Causality, Stories, Medicaid, and Opioids

Andrew Goodman-Bacon, Assistant Professor of Economics, Vanderbilt University Emma Sandoe, doctoral candidate, Harvard University

Executive Summary

The Homeland Security and Governmental Affairs (HSGAC) Committee's majority report, "Drugs for Dollars: How Medicaid Helps Fuel the Opioid Epidemic", claims that Medicaid causes its recipients to commit fraud in order to obtain opioids and drives up drug-related mortality rates. The majority points out that drug deaths have grown more quickly in expansion states than non-expansion states and that, out of 298 cases of opioid-related Medicaid fraud, most occurred in expansion states and since the expansion date, 2014. We argue that this evidence fails to support the claim that Medicaid expansion itself causes these problems.

Recent changes in drug-related mortality have been due to the wrong drugs, have come at the wrong time, and have been in the wrong places to be due to the expansion of Medicaid.

- 1. Opioid addiction increasingly begins with non-prescription drugs such as heroin, and recent increases in drug deaths are almost entirely due to non-prescription opioids. Medicaid does not supply these drugs.
- 2. Drug deaths began increasing in expansion states in 2010, four years before the expansion started, which cannot be due to Medicaid expansion.
- 3. Drug deaths have risen the most in the areas least affected by the Medicaid expansion.
- 4. An experiment in Oregon in which adults were randomly granted Medicaid eligibility showed no increase in opioid prescription rates.

Medicaid fraud has grown because Medicaid has grown, not because fraud is a large problem.

- 1. Most Medicaid fraud cases occur in expansion states because most Medicaid recipients live in expansion states, and most Medicaid fraud cases have occurred since expansion because the number of Medicaid recipients has grown since 2014.
- 2. In 2016, just one percent of one percent of adult Medicaid beneficiaries were convicted of fraud—less than half the rate for the average adult in Wisconsin.
- 3. Medicaid fraud rates did not change after the Affordable Care Act's Medicaid expansion.

Despite the majority report's acknowledgement that "there are many causes to the opioid epidemic", it makes strong claims about Medicaid's role in *causing* opioid abuse. Strong claims require strong evidence. The report, however, fails to support the claims that Medicaid caused the opioid epidemic.

Nevertheless, Medicaid can play a central role in combatting the opioid epidemic. Future discussions should focus on ways that Medicaid's existing infrastructure can improve prescribing, and connect recipients to evidence-based treatments for opioid addiction. Medicaid serves many Americans suffering from or at risk of opioid abuse, and it holds the potential to stem this costly and devastating health crisis.

Statement for the Record

We are two researchers who study the Medicaid program and how it affects its recipients. Given recent claims that Medicaid causes opioid abuse we sought to review the evidence and data. We are writing today to offer our expert opinions on these issues.

What does the majority's report ask?

The majority report and prepared remarks clearly assert that Medicaid causes opioid abuse.¹ Page one asks, "what if one of the contributing causes is connected to federal spending itself?" Senator Johnson claimed in his opening remarks that Medicaid is, "certainly a contributing factor that maybe enables something that shouldn't be enabled", warned that "we must not ignore the growing evidence that one of the contributing causes appears to be connected to federal spending itself." The executive summary reiterates these claims, arguing that, "new data suggest that the ACA Medicaid expansion may be making the opioid epidemic even worse" (pg. 2) and concluding that, "expanding the program—particularly to people most susceptible to abuse—could worsen the problem" (pg. 4).

What evidence does the majority's report present?

Senator Johnson's past investigations and this committee's majority report present two main types of evidence to support the claim that Medicaid causes opioid abuse. First, Senator Johnson's July 2017 letter to Inspector General Daniel R. Levinson shows that between 2013 and 2015, drug-related mortality rates rose faster in states that expanded Medicaid than those that did not.² Second, the majority presents evidence from a search of court records documenting almost instances between 2010 and 2017 in which patients or doctors used Medicaid to obtain opioids fraudulently. The testimony of two prosecutors—Otto Schalk, the prosecuting attorney in Harrison County, Indiana, and Emmanuel Tyndall, the Inspector General of Tennessee—provided additional insight this type of fraud. The basic facts, then, are that there is a large divergence in drug-related mortality between expansion and non-expansion states, and that patients and primarily doctors fraudulently prescribe or obtain opioids and, in some cases, resell them.

In light of our comments below, we want to clarify that these kinds of analyses are exactly the right way to begin examining the question of what is driving the opioid epidemic that is facing our country. Looking at states with high or low drug mortality, for example, can easily confuse the huge differences in population health, demographics, behavior, and norms that exist in different areas of the county (Adolphsen 2017). Looking at changes in states over time goes a long way to narrowing the question of what causes increases to mortality. Moreover, we admire the work of the majority staff to gather information from court records by hand and organize it in this way. This provides a useful new resource for understanding how existing Medicaid fraud works.

