The Effects of Medicaid on Health and Well-Being

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The Medicaid Program

- Medicaid is the largest insurer in the United States, covering certain low-income individuals
- Provides free or low-cost health care
- Covered 98.2 million enrollees in 2023 at a cost of $894 billion[a]
- What are we getting for our money?

"All the News That's Fit to Print"

The New York

VOL. CXIV ... No. 39,270. © 1965 by The New York Times Company. Times Square, New York, N. Y. 10036 NEW YORK, SATURDAY, JULY 31, 1965.

PRESIDENT SIGNS MEDICARE BILL; PRAISES TRUMAN

He Flies to Independence, Mo., to Hold Ceremonies at Presidential Library

20-YEAR CAMPAIGN ENDS

Social Security Is Expanded to Provide Medical Care for Americans Over 65

Johnson and Truman remarks, Page 9; Digest of law and related matter, Page 8.

By JOHN D. MORRIS
Special to The New York Times

INDEPENDENCE, Mo., July 30 — President Johnson flew to Independence today and signed the medicare - Social Security bill in a moving tribute to former President Harry S. Truman.

Mr. Truman, beaming, sat beside Mr. Johnson on the stage of the Harry S. Truman Library auditorium. More than 200 persons, including Vice President Humphrey, Congressional leaders and Administration officials, witnessed the ceremony.

President Johnson chose Independence for the signing because Mr. Truman was the first President who proposed a Federal program of health insurance under Social Security.

It was in a special message

Associated Press Wirephoto

MEDICARE BILL SIGNED: President Johnson signing bill, with former President Harry S. Truman at his side, in Truman Library at Independence, Mo. Behind them are Mrs. Johnson, Vice President Humphrey and Mrs. Truman.

Urban Post in the Cabinet Approved by Senate Panel

By United Press International

WASHINGTON, July 30 —President Johnson's request for creation of a new Cabinet-level Department of Housing and Urban Development won approval today from the Senate Government Operations Committee by a vote of 9 to 4.

MRS. MOTLEY PUT

BOGALUSA POLICE GET ULTIMATUM

Court Orders 2 Officials to Protect Demonstrators or Face $100-a-Day Fines

By United Press International

Turks Ask Meeting Of Security Council On Cyprus Curbs

Special to The New York Times

UNITED NATIONS, N. Y., July 30 — Turkey asked today for an early meeting of the Security Council on charges that the Government of Cyprus had violated the rights of Turkish Cypriotes by amending the

[a] Medicaid and CHIP Payment and Access Commission. 2024. *MACStats: Medicaid and CHIP Data Book*, Exhibit 10.

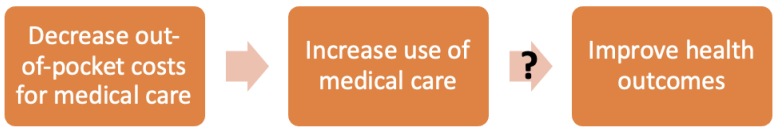
What might Medicaid do?

- Health insurance is designed to protect against medical expenses associated with unexpected illness $\rightarrow$ reduced financial hardship
  - e.g. Finkelstein et al. 2012; Hu et al. 2018; Brevoort, Godzicki, and Hackmann 2020
- Medicaid also increases access to health care and may increases in utilization

- Tradeoff: use more medical care even when health benefit is low ("moral hazard")

What about health?

- If Medicaid causes people to use more care, does their health improve?



- U.S. has a high degree of inequality in health outcomes by income
  - Correlation between income and health higher in the US than other wealthy countries[1]

- One of the often stated goals of Medicaid is to improve health

[1] Semyonov, Lewin-Epstein, Maskileyson. 2013. *Social Science & Medicine* 81: 10-17.

