RESEARCH ON TAP

Health Inequity Meets Health Economics

Tuesday, October 29, 2024 | 4-6 PM

bu.edu/research/events

Agenda

- Welcome Remarks
- Presentations
  - Kevin Nguyen
  - Megan Cole Brahim
  - Steven Pizer
  - Keith Ericson
  - Tal Gross
  - Rena Conti
  - Randy Ellis
  - Alison Galbraith
  - Pauline Mourot
  - Sarah Gordon
- Closing Remarks

Racial and Ethnic Inequities in Patient Experience of Care Among Medicaid Managed Care Enrollees

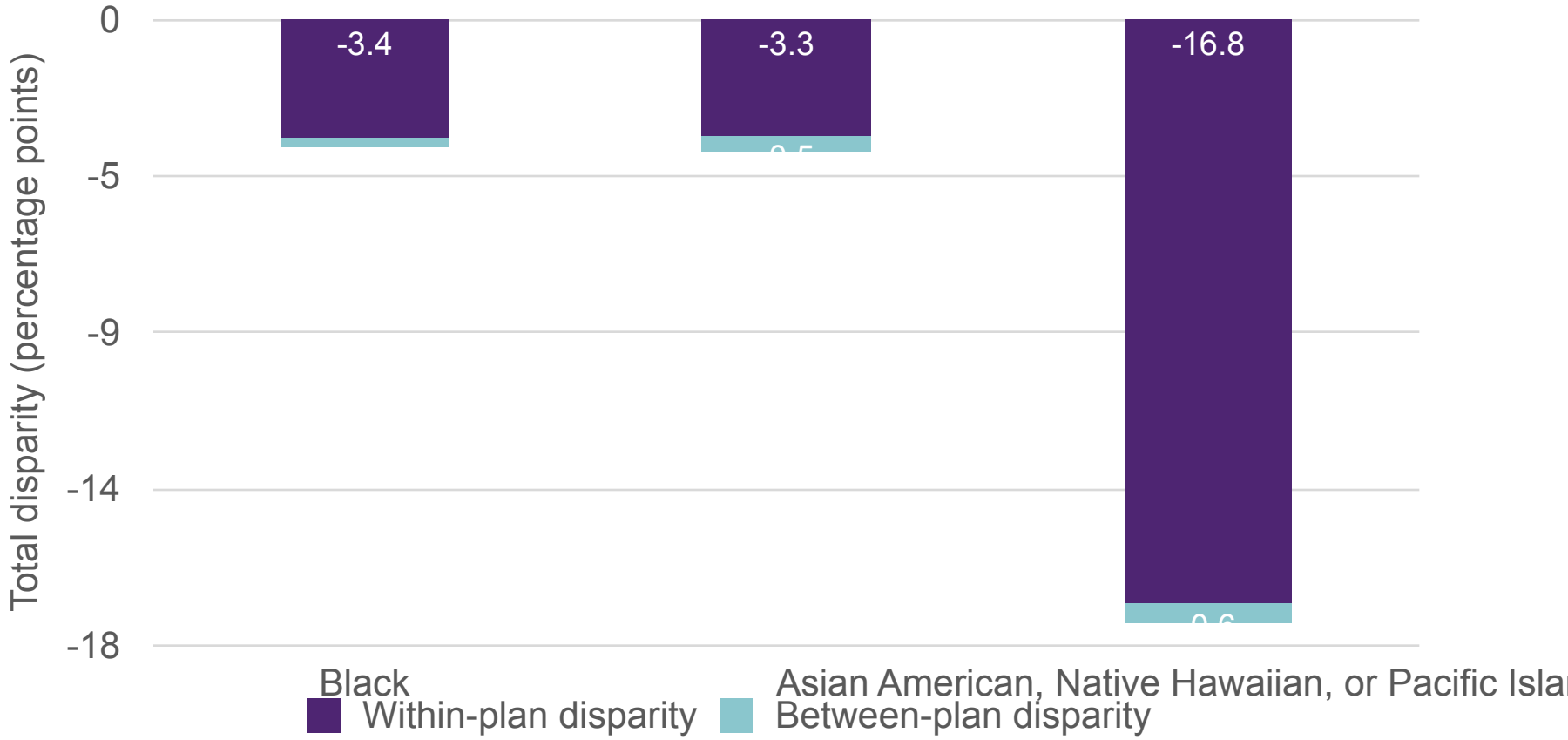
Kevin H. Nguyen, PhD

Assistant Professor, Health Law Policy & Management

Racial and Ethnic Inequities in Medicaid Managed Care

- Enrollees from racial/ethnic minority groups have historically reported significant differences in accessing necessary care, and satisfaction with care
- Inequities in patient experience are the product of systemic inequality and racism, as well as interwoven patient-, provider-, and plan-level factors
- Understanding whether variation is primarily due to within- vs. between-plan disparities can inform interventions

Racial and Ethnic Inequities in Timely Access to Specialty Care



Key Takeaways

- Compared to White enrollees, racial/ethnic minority Medicaid managed care enrollees reported significantly worse experiences on four metrics
- Differences are largely attributable to *within-plan* disparities
- For some outcomes, higher concentrations of Hispanic/Latino or AANHPI enrollees was positively correlated with smaller magnitudes of disparities for these enrollees

Implications for Policy and Practice

- Racial and ethnic inequities in experience of care driven by structural racism
- Current plan strategies include adopting health equity performance metrics, expanding provider networks, and engaging with enrollees
- Initiatives will need to be cross-sectoral to dismantle mutually reinforcing systems that perpetuate differential access to care by race and ethnicity

Thank you!

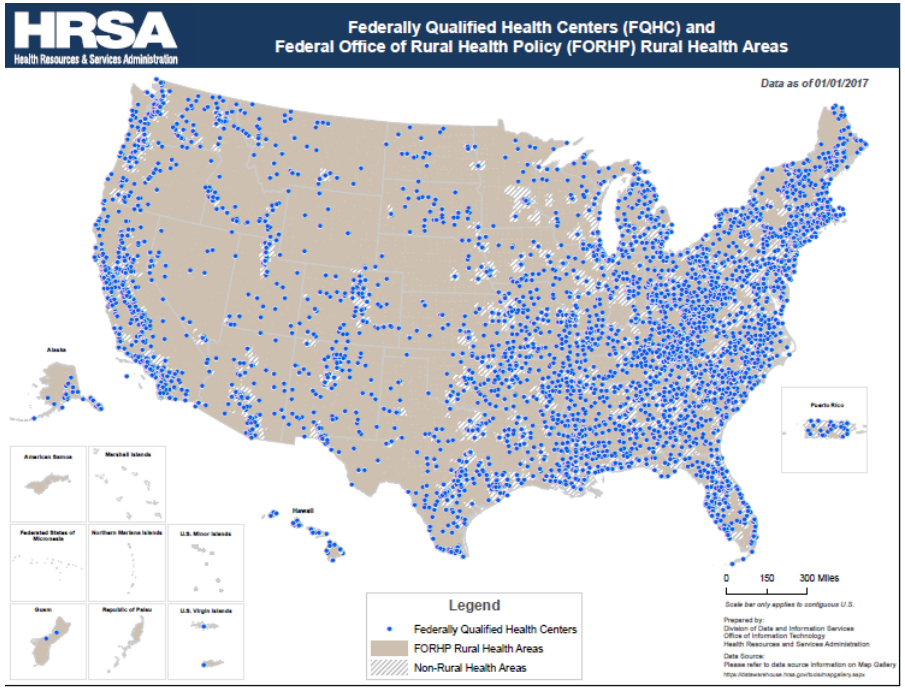
nguyen@bu.edu

The role of Medicaid policy in shaping quality and equity of care at federally qualified health centers (FQHCs) Evidence from health economics

Megan B. Cole, PhD, MPH

Associate Professor, Dept. of Health Law, Policy, and Management
Co-director, Medicaid Policy Lab
Boston University School of Public Health

FQHCs play a critical role in the US health system by providing access to health care for populations who would otherwise be without access



Provide comprehensive, culturally competent, linguistically appropriate health services to **31 million patients** without regard for ability to pay:

- ❑ 90% have incomes below 200% FPL
- ❑ 65% from racial/ethnic minorized groups
- ❑ 27% best served in language other than English
- ❑ 20% served by public housing

Medicaid policies have significant influence on FQHCs and their ability to best serve patients

- 50% of FQHC patients enrolled in Medicaid
- 62% of total FQHC patient revenue comes from Medicaid
- 63% of FQHC Medicaid revenue comes from Medicaid managed care