That said, demonstrating that Medicaid (or the Affordable Care Act's Medicaid expansion) *causes* opioid abuse, requires quite a bit more evidence. Building this kind of case is

¹ It carefully notes that this is different than the assertion that "federal spending is the primary cause of overdose deaths," and the report "is not meant to suggest that Medicaid, or any other federal program, is the only factor contributing to the opioid epidemic."

² https://www.hsgac.senate.gov/download/johnson-letter-to-hhs-oig-

akin to detective work. We must lay out the claims clearly and then think hard about what we would expect observe or, just as importantly, *not* observe, in data if they were true. If these pieces do not line up, the underlying claims of this report of the link between Medicaid expansion and the opioid epidemic become harder to believe. We agree with Senator Johnson about how important it is to understand whether Medicaid causes opioid abuse, and do not reject this story out of hand. It is precisely because it matters so much, that we must apply rigorous standards of evidence. While this majority report takes important steps toward this understanding, it ultimately falls very far short of demonstrating a causal connection between Medicaid and opioid abuse.

The Limits of Anecdotal Evidence

This hearing presents many stories. Senator Johnson has stated that his interest in this topic arose from the evocative first-hand accounts of Medicaid and opioid abuse in the book *Dreamland* by investigative journalist Sam Quinones. The majority report outlines 100 cases of Medicaid fraud and opioid abuse. Finally, Mr. Schalk shared his extensive on-the-ground experience with these kinds of cases as a prosecutor and documentary film maker.³

We do not doubt the validity of these stories. Yet, for each story presented here there are stories about Medicaid's role as a primary funder of life-saving overdose interventions and addiction therapy. A recent profile of a California woman, Heather Menzel, outlines her path through Medicaid-funded opioid addiction treatment. She has since remained clean for two years, had a healthy daughter named Bella, has recently enrolled in community college, and hopes to work to help others struggling from addiction.⁴

In light of powerful, yet starkly different accounts, which story should guide policy—the narrative that Medicaid causes opioid abuse or the narrative that Medicaid treats opioid abuse? Anecdotal evidence cannot be the only way that policymakers weigh these two potential roles for Medicaid. Rather, to understand what stories mean for policy they must be paired with statistical analyses that can, hopefully, separate the case-by-case experience of individuals from the experiences of the whole population that would be affected by legislative or regulatory action. When comparing the anecdotes against the available data on Medicaid and opioids, the majority report's narrative largely breaks down. The rest of this statement explains why.

Empirical Evidence: Medicaid Expansion and Mortality Rates

We recently coauthored a *Health Affairs* blog post evaluating the evidence for the claim that the Affordable Care Act's Medicaid expansion increased opioid mortality.⁵ We found little support for this interpretation, and here we reiterate our points.

Recent developments in the opioid epidemic cannot be due to Medicaid

Prescription opioid abuse took off in the 1990s and early 2000s after the introduction of extended release (ER) analgesics such as OxyContin led to rampant abuse.⁶ The introduction of abuse-

³ http://www.newsandtribune.com/news/hit-of-hell-heroin-documentary-produced-by-harrison-county-

prosecutor/article_62e7c42e-6286-11e7-a16f-977883b69cf5.html ⁴ https://www.statnews.com/2017/08/10/opioid-treatment-desert/

⁵ https://www.healthaffairs.org/do/10.1377/hblog20170823.061640/full/

deterrent formulations of drugs like OxyContin (late 2010)⁷ and Opana $(2012)^8$ and a reclassification of hydrocodone from a class III drug to a class II drug⁹, led to reductions in rates of prescription abuse, and a stabilization of deaths attributable to these kinds of drugs (Hedegaard, Warner, and Miniño 2017). The share of people with opioid addiction seeking treatment who started with prescription opioids fell dramatically from 84.7 percent in 2005 to 51.9 percent in 2015 (Cicero, Ellis, and Kasper 2017).

The slow-down in the prescription opioid epidemic since 2010 stands in stark contrast to the explosion in the overall epidemic, which is now much worse than ever before. The price and potency of illegal opioids helps explain why. DEA data show that the price per pure gram of heroin fell from about \$3,000 in 1980 to about \$500 in 2012 (Evans, Lieber, and Power 2017)— cheaper than many prescription opioids(Severtson, Bucher-Bartelson, et al.).¹⁰ Moreover, Mexican cartels have increased purity, expanded geographic availability, and made it significantly easier to purchase heroin (Quinones 2016). Compounding the rapid move toward cheaper, purer, more convenient heroin, was the development of extremely powerful, illicitly produced synthetic opioids like fentanyl and carfentanil. Almost all of the growth in opioid-related mortality since 2010 has come from either heroin or synthetic opioids like fentanyl, and one-third of people seeking treatment in 2015 started with heroin (Cicero, Ellis, and Kasper 2017).

