally.

HDSA Partners









CENTER FOR IMPROVING **VALUE** IN HEALTH CARE

Ongoing CHSP Projects

MHQP (Massachusetts):

- Assessing the relationships of Total Cost of Care, unit cost and use of services from 2013 to 2016 in system- and non-system affiliated practices.
- Examine the relationship between Practice Characteristics (from NSHOS Survey) and Patient Experience Survey results in Massachusetts.

Comagine (Oregon and Utah):

 Comparing Total Cost of Care, and additional measures, between system- and nonsystem affiliated practices in the states of Utah and Oregon.

CIVHC (Colorado):

 Pediatric Care Utilization, Spending and Quality for publicly and privately insured Children and young adults with different levels of medical complexity receiving care from system vs. non-system providers.

Sample Project: Specialization and Integration of Care for Medicaid Patients

Background and Motivation

Research Questions:

- Do Medicaid and commercially insured patients go to different or similar providers?
- Do Medicaid patients receive better or worse quality of care from providers who treat a lot of Medicaid patients?
 - Maybe yes: there is return to specialization in treating Medicaid patients(e.g. care management)
 - Maybe no: better reimbursement from commercial insurance may lead to greater investment in quality

.

Methods

Data

- CO APCD
- Enhanced Database (EDB)
 - The EDB compiles managerial and financial ownership information from a number of data sets, including the Medicare Provider Enrollment, Chain, and Ownership System (PECOS), Medicare Claims Data on Provider Practice & Specialty (M-PPAS), Sk&A, Irving Levin, & S&P Capital IQ M & A Transactions.

Patient attribution

- Attribute patient to PCP with the highest number of evaluation and management visits during a year
- Link PCPs to practices (TINs) and health systems using the EDB

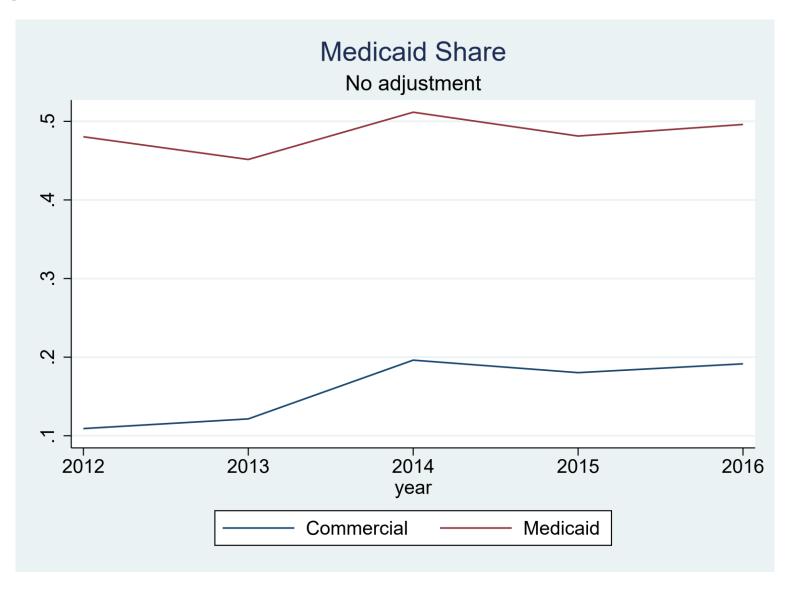
Methods

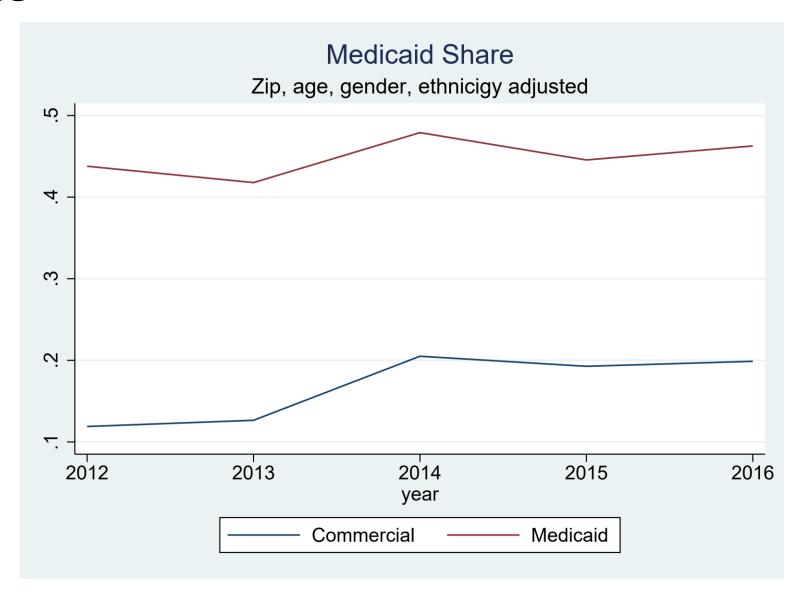
Quantifying integration: Medicaid focus of providers