3 examples of how Medicaid policies affect FQHCs: evidence from studies using methods in health economics

MEDICAID ELIGIBILITY EXPANSION UNDER THE ACA

- Increased rates of insurance coverage
- Improved access to preventive, mental health, SUD, oral, and vision services
- Improved quality of care measures, especially among Hispanic patients

MEDICAID ACCOUNTABLE CARE ORGANIZATIONS

- Increased rates of social needs screening
- Improved rates of cancer screenings
- Improved rates of timely prenatal care and low birth weight

MEDICAID EXPANSION OF TELEHEALTH COVERAGE

- Increased care engagement for patients with mental health needs, patients with SUD
- Some increases in quality of care measures
- All racial/ethnic groups had similar rates of telehealth use, but Black patients saw least benefit

Key policy takeaways

Expanded **Medicaid eligibility** is critical to improved quality and access for FQHC patients

Expanded implementation of **Medicaid ACOs**, particularly those that address patients' behavioral and social needs, may improve quality of care and engagement in care at FQHCs

Continued **reimbursement for telehealth** through Medicaid may help support quality improvement and care engagement at FQHCs, but we must ensure telehealth is delivered equitably

The Economics of Public Health Care Delivery

Steve Pizer

Professor and Doctoral Program Director
Department of Health Law, Policy & Management, School of Public Health

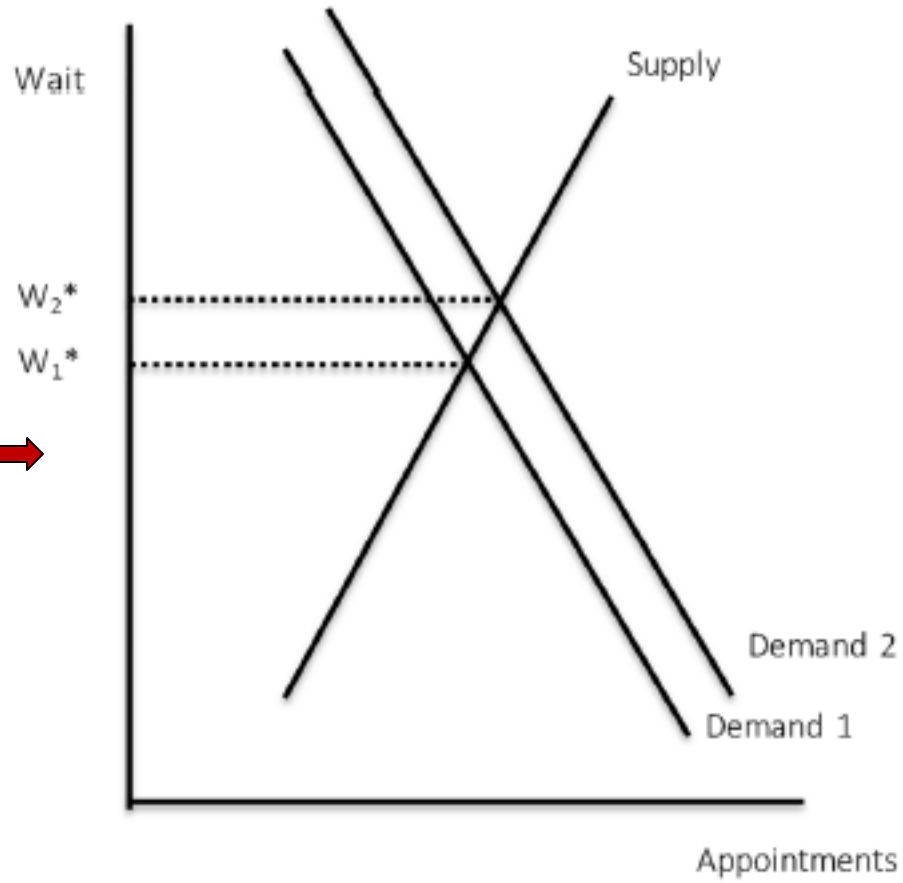
Public Health Care Delivery Systems Can Directly Address Inequity in Access to Care

- By choosing locations, private delivery systems provide better access to care to affluent, well insured individuals
- Public funding for health insurance (Medicare, Medicaid, ACA) is crucial, but private delivery system leads to inequitable access
- Public delivery systems (public hospitals, VA in US, NHS in UK) can directly target underserved areas, but do they?
- Political considerations may lead resources away from the underserved
  - Public jobs are political prizes (elected officials, unions)
  - Difficult to move resources once located
- Management is hard, especially with physicians & public HR functions

- Economic theory and econometric models can reveal misallocations of resources and productivity problems, potentially reducing inequities

The Economics of Public Delivery Systems

- Private markets use prices to equate supply and demand
- If consumers don't pay for services, prices can't clear the market
- Instead, waiting times do it
- If demand shifts out, waiting times will increase and managers will feel pressure to expand supply
- So, should resources follow waiting times?
- What about productivity? Don't want to send more resources to underperforming managers
- Have to measure wait times & productivity; model causal effects



Yee, C.A., Barr, K., Minegishi, T., Frakt, A. and Pizer, S.D., 2022. Provider supply and access to primary care. *Health Economics*, *31*(7), pp.1296-1316.

Measurement and Modeling Challenges

- Measurement Challenges
  - Many existing measures of waiting times and productivity
  - None validated, most are wrong
  - Political pressures and self interest distort measures (RVUs, FTEs)
  - Unreliable staff-reported effort and patient preferences (desired date)
- Modeling Challenges

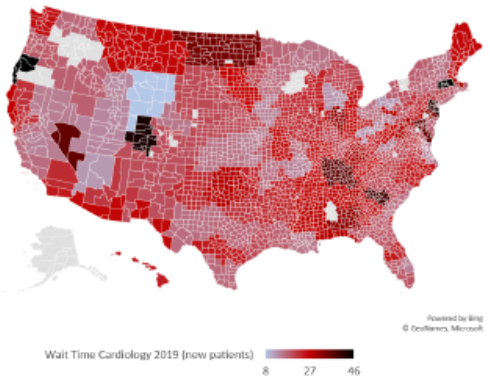
$$\text{Wait}_{c,t} = \beta_1 \cdot \text{capacity}_{c,t-1} + \beta_2 \cdot \text{productivity}_{c,t} + \boldsymbol{\gamma} \cdot \boldsymbol{\theta}_{c,t} + \boldsymbol{\delta} \cdot \boldsymbol{\rho}_{c,t} + \alpha_c + y_t + q_t + u_{c,t}$$

  - Capacity and productivity are endogenous because managers respond to high waits by increasing clinic time and scheduling intensity
  - Instrumental variables is necessary to estimate causal effects
  - Instruments: holidays, sick leave, vacations, new patient scheduling policies, providers' scheduling practices
- Results: Can improve access by increasing staff time in clinic and/or increasing productivity – and both are highly variable

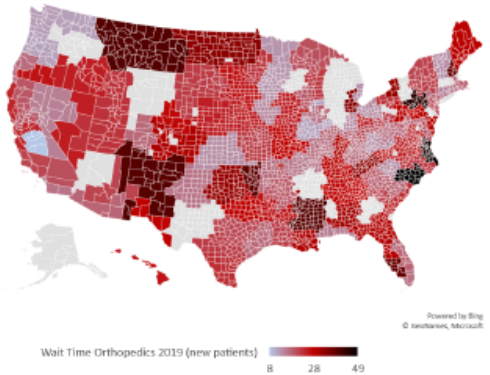
The Truth is Necessary, but not Sufficient (Management is Hard)

- Wait times vary widely by geography and specialty
- Valid measures and careful models can reveal misallocations of staff and effort
- Moving resources is a problem (provider preferences, political turf)
- Increasing productivity is a problem (lack of managerial leverage and motivation, salary inflexibility)
- Nevertheless, we can do better
  - Virtual care
  - Targeted hiring & incentives
  - Transparent scheduling
  - Management accountability

Cardiology



Orthopedics



Yee, C., Palani, S., Barr, K. and Pizer, S.D., 2022. Provider Supply and Access to Specialty Care. *Available at SSRN 4291717*.