This history matters for the majority's argument because Medicaid does not provide these drugs, and cannot be responsible for their distribution.

Mortality changes began before the Affordable Care Act

Senator Johnson points out that drug-related mortality rates grew faster in states that expanded Medicaid than those that did not. To believe that Medicaid was the cause, we need to be sure that expansion and non-expansion states are comparable in terms of the other factors behind the changes in the opioid epidemic.

One important factor is the trajectory of the epidemic itself in the years before expansion began. In fact, we see a very large divergence in drug-related deaths rates between expansion and non-expansion states several years before 2014. Figure 1 shows that drug-related mortality rates began rising in expansion states relative to non-expansion states four years before the Medicaid expansion began. Since Medicaid enrollment was *not* growing differently in the two groups of states before 2014, any divergence in the development of the opioid epidemic during this period must signal that something else (unrelated to Medicaid enrollment) was driving drug-related

⁶ Severtson et al. (2016; table 1) show that in 2009, the ratio of abuse incidents to prescriptions of OxyContin, for example, was 5-10 times higher than for other opioids. <u>http://www.drugandalcoholdependence.com/article/S0376-8716(16)30925-5/fulltext</u>

⁷ <u>https://www.ncbi.nlm.nih.gov/pubmed/25760692</u>

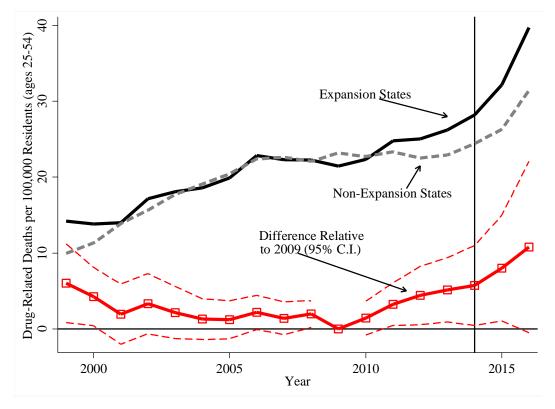
⁸https://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/AnestheticAndAnalgesi cDrugProductsAdvisoryCommittee/UCM547235.pdf

⁹ <u>https://www.deadiversion.usdoj.gov/fed_regs/rules/2014/fr0822.htm</u>

¹⁰ <u>http://www.jpain.org/article/S1526-5900(12)00143-5/fulltext</u>

mortality across these state groups.¹¹ Knowing this, one cannot attribute ongoing mortality differences to the Affordable Care Act's Medicaid expansion.





Drug-related mortality grew most in counties least affected by the Affordable Care Act

The Affordable Care Act's coverage provisions had drastically different impacts in different local areas, but drug-related mortality actually grew most in the areas where the Affordable Care Act had the smallest effects on coverage. In Maryland, for example, 6 percent of people in wealthy Howard County were uninsured in 2013, compared to about 16 percent of people in relatively poor Wicomico County. In 2016, however, after the ACA's coverage provisions—including Maryland's Medicaid expansion—were in effect, uninsured rates fell to 2 percent in Howard County and all the way to 6 percent in Wicomico County.¹² Despite experiencing more than double the coverage gains, however, Wicomico's drug mortality *fell* by 1.4 deaths per 100,000, while Howard County's drug mortality rate rose by 8.5 deaths.

¹¹ Simon, Soni, and Cawley (2017) (Figure 1) shows no divergence in adult insurance rates between expansion and non-expansion states from 2010 and 2013 using data from the Behavioral Risk Factor Surveillance System. Duggan, Goda, and Jackson (2017) (Figure 9) show no divergence in adult insurance rates between local areas with higher versus lower eligibility for the ACA Medicaid expansion from 2010 to 2013 using American Community Survey data. Ghosh, Simon, and Sommers (2017) (Figure 1) shows no divergence between expansion and non-expansion states in Medicaid-funded prescription rates across the quarters of 2013 using proprietary data from a large, nationally representative, all-payer pharmacy transactions database. Maclean and Saloner (2017) (Figure 4) shows no divergence between expansion and non-expansion states in Medicaid-funded prescription rates between 2011 and 2013 using Treatment Episodes Dataset.

