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# Medicaid Reimbursement For Psychiatric Services: Comparisons Across States And With Medicare

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#### **Abstract**

Medicaid is characterized by low rates of provider participation, often attributed to reimbursement rates below those of commercial insurance or Medicare. Understanding the extent to which Medicaid reimbursement for mental health services varies across states may help illuminate one lever for increasing Medicaid participation among psychiatrists. We used publicly available Medicaid fee-for-service schedules from state Medicaid agency websites in 2022 to construct two indices for a common set of mental health services provided by psychiatrists: a Medicaidto-Medicare index to benchmark each state's Medicaid reimbursement with that of Medicare for the same set of services, and a state-to-national Medicaid index comparing each state's Medicaid reimbursement with an enrollment-weighted national average. On average, Medicaid paid psychiatrists at 81.0 percent of Medicare rates, and a majority of states had a Medicaid-to-Medicare index that was less than 1.0 (median, 0.76). State-to-national Medicaid indices for psychiatrists' mental health services ranged from 0.46 (Pennsylvania) to 2.34 (Nebraska) but did not correlate with the supply of Medicaid-participating psychiatrists. As policy makers look to reimbursement rates as one strategy to address ongoing mental health workforce shortages, comparing Medicaid payment across states may help benchmark ongoing state and federal proposals.

Medicaid now covers more than one-fifth of all Americans with mental health disorders, but many enrollees with mental health conditions report difficulty accessing treatment. Half of Medicaid beneficiaries with serious mental illness reported unmet needs in 2018. As a driver of provider acceptance of Medicaid insurance, low provider reimbursement rates may be one important determinant of access to care and health outcomes for Medicaid

enrollees.<sup>3,4</sup> Reimbursement rates in Medicaid are typically lower relative to commercial insurance or Medicare; for instance, one study found that Medicaid feefor-service payments for physician services were nearly 30 percent below those of Medicare in 2019.<sup>5</sup> Likewise, hospital base payments were 22 percent less in Medicaid compared with Medicare in 2020.<sup>6</sup>

States generally have broad flexibility in determining payments for physician services through one of three methods:<sup>7</sup> a resource-based relative value scale taking into account physician time and effort, as a fixed percentage of either Medicare or commercial payments; or the use of a state-specific internal process based on market conditions, costs of care, legislative action, and other factors. 8 Medicaid fee-for-service rates for mental health services may differ from rates paid to Medicaid managed care organizations, which covered more than 70 percent of Medicaid enrollees as of 2019. Managed care plan rates are contractually negotiated. States pay plans a capitated payment for enrollees, and managed care organizations in turn pay their contracted providers using a number of payment methodologies approved by the Centers for Medicare and Medicaid Services (CMS).<sup>10</sup> There is also variation in the use of supplemental payments in many states, including funds appropriated by state legislatures or authorized through federal Medicaid waivers. Given that managed care rates are not typically published, however, fee-for-service rates provide a useful anchor for estimating reimbursement, and they often serve as benchmarks for fees negotiated by managed care plans. In one analysis published in 2014, Medicaid managed care payments were lower than fee-for-service payments in only two of twenty states examined, 11 and overall have been found to be similar and sometimes identical to those paid by Medicaid fee-for-service. 11,12

Although Medicaid's payment differential to Medicare has been well documented, the extent to which reimbursement for mental health services varies across state Medicaid programs is not known. This variation is important to understand for several reasons. First, mental health care access is constrained by a critical shortage of specialty professionals who are willing and able to see Medicaid enrollees. <sup>13,14</sup> Providers' acceptance of Medicaid insurance is lower than that of other payers, <sup>15</sup> with only 35 percent of psychiatrists participating in Medicaid as of 2014. <sup>16</sup> Payment differentials across state Medicaid programs could exacerbate the existing geographic maldistribution of mental health providers <sup>17,18</sup> and worsen shortages in particular states. Second, mental health professionals in states where Medicaid pays less may be driven to find alternative methods to sustain their financial margins—for example, through cost shifting to private payers or to patients paying cash, <sup>19,20</sup> further reducing the care they deliver to Medicaid enrollees. Third, given Medicaid's role in mental health delivery, the program's payment policies may inform ongoing policy efforts to expand access to mental health care more broadly.