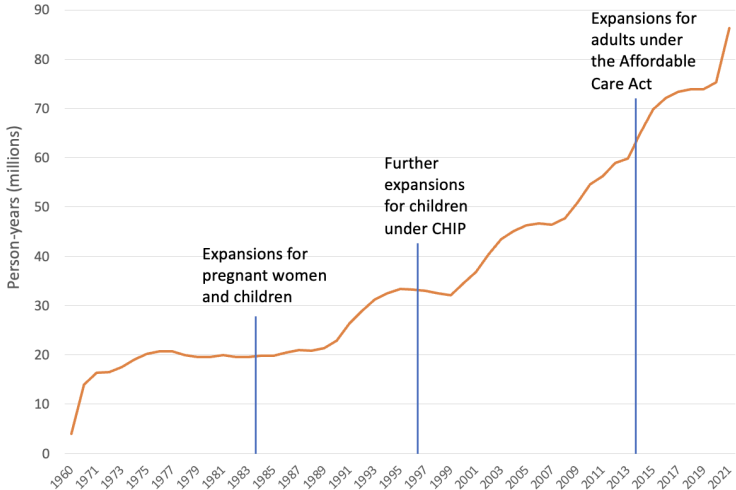
Does Medicaid causally affect health? Difficult to answer empirically

- Unable to compare the health of people covered by Medicaid and those who are not
  - They likely differ in important ways that affect their health separately from Medicaid (Freedman, Goodman-Bacon, and Hammarlund 2021)
  - Opportunities for random assignment are rare (e.g. Finkelstein et al. 2012)
- Objective measures of health are less available, and may be less frequent (mortality)
  - This can make it difficult to detect effects (Black, Hollingsworth, Nunes, Simon 2022)
- It may take time for health effects to materialize, making short-term evaluation difficult

Estimating the impacts of Medicaid

- Research aims to evaluate health impacts using new approaches and data
- Use policy variation created by expansions in Medicaid to estimate the causal effects
- Rely on objective measures of health and financial outcomes from administrative data when available
- When possible, take longer-term view to examine health later in life
- Use new data linkages to zoom in on targeted population to improve detection

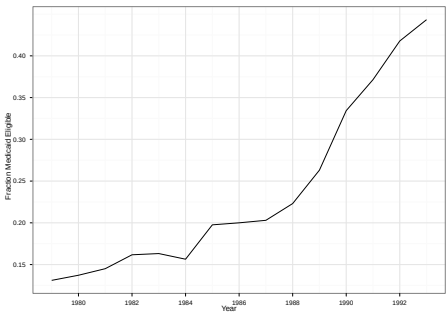
Millions of Americans enrolled in Medicaid by year



Sources: Centers for Medicare & Medicaid Services. 2018 Actuarial Report, https://www.cms.gov/files/document/2018-report.pdf; Medicaid and CHIP Payment and Access Commission. 2022 (December). *MACStats: Medicaid and CHIP Data Book*, Exhibit 10, https://www.macpac.gov/publication/medicaid-enrollment-and-total-spending-levels-and-annual-growth/

Medicaid expansions for pregnant women

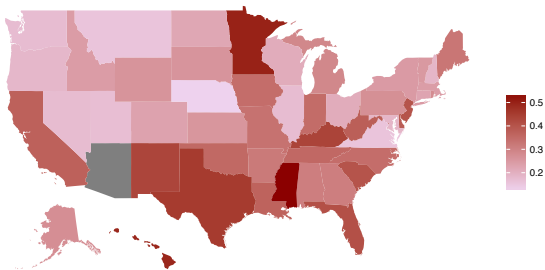
Medicaid expansions for pregnant women



- Rapid expansion in Medicaid prenatal eligibility to poor women in the 1980s and 1990s
- *Saving Babies* study by Currie and Gruber documents large decline in infant mortality, decrease in low birthweight for the most disadvantaged families
- Does this early health intervention have long-lasting benefits?

Evaluating long-run effects on adult outcomes

- Use variation in timing and magnitude of Medicaid expansions across states to estimate effects of *in utero* exposure
- Link on information on Medicaid exposure using state and year of birth
- Examine adult health and human capital at ages 19-36 from survey and administrative data



Miller and Wherry. 2019. *Journal of Human Resources* 54(3): 785-824.