Rethinking Insurance for Low-Income Individuals

Keith Marzilli Ericson

Professor and Department Chair
Markets, Public Policy, and Law, Questrom School of Business

Financial Constraints and the Value of Insurance

Low-income people face difficult financial constraints: 40% report unable to pay for $400 w/ cash, 5% use payday loans

- Unexpected expenses can be catastrophic

Traditional view of insurance:

- Insurance moves money from healthy to sick

For people living “hand-to-mouth”:

- Insurance also moves money across time
- Premiums are paid smoothly (monthly), but expenses are lumpy
- Insurance provides valuable *financing*

Results of this research:

- Puzzlingly high demand for insurance low-income makes sense

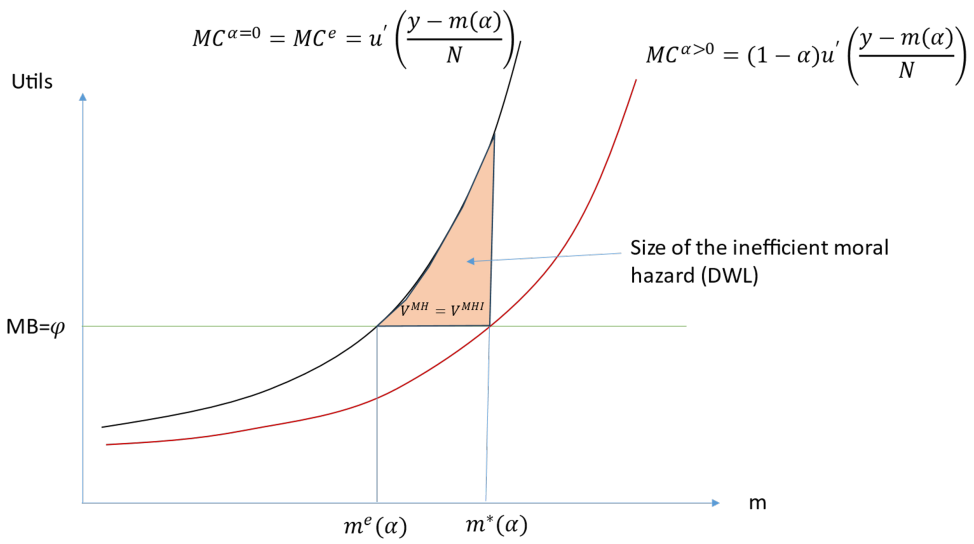
Liquidity-Constrained People Value Insurance More

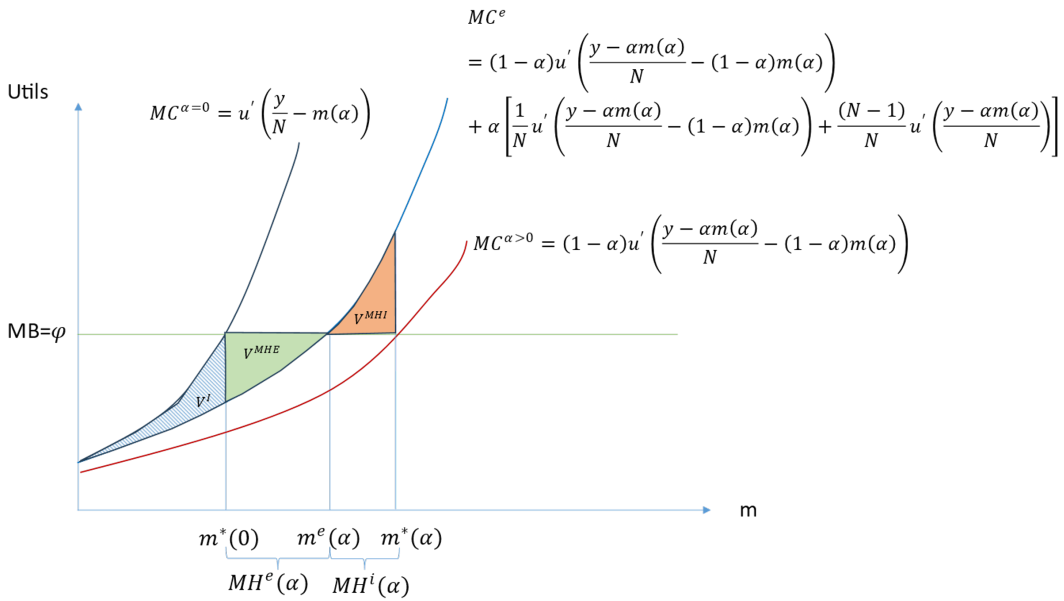
- Standard model: can easily borrow and save
  - Timing of expenses does not matter
- Hand-to-mouth model: no assets or credit, spend what's available

- Puzzling behavior: High willingness to pay for low deductible plans
  - Pay $500 more in premiums to reduce deductible by $250.
  - Mistake? Will spend more, no matter what
  - If mistake, insurers should discontinue these "dominated options"

- Results: Hand-to-mouth people rationally pay to lower cost-sharing
  - People *finance* healthcare spending via higher premiums, paid in smooth monthly amounts
  - Survey evidence: constrained people more likely to agree with argument that "dominated option" is beneficial to smooth expenses
- Pushing people into higher deductible plans can be harmful

Insurance, Moral Hazard, and Wasteful Spending





Standard Model:

Increase in healthcare spending with insurance is wasteful because the benefit is below the cost

Hand-to-Mouth Model:

Uninsured spending was too low because costs could not be financed

Insurance smooths out costs– additional spending is actually valuable

Some *efficient* moral hazard

BOSTON UNIVERSITY

Modeling Constraints Faced by Low-Income People Changes Public Policy Conclusions

- Established fact: Get insurance→ buy more healthcare: "moral hazard"
- Standard analysis: additional care is lower value, wasteful
  - "Instead of giving poor people insurance, give them cash"
- Our model: insurance gives *financing* benefits to hand-to-mouth people
  - Smooth premiums are a less costly way to pay for healthcare
  - Optimal amount of healthcare bought should rise→ is not waste
  - "Would need to give people cash *when* they need it"→ insurance!
- Revisited Oregon Health Insurance Experiment
  - Value of Medicaid to hand-to-mouth recipients may be as much as 2-3x higher than standard approach
  - Standard model: benefit < cost
  - Hand-to-mouth model: benefits justify the cost

The Liquidity Sensitivity of Healthcare Consumption: Evidence from Social Security Payments