Recent research has examined Medicaid reimbursement differentials for selected specialties such as primary and obstetric care<sup>5</sup> and opioid use disorder treatment.<sup>21</sup> To our knowledge, data on Medicaid payments for mental health services have not been collected systematically across states. This analysis describes Medicaid fee-for-service reimbursement rates for a common set of mental health services delivered by psychiatrists, and it benchmarks Medicaid reimbursement rates to those of Medicare. Our analysis helps identify high- and

low-paying states and can inform policy options that leverage reimbursement as a way to expand access to psychiatrists and potentially to other mental health professionals.

# **Study Data And Methods**

#### **Fee Schedules**

We first used newly available national Medicaid claims data from the 2018 Transformed Medicaid Statistical Information System Analytic Files (TAF) to identify a list of the forty most frequently billed mental health services, by volume, and their corresponding Current Procedure Terminology (CPT) codes. These were restricted to services that psychiatrists were eligible to bill in every state, including both mental health–specific CPT codes, such as 90791 (psychiatric diagnostic evaluation without medical services), and evaluation and management codes for office visits (for example, 99201–05 and 99211–15). We included evaluation and management codes because although their reimbursement tends not to vary across specialties within a state, it does vary across states and may contribute to overall variations in payment to psychiatrists.

We collected the most recent 2022 data available from public Medicaid fee-for-service physician fee schedules (as of September and October 2022) for the aforementioned set of most frequently billed mental health services (see online appendix A1 for Medicaid fee schedule websites and appendix A2 for a list of CPT codes and descriptions).<sup>22</sup> When it was relevant, we focused data collection only on nonfacility professional fees in the outpatient setting, without additional modifiers.

We also collected the most recent 2022 physician fee data available as of September and October 2022 from public Medicare fee-for-service physician fee schedules for the same set of psychiatry services.<sup>23</sup> We focused on National Payment Amounts for nonfacility global (diagnostic) services, without additional modifiers.

#### Constructing the Indices

We constructed two indices: a Medicaid-to-Medicare index to compare each state's Medicaid reimbursement with that of Medicare for the same set of psychiatry services and a state-to-national Medicaid index to compare each state's Medicaid reimbursement with an enrollment-weighted national average.

To create a single aggregate index for mental health service reimbursement at the state level, we used the 2018 TAF data to quantify each service's relative share of total mental health service volume. In our service volume counts, we excluded enrollees who were dually eligible for Medicare. Service volumes were used as weights to aggregate the fee ratios across all mental health procedure codes of interest within a state. In other words, within each state, the reimbursement index was calculated as the volume-weighted average fee ratio aggregated across the procedure codes of interest.

For the Medicaid-to-Medicare index, the fee ratios were calculated as the state's Medicaid fee schedule rate divided by the Medicare payment rate for the set of services included in the analysis. To identify a consistent set of codes across states, we included procedure codes

that had available fee data and were covered in at least forty-five states, and we excluded codes with consistently low utilization across all states. For the state-to-national Medicaid index, the fee ratios were calculated as the state's Medicaid fee schedule rate divided by an enrollment-weighted national average Medicaid payment rate.

Our final analysis included twenty of the most common mental health–specific and evaluation and management codes billed by psychiatrists (90791, 90792, 90832–34, 90836–38, 90847, 90853, 90870, 99202–05, and 99211–15) in forty-eight states and Washington, D.C. (hereafter referred to as "states"). In our final sample we excluded two states: Tennessee, because it does not publish a Medicaid fee schedule, and Florida, because of data quality issues in the TAF data.

#### **Robustness Checks**

As a robustness check, we tested how sensitive our state index comparisons were to the service-share weights, based on utilization in the TAF claims data. To ensure that cross-state comparisons were practical, given underlying variation in utilization patterns, we performed a permutation test wherein we replaced each state's service-share weights with the weights from another state, randomly selected without replacement. Then we recalculated our state reimbursement indices and compared the new ranked order of states with our original ranked order, using a Kendall Tau test. We repeated this process 100 times and found the paired rankings to be consistently positively correlated (correlation coefficient range: 0.74–0.90; mean: 0.82), with significance levels below 0.05 (data not shown). Thus, these robustness checks suggested that the rankings of state indices were not highly sensitive to utilization weights derived from the TAF data.