¹² https://www.census.gov/quickfacts/fact/table/williamsoncountytennessee,cartercountytennessee/PST045216

Our post shows that this relationship—larger increases in drug-related mortality in areas with smaller increases in insurance coverage—holds nationwide. In expansion states, the top 10 percent of counties according to 2013 uninsured rates gained about 14 percentage points of insurance coverage and saw increases in drug-related death rates of about 2 deaths per 100,000. The bottom 10 percent of counties, on the other hand, had smaller growth in insurance coverage (4 percentage points), but four times the increase in drug-related death rates (8.5 deaths). This is the opposite of what we would see if Medicaid (or health insurance) increased drug mortality.

Medicaid Expansion and Opioid-Related Drug Charges

Much of the new evidence in this report involves data gathered by the majority staff on Medicaid fraud charges related to opioids. While we applaud the committee for their work in collecting such detailed information on Medicaid opioid fraud cases, the interpretation of this information in the majority report is quite misleading.

The majority finds that "more than 80 percent of the 298 separate Medicaid-opioids cases identified were filed in Medicaid expansion states." The 2015 American Community Survey shows that 70 percent of adult Medicaid recipients reside in expansion states (Ruggles et al. 2010). It is not a surprise that most Medicaid-related fraud occurs in the states with the most Medicaid recipients.

The majority also finds that "the number of criminal cases increased 55 percent in the first four years after Medicaid expansion." The number of adult Medicaid recipients grew by 50 percent during this period. It is not a surprise that Medicaid-related fraud cases grew at essentially the same rate as the number of people in the adult Medicaid population.

Despite these limitations, we agree that criminal justice data are an important resource for generating evidence on any Medicaid and opioid abuse connection. Here we present several different pieces of evidence that use such data.

Opioid-related Medicaid fraud is rare

Mr. Schalk claimed that the "the true number of those that are abusing the system would likely be staggering", although he was not able to quantify the amount of abuse. The majority report also argues that its compilation of 298 cases is a "conservative estimate". Criminal justice data, however, do not point to opioid-related Medicaid fraud as a "large" problem.

To supplement the majority's analysis,¹³ we collected official statistics on the activities of Medicaid Fraud Control Units (MFCUs) from the Office of the Inspector General (OIG).¹⁴ These include the total number of investigations, indictments, and charges by state measured separately for fraud and abuse/neglect. There were almost 19,000 MFCU investigations in 2016, about 16,000 of which were for fraud. The number of convictions, however, is much smaller: 1,564 convictions in 2016, 1,160 of which were for fraud, only a fraction of which would have been for opioid-related crimes.

¹³ The committee describes its search-based fraud data as "thorough" but "not scientific or comprehensive" (pg. 17). ¹⁴ https://oig.hhs.gov/fraud/medicaid-fraud-control-units-mfcu/index.asp

As a share of all adult Medicaid recipients, fraud is rare.¹⁵ Even if we assume that *all* fraud investigations are initiated against recipients (which as the committee noted is not the case), less than 0.05 percent of adult Medicaid recipients are investigated for fraud in any year, and less than 0.01 percent are convicted. For comparison, we calculated an opioid conviction rate for the average adult in Wisconsin. Out of about 3.6 million adults (18-64) in Wisconsin, 998 people were admitted to prison in 2016 on opioid-related drug charges.¹⁶ This yields an opioid conviction rate among adult Wisconsinites of 0.028 percent—more than *double* the already inflated fraud conviction rates (ie. not only opioid fraud, and not only fraud committed by recipients) among adult Medicaid recipients.

Actually, the fraud cases summarized in the majority report show that in about half of criminal cases (48 out of 100) the defendant is a doctor. Because the number of actively licensed physicians in the United States (950,000¹⁷) is just a fraction of the number of Medicaid recipients, this suggests that physicians commit opioid-related crimes at significantly higher rates than recipients do.

Medicaid expansion is unrelated to changes rates of fraud per Medicaid recipient

The Affordable Care Act's Medicaid expansion serves about 15 million people¹⁸ and has increased the share of adults on the program in expansion states by 5.5 percentage point compared to non-expansion states. The majority report argues that the Medicaid expansion covered the "people most susceptible to abuse" (pg. 4), which implies that the expansion population, which accounts for about one-third of adult recipients in expansion states, commits more opioid fraud than the pre-expansion Medicaid population. How would we expect the rate of fraud investigations among Medicaid recipients to change if the majority report's claims were true? Suppose, for example, that these adults were investigated for fraud at twice the rate of the pre-expansion population: 0.1 percent. This implies that the rate of fraud investigations should have grown to 0.067 percent after 2014 and only in expansion states.¹⁹

In contrast to this implication, the OIG data show no evidence of relative increases in fraud rates across states. Figure 2 plots Medicaid fraud *rates* over time in expansion and non-expansion states. Expansion states had a lower fraud rate in every year, and this difference (plotted in red) remained constant from 2010-2016. The raw number of fraud investigations did increase more in expansion states (4,638) than non-expansion states (1,161) after 2014, which shows that MFCUs had the capacity to prosecute more fraud cases and that they did so at essentially the same rate as before expansion.