$$MedicaidFocus_{ij} = \beta_1 Medicaid_i + \beta_2 X_i + \epsilon$$

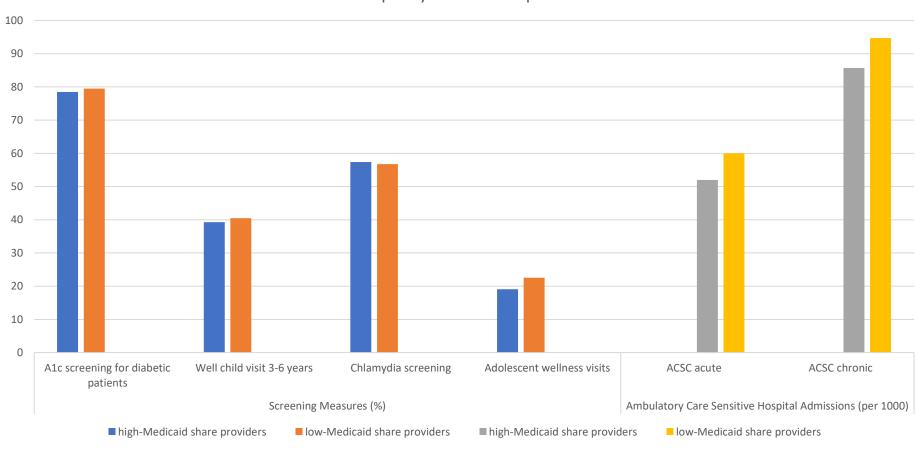
- MedicaidFocus_{ij} is the share of all of patient i's PCP j's patients who are on Medicaid
- $Medicaid_i$ indicates whether patient i is on Medicaid
- $lacktriangleright X_i$ are control variables that adjust for patient characteristics

•

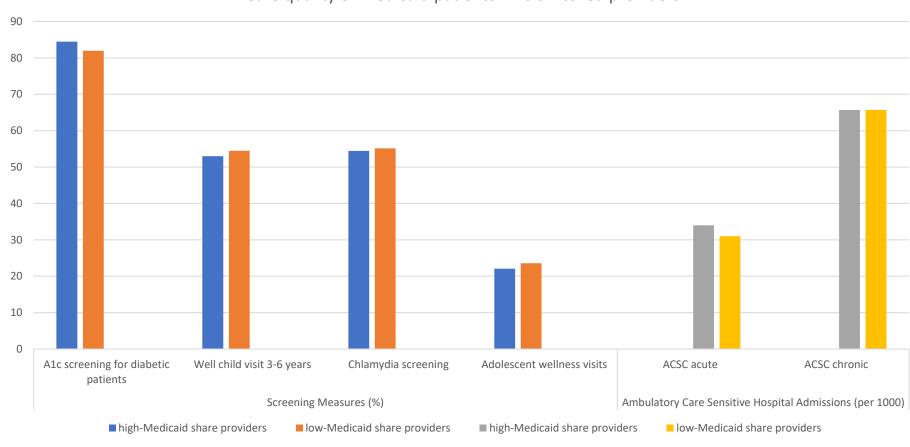




Care quality of Medicaid patients







Dissemination effort

Local stakeholder engagement (dissemination and feedback)

- MHQP, Comagine, and CIVHC established advisory bodies (e.g., governance committee, advisory boards) to disseminate the research findings and gather feedback.
- MHQP also used ad-hoc events and webinar to engage with specific stakeholder segments.
- Comagine is holding one-on-one interviews with key stakeholders in both Utah and Oregon.
- CIVHC will hold ad-hoc stakeholder feedback panels.

NRHI: The Network for Regional Healthcare Improvement (nrhi.org) will provide communication and dissemination support to promote the learnings from these studies nationally.