Finally, we used the TAF data to derive counts of unique psychiatrists billing Medicaid in outpatient and prescription drug claims within each state. We identified all psychiatrists in the TAF claims data by their primary taxonomy code in the National Plan and Provider Enumeration System. Psychiatrists were counted in all states in which they appeared in claims and thus could be counted multiple times. However, in cases where more than 95 percent of a given psychiatrist's patients resided in a single state, that psychiatrist was counted toward one state. For validation, we compared these psychiatrist counts with counts of all psychiatrists in the 2019 Area Health Resources Files, a county-level database maintained by the Health Resources and Services Administration. On the basis of TAF claims, we calculated the number of Medicaid-participating psychiatrists per 10,000 enrollees within each state.

### Limitations

This analysis had several limitations. First, we examined only nonfacility professional fees paid to psychiatrists, who are able to bill Medicaid their professional fees in all states. Although other mental health professionals, including therapists, counselors, psychologists, and licensed clinical social workers, constitute a major part of the mental health workforce in Medicaid, they are often subject to heterogeneous billing and reimbursement practices across states. We thus were unable to draw conclusions about Medicaid reimbursement rates for mental health services provided by clinicians either in other care settings, such as

residential treatment facilities and acute inpatient hospitals, or by specialty mental health professionals who are not psychiatrists.

Second, we did not adjust for Medicare's geographic cost index. These adjustments would likely have had relatively modest effects on overall rankings. A study by Lisa Clemans-Cope and coauthors found that the interquartile range (from the twenty-fifth to the seventy-fifth percentile) of Medicaid rates for psychotherapy codes, compared with those of Medicare, varied by less than 5 percent.<sup>21</sup> Thus, inclusion of these adjustments would have been unlikely to result in large changes to our overall findings.

Third, we used TAF data to construct service-volume weights used in our indices. As these data are relatively new in research use, it is possible that service volumes differ across states because of data quality and not actual utilization. It is also possible that current utilization for mental health care may differ somewhat from service volumes in 2018, the most recent claims data available. In robustness checks, however, we did not find evidence that changes to the TAF-generated service-share weights affected overall state rankings of higher-versus lower-paying states.

Finally, our analysis was cross-sectional and did not offer any causal view into the relationship between increasing reimbursement rates and psychiatrist supply, which can be affected by a host of additional factors, including training, licensing, and practice conditions.

## Study Results

Exhibit 1 shows summary statistics of Medicaid nonfacility outpatient fees to psychiatrists for twenty commonly billed CPT codes. There was significant variation in reimbursement rates across states for each CPT code. For example, the mean reimbursement rate for CPT code 90791 (psychiatric diagnostic interview) was \$134.73; the interquartile range represented an approximately 50 percent difference in rates (103.07–154.21).

On average, and weighted by Medicaid enrollment, Medicaid paid psychiatrists at 81.0 percent of Medicare for the same services (data not shown). Most states had a Medicaid-to-Medicare index of less than 1.0 (median: 0.76; IQR: 0.65–0.94; exhibit 2), with a difference of more than fivefold between the highest- and lowest-paying states. Medicaid reimbursement rates were approximately one-third of those of Medicare in Pennsylvania (0.32) and half of Medicare's rates in Maine and Rhode Island (0.49 and 0.47, respectively). In a handful of states, including Nebraska (1.67), Alaska (1.62), Arkansas (1.35), Montana (1.22), Arizona (1.01), Oregon (1.00), New Mexico (1.00), and North Dakota (1.00), Medicaid reimbursement for mental health services was on par with or greater than that of Medicare.

Exhibit 3 displays state Medicaid indices for mental health services relative to a weighted national Medicaid average. The states with the highest Medicaid fee-for-service reimbursement rates for a common set of mental health services were Nebraska (2.34), Alaska (2.26), Arkansas (1.85), Montana (1.73), Arizona (1.47), Delaware (1.41), Virginia (1.40), North Dakota (1.40), Oregon (1.39), and New Mexico (1.38). The states with the

lowest reimbursement rates were Pennsylvania (0.46), Rhode Island (0.67), Maine (0.70), Illinois (0.76), and Louisiana (0.78).