From this we draw two conclusions. First, changes in the number of opioid-related Medicaid fraud cases come from changes in eligibility. Second, the expansion population is no

¹⁵ We calculated the number of adult Medicaid recipients using the American Community Survey (Ruggles et al. 2010).

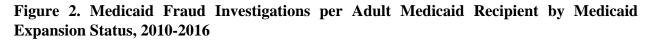
¹⁶ https://doc.wi.gov/DataResearch/DataAndReports/DrugOffenderPrisonAdmissions2000to2016.pdf

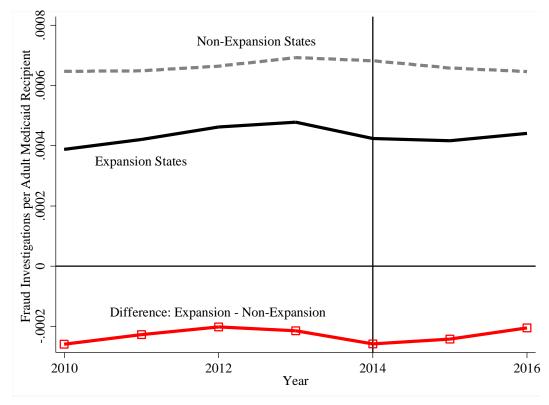
¹⁷ https://www.fsmb.org/Media/Default/PDF/Census/2016census.pdf

¹⁸ https://www.kff.org/health-reform/state-indicator/medicaid-expansion-

<u>enrollment/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D</u> ¹⁹ This is because two-thirds of adult Medicaid recipients would have a fraud investigation rate of 0.05%, while one-third—the expansion group—would have a fraud investigation rate of 0.1% and 2/3*.05+1/3*.1 = 0.067.

more (or less) likely to commit fraud than the pre-Affordable Care Act adult Medicaid population. The report cites an article by Nicholas Eberstadt suggesting that as many as *half* on non-working childless adult men use Medicaid to obtain and abuse opioids (Eberstadt 2017). The evidence from the OIG, on the other hand, shows that expanding Medicaid to millions of such men did not affect the rate at which Medicaid recipients were investigated for or charged with fraud.





Medicaid expansion is unrelated to changes drug offense rates in the population

One criticism of this OIG analysis and of the majority's court records search is that by only measuring crimes connected to Medicaid, both our analysis and the majority's report fail to capture any crime-increasing effects of moving people onto Medicaid. In other words, crime rates among Medicaid recipients could remain unchanged, but aggregate drug crime rates could increase if more people move onto Medicaid.

To address this, we gathered state-level information on drug crimes from the FBI's National Incident-Based Reporting System (NIBRS). The NIBRS covers part of 35 states and about one-third of the population, and has reported detailed crime statistics by state since 2011.²⁰ We divided the total number of drug offenses by the covered population of each state and year to calculate drug offense *rates* not limited to Medicaid recipients. If Medicaid expansion

²⁰ <u>https://ucr.fbi.gov/nibrs/2016</u>

"incentivizes" opioid abuse, then we would expect to see a relative increase in the rate of drug offenses in states that added millions of new Medicaid recipients.²¹

Figure 6 plots the drug offense rate in expansion and non-expansion states and, again, shows no evidence that Medicaid expansion led to more drug crimes. Expansion states had a lower drug offense rate in every year, and the difference (plotted in red) slightly widened from 2011-2016. This provides no evidence that the historically large changes in Medicaid eligibility brought on by the Affordable Care Act had any effect on drug crimes.