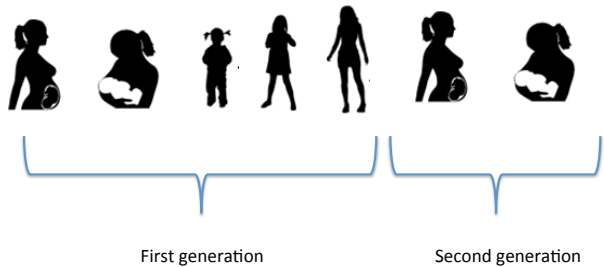
Medicaid eligibility *in utero* = better adult outcomes

- We find lower rates of chronic illness and fewer hospitalizations, and higher high school graduation rates for cohorts benefiting from expanded Medicaid eligibility
  - Reduction in hospitalization costs offset 26% of the cost of Medicaid prenatal coverage
  - Hendren and Sprung-Keyser (2020): recipients willing to pay almost 14x original cost
- Evidence indicates benefits to prenatal Medicaid eligibility are still materializing years after implementation $\rightarrow$ there may be even larger effects in the longer-term
- Given these long-term benefits, do these effects persist to later generations?

Miller and Wherry. 2019. *Journal of Human Resources* 54(3): 785-824.

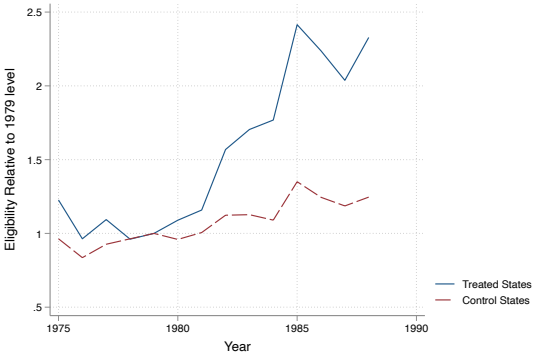
Medicaid and the next generation's health

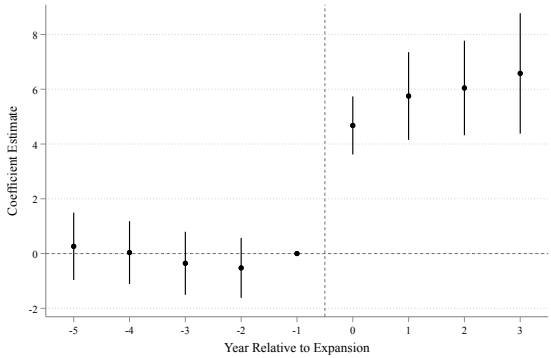
- Now that they are adults, do these exposed cohorts have healthier children?
- Examine health of infants (second generation) born to mothers (first generation) who gained Medicaid eligibility while they were *in utero* using administrative data



East, Miller, Page, and Wherry. 2023. *American Economic Review* 113(1): 98-135.

Examine outcomes for mothers in treated vs. control states

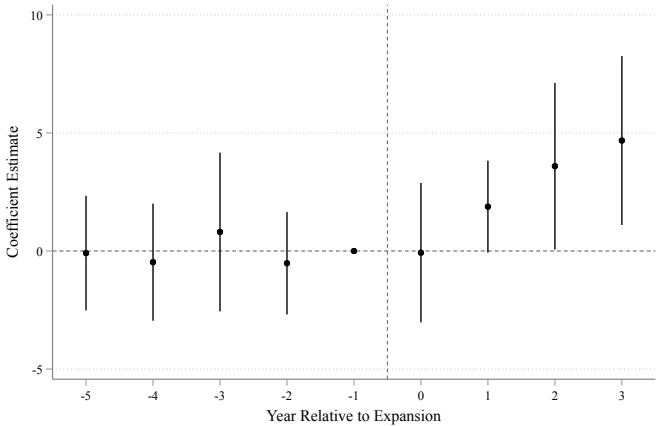




- Sharp increase in Medicaid eligibility in treated states that continues to climb

East, Miller, Page, and Wherry. 2023. *American Economic Review* 113(1): 98-135.