Exhibit 4 plots state-to-national Medicaid fee indices against the number of Medicaid-participating psychiatrists per 10,000 enrollees at the state level. The majority of states had fewer than the national average ratio of 6.7 psychiatrists per 10,000 enrollees. There was little correlation between Medicaid reimbursement rates for mental health services in 2022 and psychiatrist supply in 2018 (correlation coefficient: 0.01). For instance, New Hampshire had 11.8 Medicaid-participating psychiatrists per 10,000 enrollees and paid 80.7 percent of the national average Medicaid rates; Ohio had 6.11 psychiatrists per 10,000 enrollees yet paid a comparable 78.6 percent of the national average Medicaid rates. However, a number of states, including Arkansas, New Mexico, and Arizona, had far higher average Medicaid rates compared with the national average and far fewer psychiatrists per 10,000 enrollees, suggesting that these states may be trying to use higher reimbursement rates to incentivize psychiatrist participation in Medicaid networks.

### **Discussion**

Our analysis demonstrates wide variation in mental health reimbursement rates for psychiatrists across states. Some degree of variation in reimbursement is to be expected because of geographic cost-of-living differences, state ratesetting processes, and Medicaid program administration, but our data suggest that payments in the lowest- and highest-paying states differ by more than fivefold. Our results also suggest that, as has been previously documented for Medicaid hospital payments, dual-eligible populations, and other physician specialties, 5,25 reimbursement for mental health services continues to lag that of Medicare.

Of note, this work uses Medicaid fee-for-service fee schedules in a context in which a majority of Medicaid enrollees are covered by managed care organizations. Limited information is available on Medicaid managed care payment rates and how they compare with those in Medicaid fee-for-service. Hore work has been done in Medicare; a study of claims data evaluating Medicare Advantage prices paid to physicians between 2007 and 2012 found that Medicare Advantage plans paid rates that approximated those of traditional Medicare, including 97 percent for an office visit and 102 percent for an emergency department visit. However, Medicare Advantage plans paid only 67 percent of the Medicare price of a walker, an area where traditional Medicare is considered to overpay. To the extent that Medicare's experience is mirrored in Medicaid, we expect Medicaid managed care rates to be anchored by state fee-for-service rates, with the potential for rates to be lower where Medicaid fee-for-service overpays (uncommon by most accounts) and higher where Medicaid fee-for-service underpays.

States have historically set their own Medicaid reimbursement rates, and as our analysis suggests, some states have set particularly low rates. Evidence suggests that low reimbursement is a financial disincentive for mental health professionals to treat Medicaid enrollees, a population that disproportionately experiences serious mental illness and barriers to care. Low reimbursement also appears to be distinctively challenging for mental

health professionals, with psychiatrists receiving lower in-network payments than other physicians for the same services. <sup>27</sup> Conversely, increases in reimbursement rates have been shown to improve care provision and outcomes. Diane Alexander and Molly Schnell demonstrated, for instance, that every \$10 increase in Medicaid reimbursement per visit was associated with increases in patients' self-reported access, health care use, and "very good" or "excellent" self-reported health status. <sup>3</sup> Moreover, they found little evidence that increasing Medicaid reimbursement and care for Medicaid enrollees was offset by reduced care among privately insured people, suggesting that there may be provider capacity to increase Medicaid participation.

Greater understanding of payment variation can inform ongoing federal and state efforts to expand the professional workforce and improve access to mental health care. To date, federal efforts to increase Medicaid reimbursement have been largely temporary in duration and narrow in scope. Although the Affordable Care Act mandated a fee bump for certain primary care services to match Medicare rates, only nineteen states have sustained their primary care fee bumps beyond the two-year mandate. However, states are increasingly considering or implementing fee increases in Medicaid as a tool to expand the mental health workforce. Beginning in July 2022, for example, Maryland increased its reimbursement rates in Medicaid to match Medicare payment rates for evaluation and management services; similarly, to improve workforce retention and rate parity, Oregon is implementing 26–45 percent increases in Medicaid fee-for-service rates for services such as substance use treatment and pediatric intensive psychiatric treatment. Amid these changes, it is less clear the extent to which payment differentials across states induce between-state workforce competition and whether, in states with lower Medicaid payments, cost shifting occurs toward higher reimbursement rates from other payers.