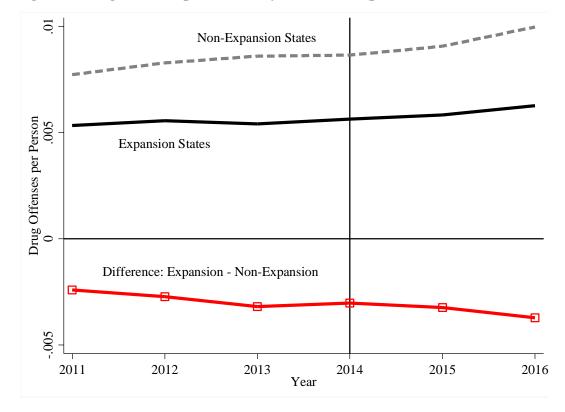


Figure 3. Drug Offenses per Person by Medicaid Expansion Status, 2011-2016

Some research finds that Medicaid expansions to low-income adults authorized under Bush-era Medicaid waivers were associated with reduced crime (Wen, Hockenberry, and Cummings 2017). Fifteen states were granted such waivers, eight of which implemented broad adult eligibility expansions. These eligibility expansions immediately led to increased admissions rates into substance abuse treatment and reductions in both violent and property crime.

That Medicaid would have this effect makes sense given what we know about substance abuse treatment. Providing supportive housing to people with addiction has been shown consistently to reduce costs to the prison system and other associated criminal justice services

²¹ Because expansion recipients make up about 5.5 percent of the population in expansion states, they would have to commit a lot of crimes in order to change the overall drug crime rate. This is relevant, however, since high crime rates among the expansion population is exactly what the committee report alleges, and diversion of opioids could create a pool of people potentially arrested for drug possession that is much larger than the expansion population alone.

(Gray and Fraser 2005). Providing evidence-based treatment services, through medication assisted treatments like naltrexone or methadone, to people with opioid addiction has been associated with reduced criminal behavior (Deck et al. 2009). Medicaid pays for many of these treatments. It is then logical that providing Medicaid coverage to people with addiction can reduce crime more broadly, save the state money in the criminal justice system, and potentially reduce fraud in the Medicaid program.

Appropriate Use of Opioids

We argued in our *Health Affairs* piece that much of the difference in opioid prescribing rates between Medicaid and other insurers can be explained by the population that Medicaid covers. Medicaid patients—the elderly, disabled, or people who have high medical expenses—often have greater need for pain management than the population at large. As we argued in the *Health Affairs* blog the traditional Medicaid population report pain at a rate that approximately equals their greater use of opioid medications compared to the general population. The fact that these patients use opioids does not necessarily mean that they engage in fraud or abuse of prescription drugs, it may largely reflect the appropriate use of pain relief medication.

In the committee hearing, Senator Paul argued that doctors can prescribe alternative forms of pain relief, and it is true that in the last few decades, doctors have been over prescribing narcotics for pain. However, it is a leap in the evidence reported here and elsewhere that physicians make different prescribing decisions based only on health insurance status.

Experimental evidence shows no effect of Medicaid on opioid use

In 2008, the state of Oregon randomly offered Medicaid eligibility to thousands of applicants on the waiting list for an auxiliary program for adults. A team of researchers has since used this Medicaid lottery to evaluate the effects of Medicaid on a range of outcomes by comparing lottery winners to losers in a way that mimics a true randomized experiment—the gold standard for understanding whether we can attribute causality, rather than correlation. Concerns about underlying differences in demographics, behaviors, health systems, or illicit drug markets are fully controlled in such an analysis.²²

The most recent analysis of OHIE data fails to find any effect of Medicaid eligibility on opioid prescription rates (Baicker et al. 2017). Adults chosen at random from the pool of applicants to receive Medicaid eligibility were no more likely to fill opioid prescriptions than an essentially identical group who did not gain Medicaid eligibility. This fails to support the majority report's claim that Medicaid "fuels" the opioid epidemic.

The authors do note that the opioid epidemic has changed since their study period, although we note that these changes imply a smaller role for Medicaid expansion and Medicaid fraud. The street price per milligram of prescription opioids has fallen since 2010 (Severtson, Ellis, et al.), both because ADF formulations are harder to abuse (and command lower prices)

²² HSGAC has already heard from one of the lead authors, Dr. Kate Baicker whose testimony on September 6, 2017 included several citations to her work on the Oregon Health Insurance Experiment (OHIE).

and because heroin has become cheaper.²³ The value of diverted opioids was therefore much higher when this study took place than today, yet adults who were randomly offered potentially lucrative Medicaid coverage were no more likely to fill opioid prescriptions.

Summary of evidence

Drug-related mortality rates have recently risen faster in states that took up the Affordable Care Act's Medicaid expansion than states that did not. The majority report also documents a range of cases in which Medicaid recipients commit fraud to obtain opioids, and points out that many of these cases have occurred in expansion states since 2014. The major claim of this report is that Medicaid or the Affordable Care Act's Medicaid expansion causes these behaviors. A more systematic analysis shows that these claims are unsupported.