Second generation: birthweight for mothers exposed to expansion



(a) Birthweight (grams)

- Birthweights of infants to mothers born after Medicaid expansion is higher
- 4 years after expansion, BW is $\approx$5 grams (0.15%) higher
- Also find expansion associated with decreases in probability of very low birthweight (4.9%), very preterm (6%, and small for gestational age (1.6%).

East, Miller, Page, and Wherry. 2023. *American Economic Review* 113(1): 98-135.

What we've learned from prenatal Medicaid expansions

- Health benefits of Medicaid persist beyond the exposed generation, meaning that Medicaid's benefits are even higher than previously documented
- Improvements in second generation health at birth are economically meaningful
  - Estimate that more than 60% of the cost of initial investment saved in medical costs associated with lower birthweights, ignoring likely additional savings later on
- Reasonable to expect that benefits will continue to be passed on to future generations
  - Accounting for this intergenerational transmission increases benefit calculation by 30% compared to analysis of first generation benefits alone

East, Miller, Page, and Wherry. 2023. *American Economic Review* 113(1): 98-135.

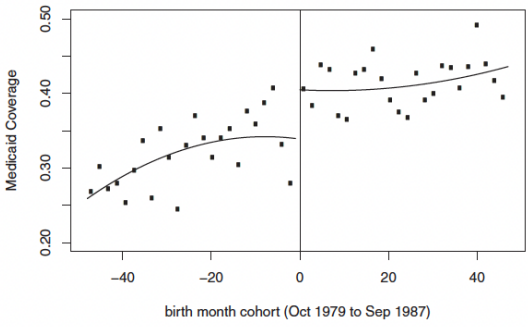
Medicaid expansions for children

Expansions in Medicaid for children

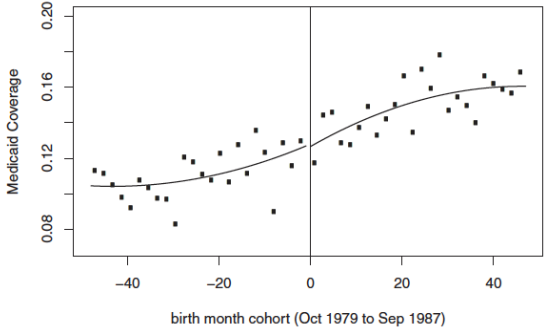
- In the late 1980s, Congress began to expand Medicaid eligibility to poor children
- Many expansions were specified to apply to children born after September 30, 1983
- This meant that children born before and after this date experienced very different childhood exposure to Medicaid ($\approx$ at ages 8-14)
- Examine effects on mortality, hospitalizations, and ED visits later in life