Importantly, policies focusing solely on increasing reimbursement may be insufficient to improve enrollees' access to mental health services. We did not find a strong correlation between Medicaid reimbursement rates and the number of Medicaid-participating psychiatrists per 10,000 enrollees, likely because of a number of important confounding factors, including simultaneous policies focused on workforce expansion, the use of managed care, provider capacity, and payment rates compared with commercial payers. Newly proposed and implemented behavioral health reimbursement hikes in Medicaid provide opportunities to investigate more robustly their effects on providers and care delivery.<sup>29</sup>

Although correlation does not equal causation, this finding supports a body of evidence suggesting that higher reimbursement rates do not necessarily lead to higher physician participation in Medicaid. The magnitude of a rate hike may matter; evidence from the Affordable Care Act's primary care fee bump in Medicaid suggests differential effects across states, <sup>32</sup> with greater increases in appointment availability in states with greater relative increases in reimbursement. In this vein, it is unclear the extent to which simply anchoring Medicaid payments to those of Medicare—which not only have failed to keep up with inflation but also are facing additional cuts in 2023—sufficiently incentivizes mental health professionals to participate in insurance networks when more lucrative private or cash payment is an alternative. <sup>33</sup> Finally, other factors influencing physicians'

acceptance of insurance, including organizational and regional differences in administrative burdens, incomplete or delayed payments, and ancillary support for care coordination and management, could be as important as reimbursement alone, if not more so.<sup>34-36</sup>

#### Conclusion

In 2022 Medicaid's fee-for-service rates for commonly billed psychiatry services were 81.0 percent of those in Medicare, with substantial variation in payments across states. Payments in the lowest- and highest-paying states differed by more than fivefold. Comparing Medicaid payment across states may help benchmark ongoing state and federal proposals to increase reimbursement for psychiatrists and other members of the mental health workforce.

# **Supplementary Material**

Refer to Web version on PubMed Central for supplementary material.

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### **NOTES**

- Medicaid and CHIP Payment and Access Commission. June 2021 report to Congress on Medicaid and CHIP [Internet]. Washington (DC): MACPAC; 2021 Jun [cited 2023 Feb 2]. Available from: https://www.macpac.gov/wp-content/uploads/2021/06/June-2021-Report-to-Congress-on-Medicaid-and-CHIP.pdf
- Sommers BD, Kronick R. Measuring Medicaid physician participation rates and implications for policy. J Health Polit Policy Law. 2016;41(2):211–24. [PubMed: 26732320]
- Alexander D, Schnell M. The impacts of physician payments on patient access, use, and health [Internet]. Cambridge (MA): National Bureau of Economic Research; 2019 Jul [last updated 2020 Aug; cited 2023 Feb 2]. (NBER Working Paper No. 26095). Available from: https://www.nber.org/papers/w26095
- 4. Bellows NM, Halpin HA. Impact of Medicaid reimbursement on mental health quality indicators. Health Serv Res. 2008;43(2):582–97. [PubMed: 18370968]
- 5. Zuckerman S, Skopec L, Aarons J. Medicaid physician fees remained substantially below fees paid by Medicare in 2019. Health Aff (Millwood). 2021;40(2):343–8. [PubMed: 33523743]
- Medicaid and CHIP Payment and Access Commission. Medicaid hospital payment: a comparison across states and to Medicare [Internet]. Washington (DC): MACPAC; 2017 Apr [cited 2023 Feb 2]. (Issue Brief). Available from: https://www.macpac.gov/wp-content/uploads/2017/04/Medicaid-Hospital-Payment-A-Comparison-across-States-and-to-Medicare.pdf
- Medicaid and CHIP Payment and Access Commission. Medicaid physician payment policy [Internet]. Washington (DC): MACPAC; 2017 Feb [cited 2023 Feb 2]. (Issue Brief). Available from: https://www.macpac.gov/wp-content/uploads/2017/02/Medicaid-Physician-Fee-for-Service-Payment-Policy.pdf
- Medicaid and CHIP Payment and Access Commission. State Medicaid fee-for-service physician
  payment policies [Internet]. Washington (DC): MACPAC; 2017 Feb [cited 2023 Feb 2]. Available
  for download from: https://www.macpac.gov/publication/states-medicaid-fee-for-service-physicianpayment-policies/

 Henry J Kaiser Family Foundation. Medicaid managed care market tracker [Internet]. San Francisco (CA): KFF; c 2023 [cited 2023 Feb 2]. Available from: https://www.kff.org/statedata/collection/medicaid-managed-care-tracker/