The most important developments in the opioid epidemic since 2010 involve illicit opioids, not the kinds of prescription opioids that Medicaid provides. In fact, rates of prescription abuse and mortality have fallen along with the street price of these drugs. These developments also appear to have begun in expansion states long before the Medicaid expansion began, and so cannot be attributed to the expansion itself. Furthermore, drug-related deaths have grown fastest in the areas *least* affected by the ACA's coverage provisions.

Importantly, these conclusions are supported by recent experimental evidence showing that Medicaid eligibility does not increase opioid prescription rates, but may increase mental health treatment (including substance abuse treatment).

Moreover, rates of fraud among Medicaid recipients are low and did not change after the Affordable Care Act extended coverage to 15 million new adults. Rates of overall drug crime have also remained relatively constant in both expansion and non-expansion states since 2010. Neither of these patterns are consistent with a large effect of Medicaid on opioid-related fraud.

Conclusion: What is Medicaid doing and what more can it do to combat opioid abuse?

Our statement focuses on the quality of evidence for claims made by the committee's majority report, by Senator Johnson, and others, regarding the effect of Medicaid on the opioid epidemic. A much more productive direction for congressional deliberation on this issue relates to ways that Medicaid can help curb opioid abuse and its consequences as we move forward. Medicaid's reach and target population uniquely position it to be a leader in combatting the opioid epidemic by reducing overprescribing and increasing access to evidence-based treatment.

States can take steps to ensure that Medicaid does not pay for suspect prescriptions and ensure the prescriptions are given only to people who need them. The hearing touched on issues such as the role of physician drug monitoring programs (PDMPs) which, when structured to ensure that physicians use them, can succeed in curtailing overprescribing and abuse (Buchmueller and Carey forthcoming). In both fee-for-service Medicaid and Medicaid managed care, states have begun to adopt other policies to curtail abuse, including preferred drug lists, prior authorization, and limits on the amount of opioids that can be dispensed in general or

²³ One unique and valuable data source on the price of diverted drugs is streetrx.com, which collects user self-reports on drug types and prices.

specifically for high-risk patients (patient review).²⁴ Since most Medicaid beneficiaries are covered by managed care organizations, there is an opportunity for these groups to develop better ways to manage pain as well as connect patients with addiction to treatment. Medicaid's role as a major payer is central to its ability to influence provider behavior, because blanket warnings from the FDA, or even targeted ones from CMS, seem not to work (Sacarny et al. 2016).

Limits on the supply of prescription opioids will not be enough. These policies may be effective at curbing some new addictions, but they carry the very real risk of leading currently addicted patients to substitute toward riskier drugs (Alpert, Powell, and Pacula 2017). Therefore, limits on Medicaid eligibility or opioid supply alone could make things worse. To complement efforts that take aim at the supply of opioids, Medicaid must work to connect more people currently suffering from addiction to effective treatments. Evidence shows that access to evidence based treatment programs improves adherence to addiction therapy, which can reduce mortality, increase employment, and reduce crime.

Medicaid may also stand to save money if it can more effectively address opioid addiction. For example, in 2009, the average infant born with neonatal abstinence syndrome cost \$53,540, and total costs were \$720 million. Medicaid paid for 77.6 percent of these costs (Patrick et al. 2012). Opioid abuse can have costly spillovers in many other areas of care, too, such as HIV or hepatitis C.

The opioid addiction battle will not be resolved with a silver bullet and there are many ways that Medicaid can play a leading role going forward. Medicaid can be a leader in both improving responsible prescribing and treatment of opioid addiction. We urge the committee to turn its attention to problems and policies supported by evidence, providing treatment while balancing the role of treating pain.

Citations

Adolphsen, Sam. 2017. "Has Medicaid Made the Opioid Epidemic Worse?" National Review, July 5, 2017.

- Alpert, Abby, David Powell, and Rosalie Liccardo Pacula. 2017. "Supply-Side Drug Policy in the Presence of Substitutes: Evidence from the Introduction of Abuse-Deterrent Opioids." *National Bureau of Economic Research Working Paper Series* No. 23031. doi: 10.3386/w23031.
- Baicker, Katherine, Heidi L. Allen, Bill J. Wright, and Amy N. Finkelstein. 2017. "The Effect Of Medicaid On Medication Use Among Poor Adults: Evidence From Oregon." *Health Affairs* 36 (12):2110-2114. doi: 10.1377/hlthaff.2017.0925.
- Buchmueller, Thomas C., and Colleen Carey. forthcoming. "The Effect of Prescription Drug Monitoring Programs on Opioid Utilization in Medicare." *American Economic Journal: Economic Policy*. doi: 10.3386/w23148.
- Cicero, Theodore J., Matthew S. Ellis, and Zachary A. Kasper. 2017. "Increased use of heroin as an initiating opioid of abuse." *Addictive Behaviors* 74:63-66. doi: <u>https://doi.org/10.1016/j.addbeh.2017.05.030</u>.
- Deck, Dennis, Wyndy Wiitala, Bentson McFarland, Kevin Campbell, John Mullooly, Antoinette Krupski, and Dennis McCarty. 2009. "Medicaid Coverage, Methadone Maintenance, and Felony Arrests: Outcomes of Opiate Treatment in Two States." *Journal of Addictive Diseases* 28 (2):89-102. doi: 10.1080/10550880902772373.
- Duggan, Mark, Gopi Shah Goda, and Emilie Jackson. 2017. "The Effects of the Affordable Care Act on Health Insurance Coverage and Labor Market Outcomes." *National Bureau of Economic Research Working Paper Series* No. 23607. doi: 10.3386/w23607.