Medicaid coverage at ages 8-14 by birth month and race

a) Black children



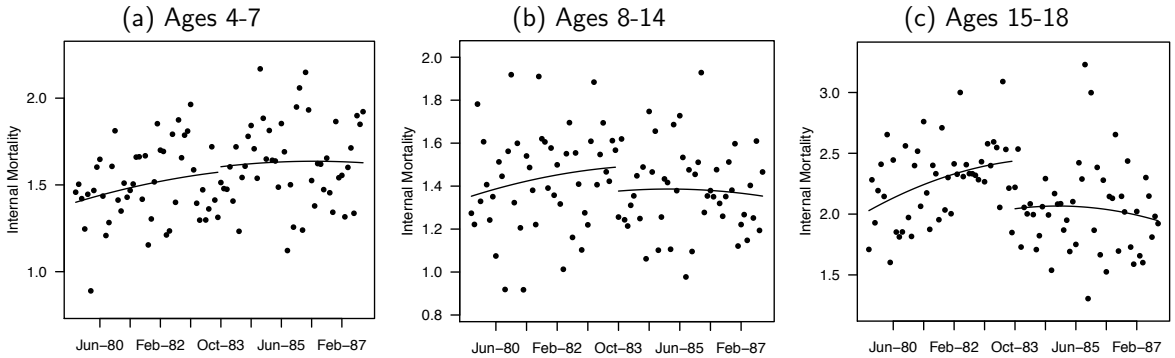
b) Nonblack children



- We estimate a 5-8 percentage point increase in Medicaid coverage for Black children born after September 30, 1983 (a 16-25% increase over baseline coverage rates)

Wherry, Miller, Kaestner, and Meyer. 2018. *Review of Economics and Statistics* 100(2): 287-302.

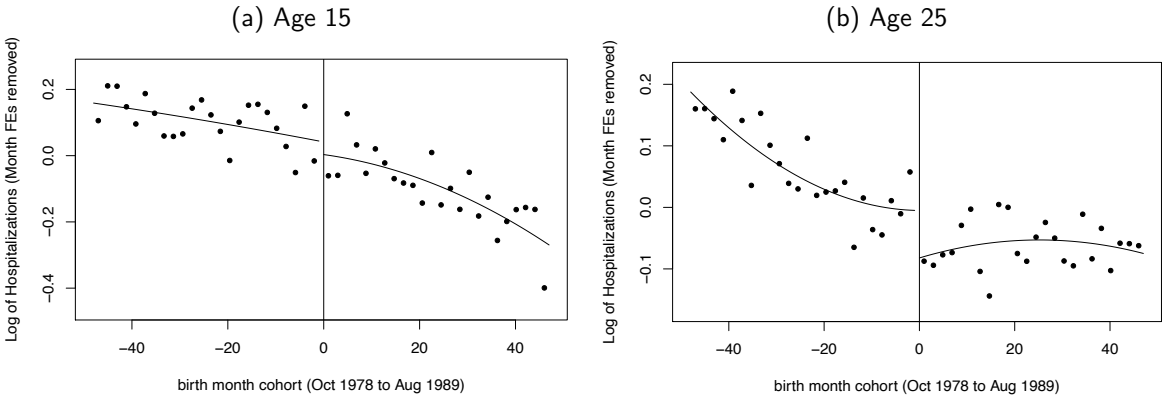
Disease-related deaths for Black cohorts



- Meyer and Wherry find a 19% decrease in disease-related deaths at ages 15-18 for Black cohorts who gained childhood Medicaid at ages 8-14

Wherry and Meyer. 2016. *Journal of Human Resources* 51(3): 556-588.

Inpatient hospitalizations for Black cohorts



- Reduction in hospitalizations of between 7-15% at age 25, related to chronic conditions

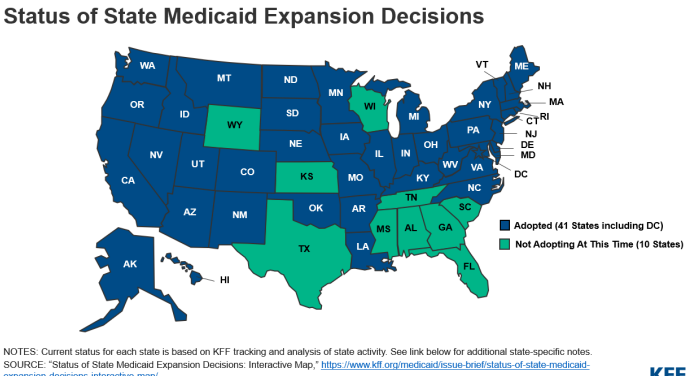
Wherry, Miller, Kaestner, and Meyer. 2018. *Review of Economics and Statistics* 100(2): 287-302.