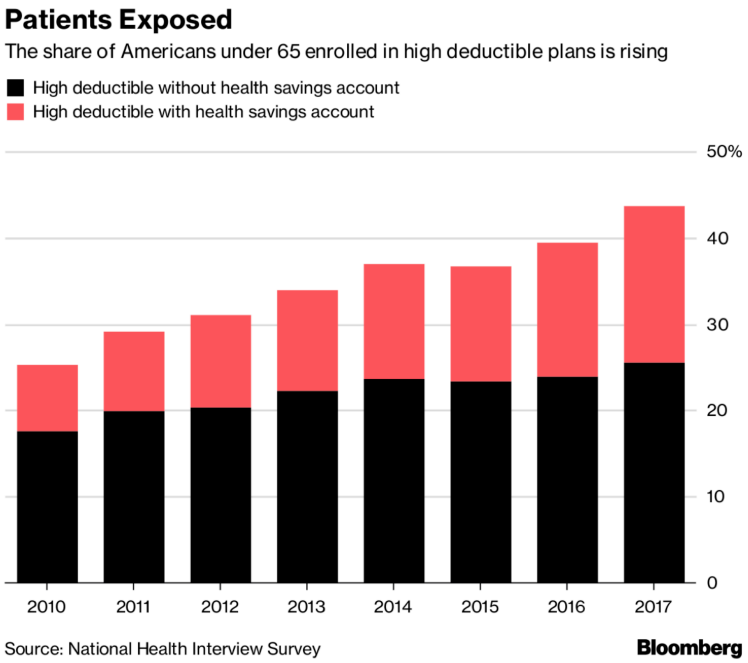
Tal Gross

Professor

Questrom School of Business

Work by Tal Gross, Tim Layton, and Daniel Prinz

AER Insights, 2022



OCTOBER 2024						
S	M	T	W	T	F	S
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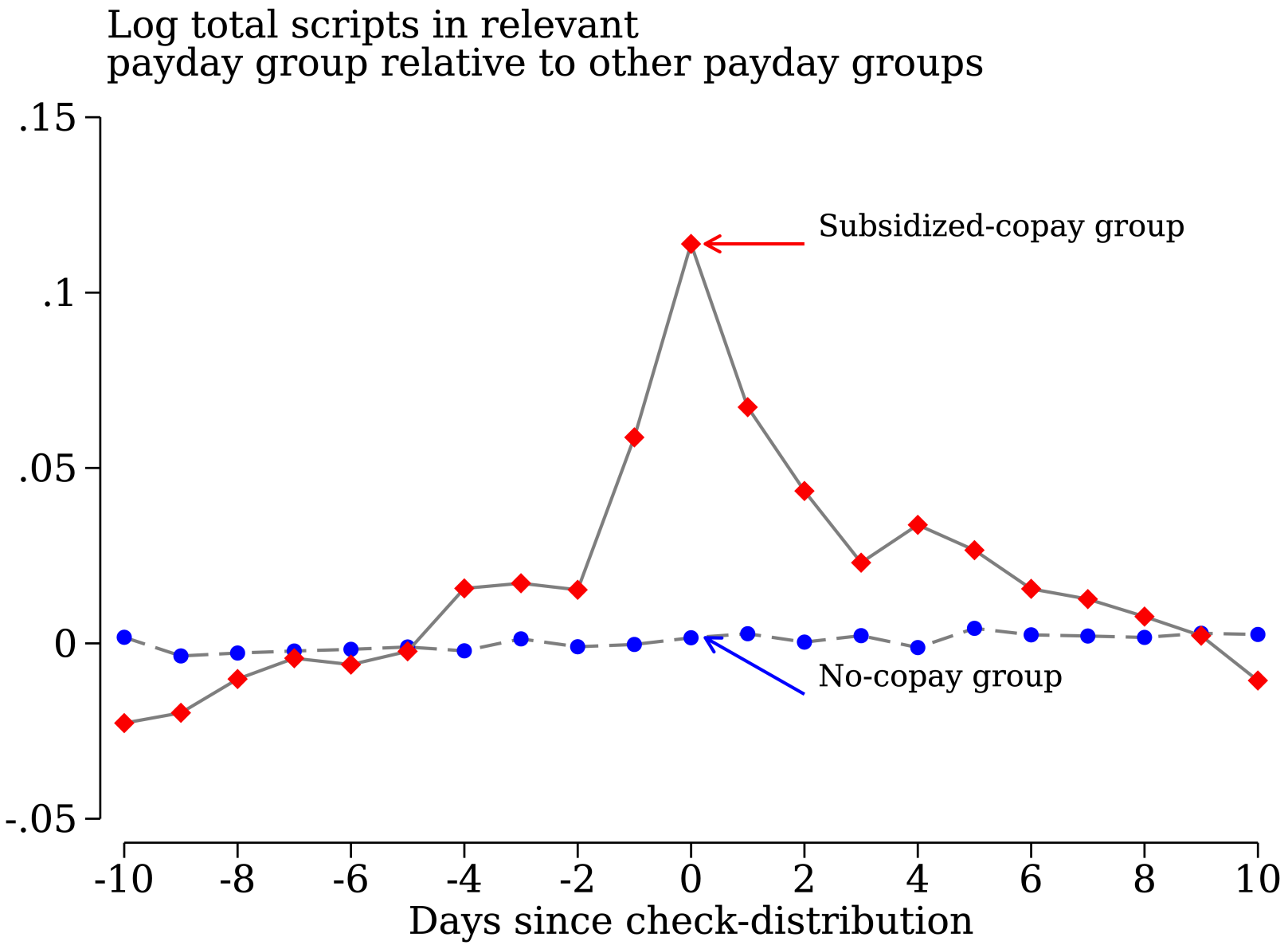
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Olafsson and Pagel (2018): Low-income households in Iceland spend 70 percent more on days when they get their paycheck than on the average day.

Benefits paid on	Birth date on
Second Wednesday	1st – 10th
Third Wednesday	11th – 20th
Fourth Wednesday	21st – 31st


Log total scripts in relevant
payday group relative to other payday groups
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Subsidized-copay group
No-copay group
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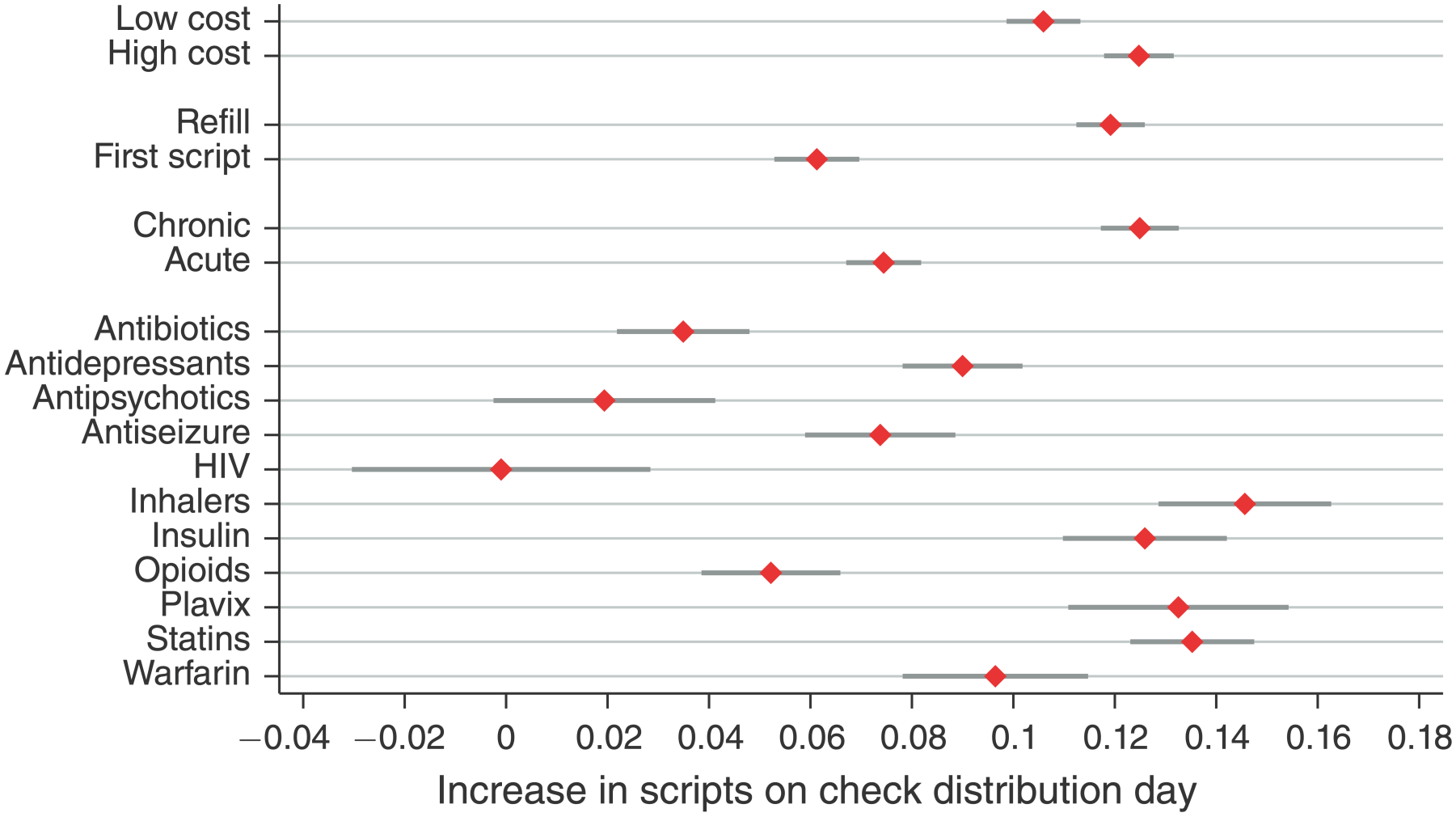
Days since check-distribution