Eberstadt, Nicholas. 2017. "Our miserable 21st century." Commentary Magazine.

²⁴ <u>https://www.healthaffairs.org/do/10.1377/hblog20170411.059567/full/</u>

- Evans, William, Ethan Lieber, and Patrick Power. 2017. "How the Reformulation of OxyContin Ignited the Heroin Epidemic." *Working Paper, University of Notre Dame.*
- Ghosh, Ausmita, Kosali Simon, and Benjamin D. Sommers. 2017. "The Effect of State Medicaid Expansions on Prescription Drug Use: Evidence from the Affordable Care Act." *National Bureau of Economic Research Working Paper Series* No. 23044. doi: 10.3386/w23044.
- Gray, Paul, and Penny Fraser. 2005. "Housing and heroin use: The role of floating support." *Drugs: Education, Prevention and Policy* 12 (4):269-278. doi: 10.1080/09687630500049684.
- Hedegaard, Holly, Margaret Warner, and Arialdi Miniño. 2017. Drug Overdose Deaths in the United States, 1999–2016. In *NCHS Data Briefs*, edited by NCHS.
- Maclean, Johanna Catherine, and Brendan Saloner. 2017. "The Effect of Public Insurance Expansions on Substance Use Disorder Treatment: Evidence from the Affordable Care Act." *National Bureau of Economic Research Working Paper Series* No. 23342. doi: 10.3386/w23342.
- Patrick, S. W., R. E. Schumacher, B. D. Benneyworth, E. E. Krans, J. M. McAllister, and M. M. Davis. 2012. "Neonatal abstinence syndrome and associated health care expenditures: United states, 2000-2009." *JAMA* 307 (18):1934-1940. doi: 10.1001/jama.2012.3951.
- Quinones, Sam. 2016. *Dreamland : the true tale of America's opiate epidemic*. Paperback edition. ed. New York: Bloomsbury Press.
- Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. 2010. Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota.
- Sacarny, Adam, David Yokum, Amy Finkelstein, and Shantanu Agrawal. 2016. "Medicare Letters To Curb Overprescribing Of Controlled Substances Had No Detectable Effect On Providers." *Health Affairs* 35 (3):471-479. doi: 10.1377/hlthaff.2015.1025.
- Severtson, S., B. Bucher-Bartelson, H. Chilcoat, P. Coplan, H. Surratt, and R. Dart. "A comparison of the street price of original and reformulated OxyContin® and immediate release (IR) oxyCodone products." *The Journal of Pain* 13 (4):S26. doi: 10.1016/j.jpain.2012.01.112.
- Severtson, Stevan Geoffrey, Matthew S. Ellis, Steven P. Kurtz, Andrew Rosenblum, Theodore J. Cicero, Mark W. Parrino, Michael K. Gilbert, Mance E. Buttram, Nabarun Dasgupta, Becki BucherBartelson, Jody L. Green, and Richard C. Dart. "Sustained reduction of diversion and abuse after introduction of an abuse deterrent formulation of extended release oxycodone." *Drug & Alcohol Dependence* 168:219-229. doi: 10.1016/j.drugalcdep.2016.09.018.
- Simon, Kosali, Aparna Soni, and John Cawley. 2017. "The Impact of Health Insurance on Preventive Care and Health Behaviors: Evidence from the First Two Years of the ACA Medicaid Expansions." *Journal of Policy Analysis and Management* 36 (2):390-417. doi: 10.1002/pam.21972.
- Wen, Hefei, Jason M. Hockenberry, and Janet R. Cummings. 2017. "The effect of Medicaid expansion on crime reduction: Evidence from HIFA-waiver expansions." *Journal of Public Economics* 154:67-94. doi: <u>https://doi.org/10.1016/j.jpubeco.2017.09.001</u>.