What we've learned from child Medicaid expansions

- Find strong evidence of health effects of expanded child Medicaid coverage that took time to materialize (decline in later life deaths and hospitalizations/ED visits)
  - Improvements for Black cohorts mirror population-level patterns (Currie and Schwandt 2016)
- Cost per life saved $1.77 million, while savings from hospitalizations avoided at age 25 represent 2-4% costs of original childhood coverage
- Growing body of evidence of improved later life outcomes for children gaining Medicaid
  - Boudreaux, Golberstein, and McAlpine 2016; Brown, Kowalski, and Lurie 2020; Cohodes et al. 2016; Currie, Decker and Lin 2009; Goodman-Bacon 2021; Levine and Schazenbach 2009; Lipton et al. 2016; O'Brien and Robertson 2018; Quershi and Gangopadhyaya 2021; Sohn 2017; Thompson 2017
- Brown, Kowalski, and Lurie (2020) find government recoups 58 cents per dollar by age 28; Goodman-Bacon (2021) finds Medicaid saves the government more than its initial costs

Medicaid expansions for adults

Affordable Care Act state Medicaid expansions



- Starting in 2014, some states expanded Medicaid to include low-income adults
- 40 states and DC have adopted expansions to date, with 10 states not adopting expansions

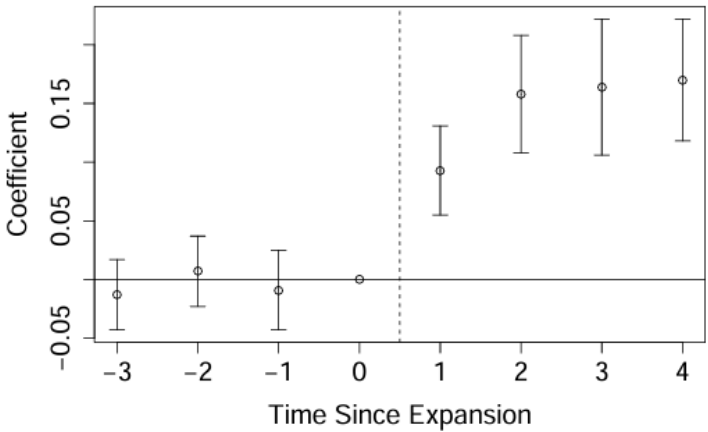
Evaluating impacts of adult expansions

- Comparing outcomes for low-income survey respondents most likely to gain eligibility
- Examine changes in coverage, access to care, and financial outcomes in expansion states, as compared to non-expansion states

Miller and Wherry. 2019. *AEA Papers and Proceedings* 109:327-333.

Change in Medicaid enrollment

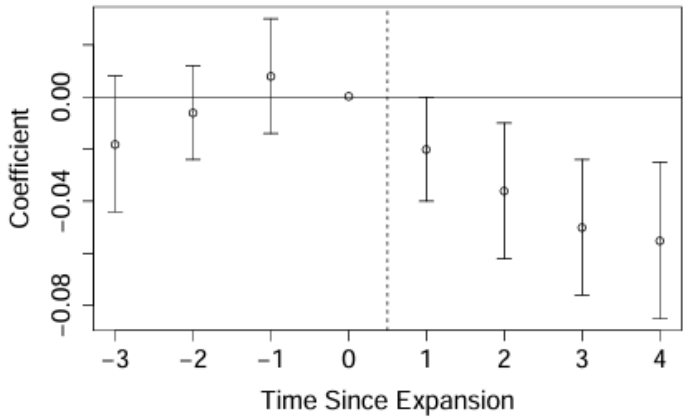
- On average, 16.4pp increase in any Medicaid enrollment at the time fo the survey
- Corresponding decrease in probability being uninsured of 10.3pp.



Miller and Wherry. 2019. *AEA Papers and Proceedings* 109:327-333.

Change in access to medical care

- On average, 4.9pp decrease in the probability a respondent reported he or she "needed medical care but could not afford it,"
- Similar improvements in access to follow-up care, specialist care, reductions in delaying needed care and worrying about medical bills.