Low cost
High cost
Refill
First script
Chronic
Acute
Antibiotics
Antidepressants
Antipsychotics
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HIV
Inhalers
Insulin
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Plavix
Statins
Warfarin
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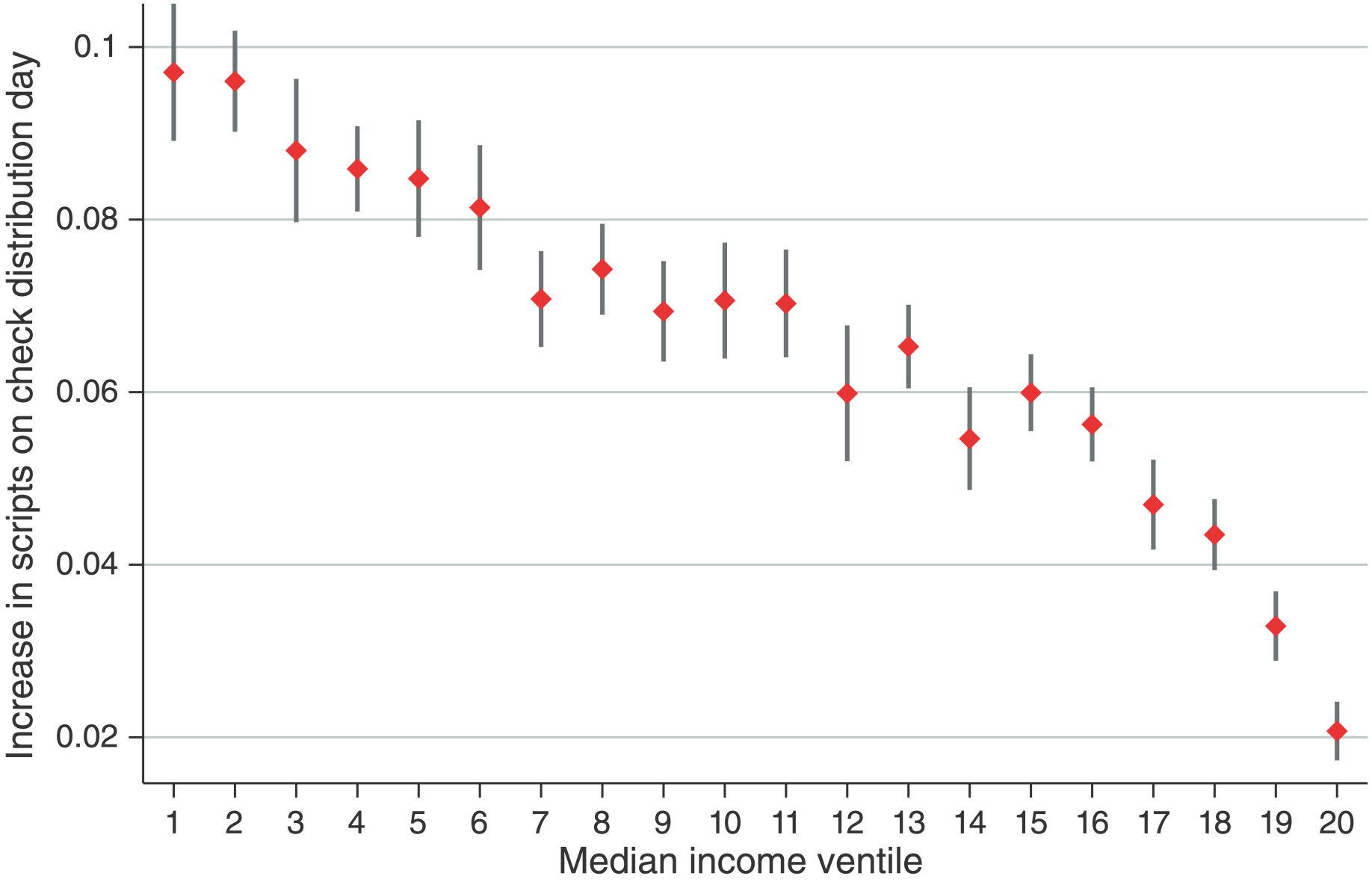
Increase in scripts on check distribution day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Median income ventile

Access & Innovation Among Cell and Gene Therapies

Rena M. Conti, PhD

Associate Professor, QST Markets, Public Policy, and Law

Persons with Rare Disease in the US Experience Disparities

Rare Disease Prevalence of <200K

>6K known diseases; 25-30M Americans, 70% children

- Cystic fibrosis, Tay Sachs, Pediatric cancers

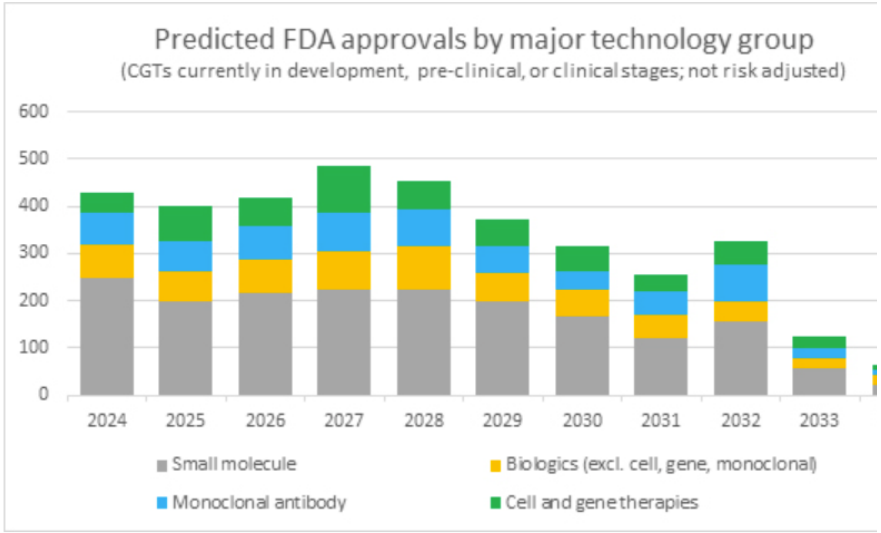
- Sickle cell & Kidney failure in Black, Hispanic communities

$996B annual direct costs

Patients

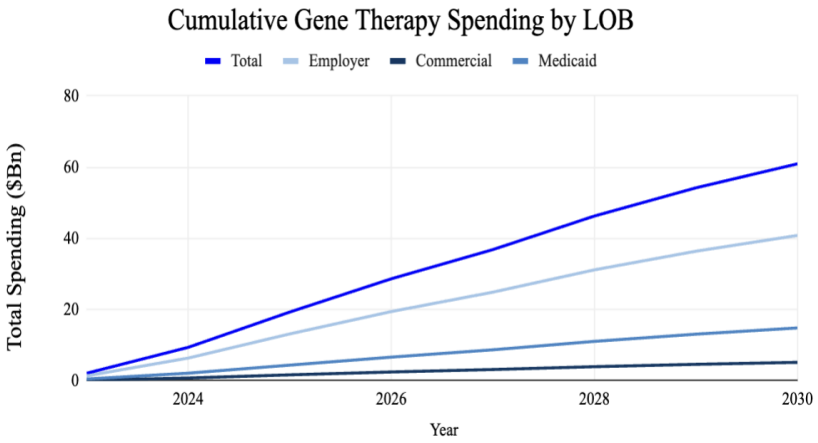
- -Require specialized care
- -Need to take time off work or school
- -Die at a younger age
- -Experience barriers to access related to social determinants of health

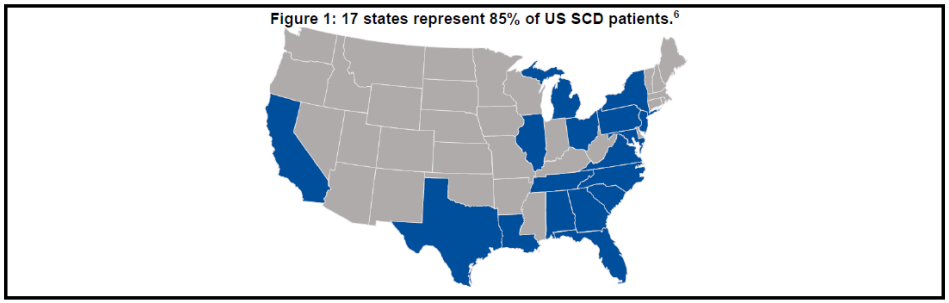
Advanced Therapeutics are a Scientific Achievement & Represent a Small Share of New Products but Growing



Source: Evaluate; RSM US LLP

Advanced Therapeutics Spending is a Small Share of Total,
Access Barriers Exist in Commercial & State Medicaid Plans





	Max Spending (billions)	2023-2035 Average Annual Spending (billions)
Medicare	$8.10	$6.40
State Medicaid plans	$5.44	$4.30
Commercial plans	$12.20	$9.60
Total	$25.60	$20.40