Miller and Wherry. 2019. *AEA Papers and Proceedings* 109:327-333.

Financial improvements

- Similar analysis using data on credit reports to evaluate Medicaid expansions
- Decrease in medical bills sent to debt collectors, other unpaid bills, and other negative financial markers

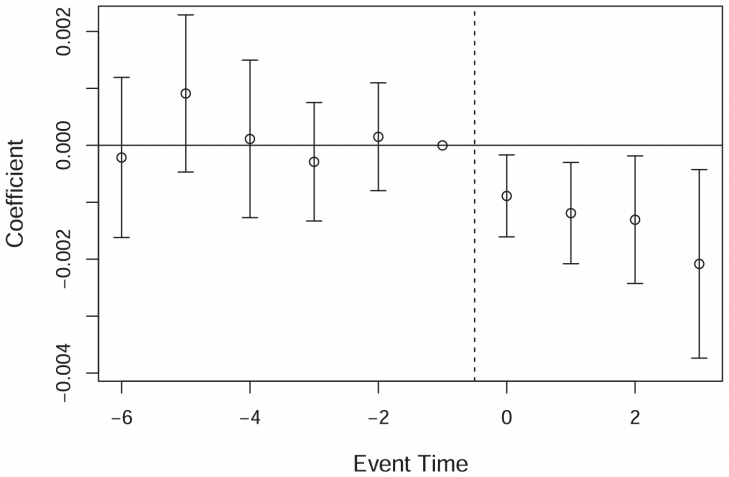
Miller et al. 2020. *Journal of Policy Analysis and Management* 40(2): 348-375., Hu et al. 2019. *Journal of Public Economics* 163:99-112. ,

Evaluating mortality impacts of adult expansions

- Did these effects translate into better health?
- Use "new" data for an old question: survey data linked to administrative death data
- Survey data provide individual characteristics (such as income)
- Identify group most likely to gain Medicaid eligibility
- Focus on adults ages 55-64 since higher mortality risk but replicated for all ages in other work (Wyse and Meyer 2024).
- Examine changes in mortality in expansion states, as compared to non-expansion states

Miller, Johnson, and Wherry. 2022. *Quarterly Journal of Economics* 136(3): 1783-1829.

Mortality effects

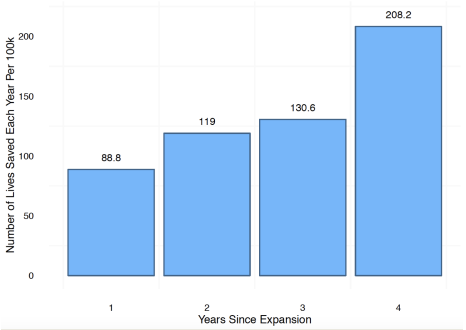


- Immediate reduction in mortality in first year, effects growing over time
- Average decrease of 0.132 percentage points (9.4% decline relative to mean)
- Decline in mortality related to disease-related causes

Miller, Johnson, and Wherry. 2022. *Quarterly Journal of Economics* 136(3): 1783-1829.

What we've learned from adult Medicaid expansions

- Implies about 19,200 fewer deaths over the period
  - 15,600 excessive deaths in non-expansion states
- Consistent with prior work finding mortality reductions using population-level data (e.g. Sommers 2017)
- Also with experimental evidence of mortality effects (Goldin, Lurie, McCubbin 2021)



Miller, Johnson, and Wherry. 2022. *Quarterly Journal of Economics* 136(3): 1783-1829.

Conclusions

- Empirical evidence indicates that Medicaid generates meaningful health and well-being improvements from expanded Medicaid for pregnant women, children, and adults
- These are a small collection of studies from a larger literature, none of which provides a complete view of benefits
  - Only capture one dimension of health and well-being measured at a point in time
- Future research needed to document longer-term effects, spillovers, and heterogeneity, as well as to evaluate continued growth in the program

Thank you!