Gene Therapy www.nature.com/gt

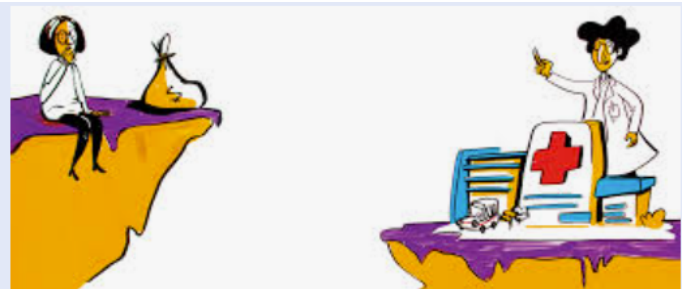
ARTICLE OPEN

The estimated annual financial impact of gene therapy in the United States

Chi Heem Wong[1,2], Dexin Li[3], Nina Wang[4], Jonathan Gruber[5], Andrew W. Lo[6] and Rena M. Conti[7,8]

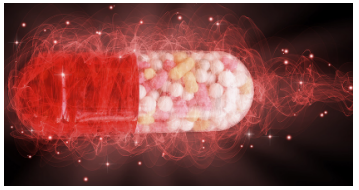
Sickle Cell Gene Therapy May Be Unaffordable For Some State Medicaid Programs, Jeopardizing Access, Study Finds

Research Agenda



Coverage & reimbursement

Structural barriers to medical care



Spending on Advanced Therapeutics

- Analysis of use, spending
- Expect use in 'better' funded populations, co-located with clinical trials, academic centers
- Use results to inform reductions in disparities through financing and coverage interventions

Supply of Next Generation Advanced Therapeutics

- Quantify relationship between use & innovative activities
- Expect more investment in better covered, more affordable therapeutics
- Use results to inform investment policies

Capturing Social Drivers of Health (SDoH) in primary care provider payments

Randall P Ellis

Professor

Department of Economics, College of Arts and Science

Primary Care Provider (PCP) payments are low and unfair in the US

- Fee for service (FFS) payments reward treatment, not prevention and care coordination
- Specialist fees are too high, primary care provider (PCP) fees too low
- Bundled payment using to current spending will still be too low

Need based payment

- Pay a monthly fixed amount based on diseases identified
- Pay more for complex patients
- Needs, based not only on diseases and pharmacy use but also
- Social Drivers of Health (SDoH) (See Dyer et al Health Affairs 2023)
  - Built environment
  - Criminal justice
  - Education
  - Employment
  - Housing
  - Income and poverty
  - Social cohesion
  - Transportation
  - Wealth

New framework for Massachusetts Medicaid and CHIP managed care

(Ash, Alcusky, Ellis, Sabatino, and Eanet, 2024)

- Bundled monthly payments replace FFS revenue
- Total payments augmented to reflect the extra PCP time and effort needed by patients with hospital, specialist, ED, or drug spending.
- Identify more complex patients as those with multiple diseases and SDoH or eligibility information
- Key concept is not to pay fees, but rather give more to doctors treating patients with difficult diagnoses or SDoH factors predicting they will take more time and effort
- SDoH is captured by
  - Neighborhood stress index
  - Homelessness measures
  - Substance abuse
  - Program eligibility

Ash et al PCAL Solution

- Use a payment framework called the Primary Care Activity Level (PCAL)
- Recognize and pay for all relevant diagnoses
- Calculate resources needed to treat complex patients using proxies of spending on hospitals, drugs, specialists, and emergency departments
- Use principal components to collapse census tract info into a SDoH index NSS = neighborhood stress score
- *(New Structural Racism Effect Index by Zachary Dyer et al 2023 is even better. See SREIndex.com for paper and full details.)*

Ratios of Observed to Expected (O:E) PCAL for Select Patient Subgroups (Ash et al 2024)

Variable	Person-Years	Mean PCAL $	O:E ratio with E predicted by		
			Average	Age-Sex Model	PCAL model
Total	1,014,625	$985	1.00	1.00	1.00
Housing Problems					
Homeless	19,501	$3,378	3.43	2.75	0.95
Unstably Housed	92,348	$1,188	1.21	1.30	1.02
None	902,407	$913	0.93	0.92	1.00
Race					
White, Non-Hispanic	349,900	$1,114	1.13	1.06	1.01
Black, Non-Hispanic	103,418	$883	0.90	0.93	0.96
Hispanic	78,776	$1,045	1.06	1.07	1.00
Other	57,017	$701	0.71	0.72	0.97
Unknown	425,514	$932	0.95	0.99	1.00
NSS Quintile					
Least Stressed	202,519	$965	0.98	0.95	1.01
2nd Quintile	202,567	$984	1.00	0.98	1.01
3rd Quintile	202,150	$979	0.99	0.99	1.01
4th Quintile	203,316	$988	1.00	1.03	0.99
Most Stressed	204,072	$1,010	1.03	1.05	0.97
None	902,407	$913	0.93	0.92	1.00

Trade-offs and Spillovers: The Impact of Insurance Policies on Low-Income Children and Families

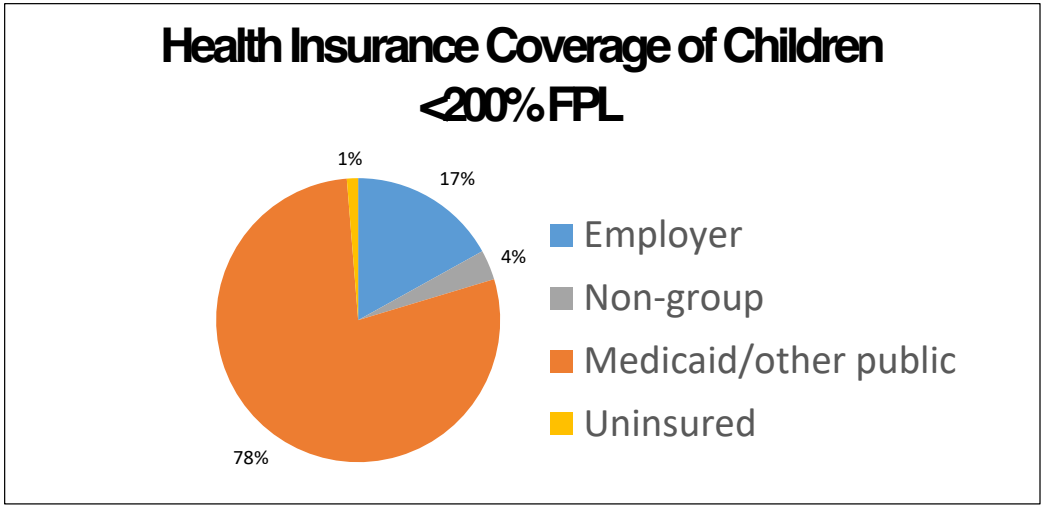
Alison Galbraith, MD, MPH

Professor and Health Services Research Division Director
Department of Pediatrics

Children and families face unique insurance complexities and challenges

- Medicaid eligibility thresholds and policies vary across ages and within families
- Adult Medicaid policies may have spillover effects on children
- Children of low-wage workers are at risk for high out-of-pocket (OOP) costs in employer plans

- Intrafamilial trade-offs occur in the face of high OOP costs
- Spillover effects on financial well-being and non-medical outcomes



Kaiser Family Foundation, 2021

How does cost-sharing affect children and families?

- Mixed methods project on experiences with high-deductible health plans (HDHPs) for families with asthma
- Quantitative studies used Optum claims data, difference-in-differences methods
- Findings:
  - decreased utilization of preventive medications after switching to a HDHP vs. staying in a traditional plan, for both children and adults
  - increased utilization and reduced OOP costs when cost-sharing was removed for high-value care
  - no impact on asthma flares

AFFORD
Asthma in Families Facing Out-Of-Pocket Requirements with Deductibles

How are families making trade-offs when faced with burdensome OOP asthma costs?

- Qualitative interviews with 59 adults with asthma or parents of children with asthma
- High priority placed on getting needed asthma care despite cost
- Criteria for making trade-offs:
  - needs of children over adults
  - short-term needs over longer-term financial health
  - acuity

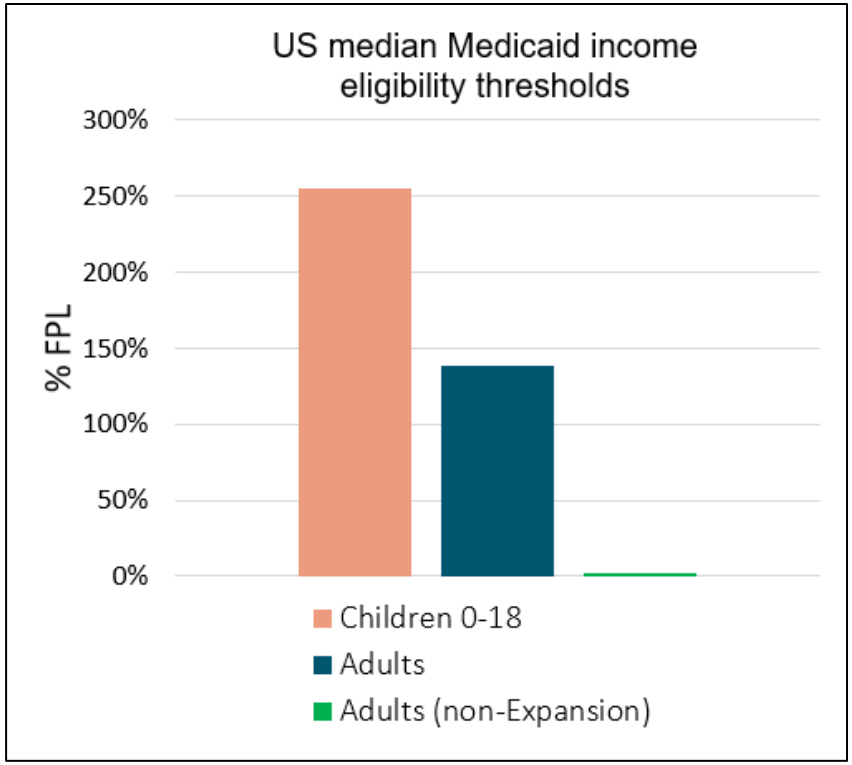
You have to rob Peter to pay Paul so your kid can breathe.

Usually, I judge it by the health that I'm in, and where I'm at. If I'm not having a hard time with the asthma, then I'll do the other [high blood pressure medication], and vice versa.

A lot of our retirement savings and things like that take a backseat. So savings is nonexistent.

Next steps: what happens to adolescents with Medicaid when they turn 19 and become exposed to adult eligibility policies?

- Impact of coverage churn on health outcomes for adolescents with chronic conditions
- Impact of continuous coverage policies on churn and health outcomes
- Role of redetermination policies and administrative barriers



Should Top Surgeons Practice at Top Hospitals? Sorting and Complementarities in Healthcare

Pauline Mourot

Assistant Professor
Economics, CAS

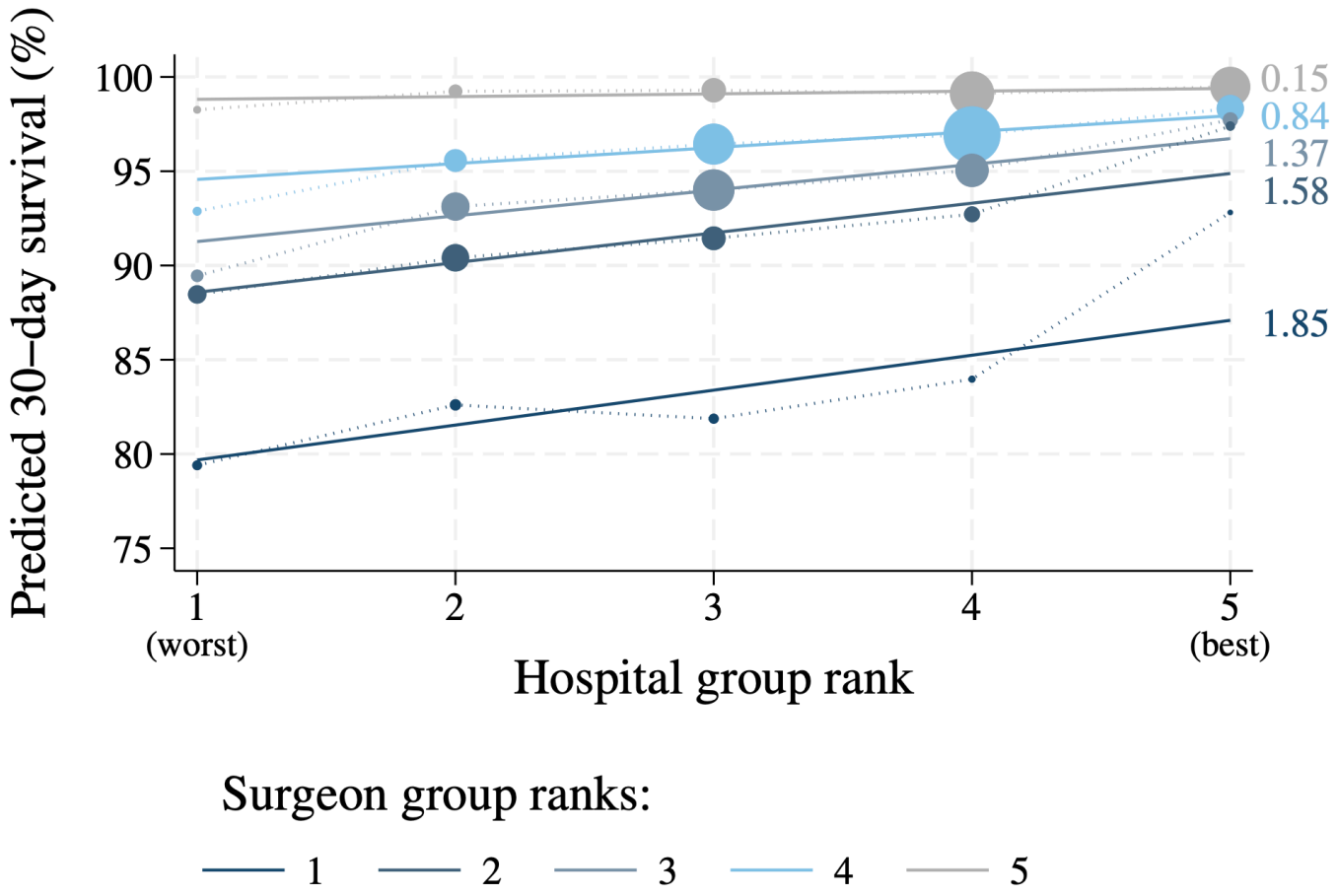
Understanding how healthcare is produced

- Patient care involves many different providers (e.g. surgery)
  - What is their respective contribution to patient outcomes?
  - Do best surgeons practice at top hospitals? [sorting]
  - Do better hospitals raise the performances of better surgeons more than for less good surgeons? Or less? [complements or substitutes]

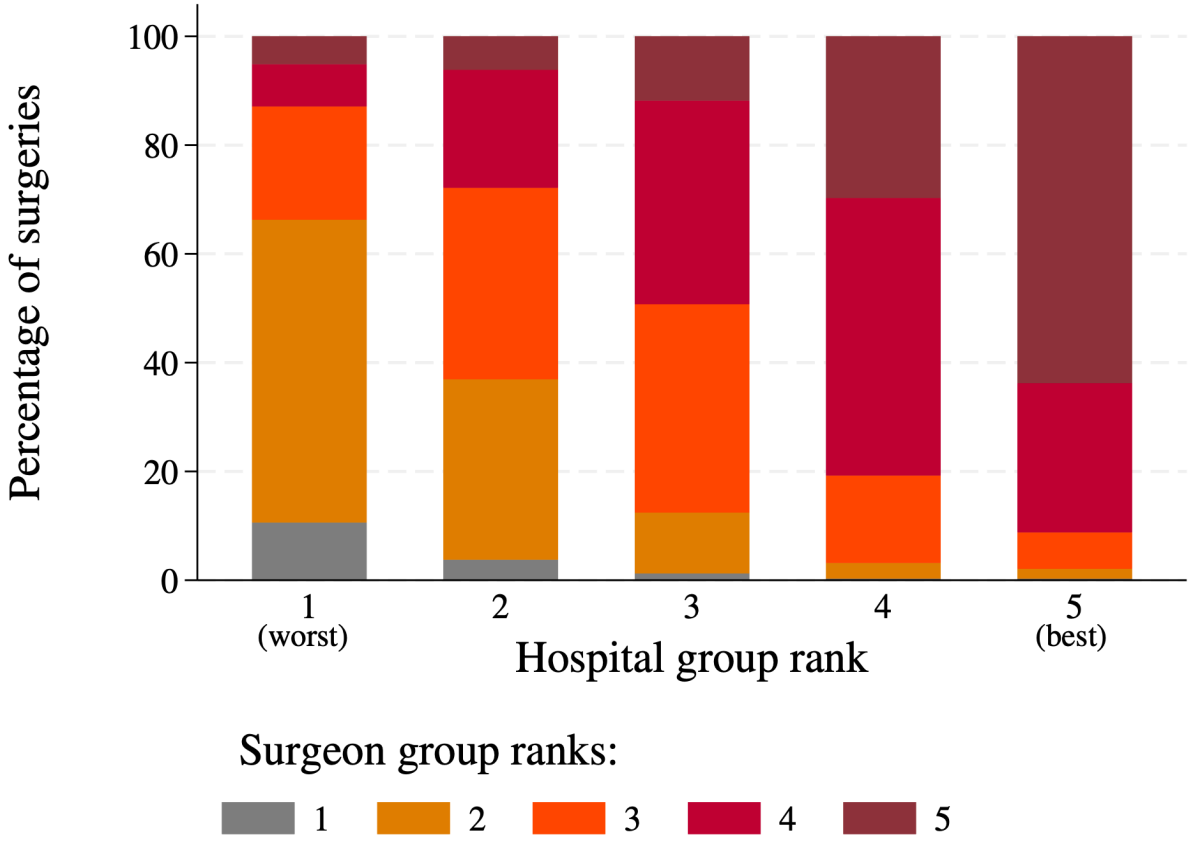
➔ What is the impact of sorting and complementarities on patient survival?

  - Specific surgery: CABG
  - Data: Medicare

Substitutability between surgeons and hospitals



Sorting of surgeons across hospitals



Large consequences for patient survival

- Reallocations across the country: impact on average mortality
  - ➢ Reductions of 7% (random) and 25% (negative matching)

- Do we have to move surgeons across regions to achieve these gains?
  - ➢ 50% of the gains achieved when keeping surgeons in same regions

Conclusions

1. Returns to high-survival hospitals: larger for low-survival surgeons
2. High-survival surgeons sort into high-survival hospitals
3. Large impact of surgeon sorting on aggregate patient outcomes

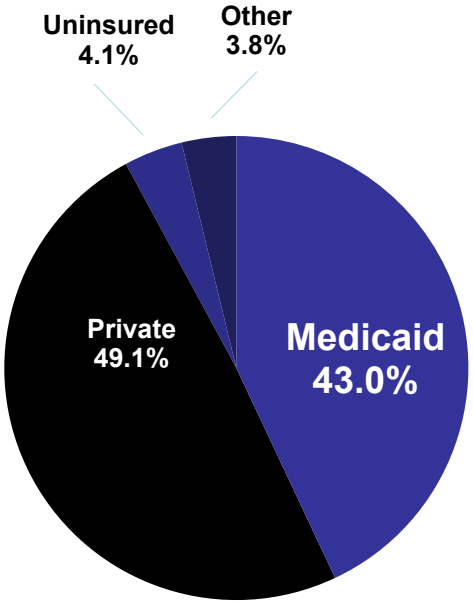
➔ Inform policy

Beyond 60 Days: Comparing Postpartum Health Care Utilization and Spending in Medicaid versus Commercial Insurance

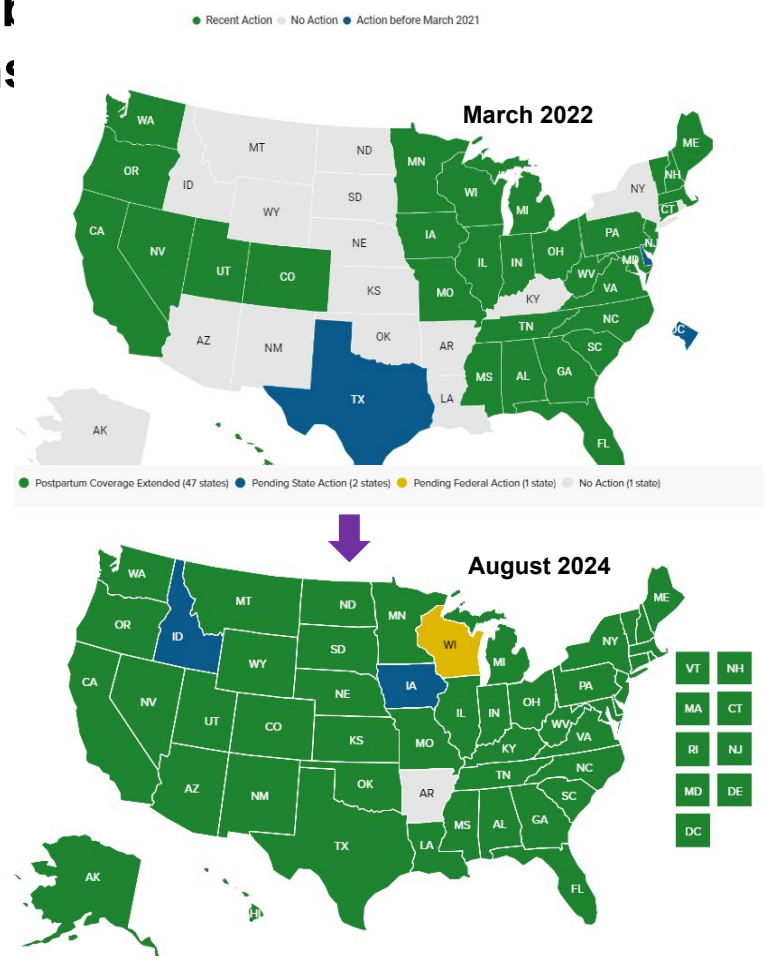
Sarah H. Gordon, PhD, MS

Department of Health Law, Policy, and Management
Boston University School of Public Health

Nearly all states have extended pub Medicaid insurance until 12 months after birth for low-income people.



Share of Births by Payer, 2018

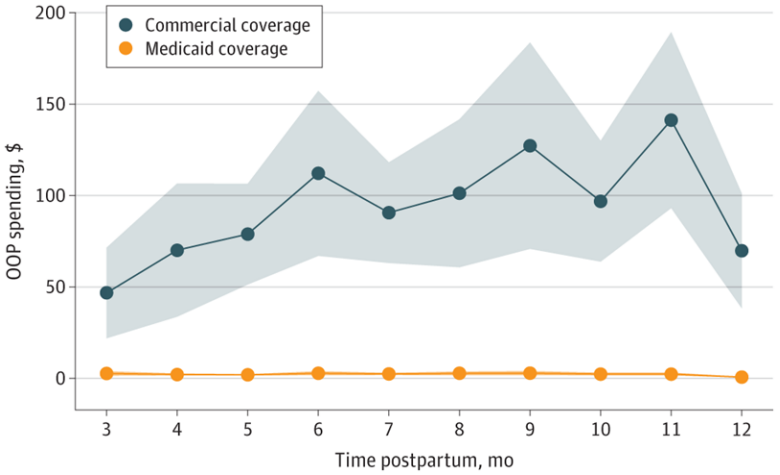


Study Question and Methods

- **How do health care use and spending compare in the postpartum year for those with Medicaid vs. commercial insurance?**
- Cross-sectional analysis of the association between continuous enrollment in Medicaid versus commercial insurance months 3-12 postpartum
- Linked Colorado All Payer Claims Database, birth records, and income data
- 44,471 Medicaid-financed delivery hospitalizations those >18 years of age who were *continuously enrolled* in Medicaid or commercial coverage during months 3-12 postpartum

Key Findings

- Those in commercial insurance had higher use of outpatient and primary care and lower ED compared to those in Medicaid
- Total health care spending was significantly higher in commercial insurance compared to Medicaid
- Enrollees in commercial insurance had much higher out-of-pocket spending across all service types



Mean Monthly Unadjusted Out-of-Pocket Spending Per Person in Medicaid versus Commercial Insurance During Months 3-12 Postpartum

Policy Implications

- Shift from subsidized private insurance may mean that federal government could pay less and states could pay more, though relatively low-cost population
  - Per-capita Medicaid spending for postpartum population during months 3-12 postpartum was ~$4,200 in CO, less than per-capita annual spending for the Medicaid expansion population ($6,673 across 17 states in 2018, $5,650 in CO)
- **Enrollees who shift from commercial to Medicaid will face much lower exposure to OOP costs**

Disclosures + Acknowledgements

- Sarah Gordon is a senior advisor on health policy in the Office of the Assistant Secretary for Planning and Evaluation at the U.S. Department of Health and Human Services. This research was conceived and drafted while Dr. Gordon was employed at Boston University, and findings and views in this presentation do not reflect the official views or policy of the Department of Health and Human Services.
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