- 10. Hinton E, Muscumeci MB. Medicaid managed care rates and flexibilities: state options to respond to COVID-19 pandemic [Internet]. San Francisco (CA): Henry J. Kaiser Family Foundation; 2020 Sep 9 [cited 2023 Feb 2]. Available from: https://www.kff.org/medicaid/issue-brief/medicaid-managed-care-rates-and-flexibilities-state-options-to-respond-to-covid-19-pandemic/
- 11. Government Accountability Office. Medicaid payment: comparisons of selected services under fee-for-service, managed care, and private insurance [Internet]. Washington (DC): GAO; 2014 Jul [cited 2023 Feb 2]. Available from: https://www.gao.gov/assets/gao-14-533.pdf
- 12. Substance Abuse and Mental Health Services Administration. Medicaid handbook: interface with behavioral health services, module 5: structure and reimbursement methodologies [Internet]. Rockville (MD): SAMHSA; 2013 [cited 2023 Feb 2]. Available from: https://store.samhsa.gov/sites/default/files/d7/priv/sma13-4773\_mod5.pdf
- 13. Zhu JM, Zhang Y, Polsky D. Networks in ACA Marketplaces are narrower for mental health care than for primary care. Health Aff (Millwood). 2017;36(9):1624–31. [PubMed: 28874490]
- Zhu JM, Charlesworth CJ, Polsky D, McConnell KJ. Phantom networks: discrepancies between reported and realized mental health care access in Oregon Medicaid. Health Aff (Millwood). 2022;41(7):1013–22. [PubMed: 35787079]
- Bishop TF, Press MJ, Keyhani S, Pincus HA. Acceptance of insurance by psychiatrists and the implications for access to mental health care. JAMA Psychiatry. 2014;71(2): 176–81. [PubMed: 24337499]
- 16. Wen H, Wilk AS, Druss BG, Cummings JR. Medicaid acceptance by psychiatrists before and after Medicaid expansion. JAMA Psychiatry. 2019;76(9):981–3. [PubMed: 31166578]
- 17. Beck AJ, Page C, Buche J, Rittman D, Gaiser M. Estimating the distribution of the U.S. psychiatric subspecialist workforce [Internet]. Ann Arbor (MI): University of Michigan, School of Public Health, Behavioral Health Workforce Research Center; 2018 Dec [cited 2023 Feb 2]. Available from: https://www.behavioralhealthworkforce.org/wp-content/uploads/2019/02/Y3-FA2-P2-Psych-Sub\_Full-Report-FINAL2.19.2019.pdf
- 18. Zhu JM, Howington D, Hallett E, Simeon E, Amba V, Deshmukh A, et al.

  Behavioral health workforce report to the Oregon Health Authority and state legislature
  [Internet]. Salem (OR): Oregon Health Authority; 2022 Feb 1 [cited 2023 Feb
  2]. Available from: https://www.oregon.gov/oha/ERD/SiteAssets/Pages/Government-Relations/Behavioral%20Health%20Workforce%20Wage%20Study%20Report-Final%20020122.pdf
- 19. Zuvekas SH, Rupp A, Norquist G. Cost shifting under managed behavioral health care. Psychiatr Serv. 2007;58(1):100–8. [PubMed: 17215419]
- 20. Domino ME, Norton EC, Morrissey JP, Thakur N. Cost shifting to jails after a change to managed mental health care. Health Serv Res. 2004; 39(5):1379–401. [PubMed: 15333114]
- 21. Clemans-Cope L, Lynch V, Payton M, Aarons J. Medicaid professional fees for treatment of opioid use disorder varied widely across states and were substantially below fees paid by Medicare in 2021. Subst Abuse Treat Prev Policy. 2022;17(1):49. [PubMed: 35794626]
- 22. To access the appendix, click on the Details tab of the article online.
- Centers for Medicare and Medicaid Services. Overview [Internet]. Baltimore (MD): CMS; [last updated 2023 Jan 1; cited 2023 Feb 2]. Available from: https://www.cms.gov/medicare/physician-fee-schedule/search/overview
- Roberts ET, Nimgaonkar A, Aarons J, Tomko H, Shartzer A, Zuckerman SB, et al. New evidence of state variation in Medicaid payment policies for dual Medicare-Medicaid enrollees. Health Serv Res. 2020;55(5): 701–9. [PubMed: 33460128]
- Zuckerman S, Williams AF, Stockley KE. Trends in Medicaid physician fees, 2003–2008. Health Aff (Millwood). 2009;28(3):w510–9. 10.1377/hlthaff.28.3.w510 [PubMed: 19401290]
- 26. Trish E, Ginsburg P, Gascue L, Joyce G. Physician reimbursement in Medicare Advantage compared with traditional Medicare and commercial health insurance. JAMA Intern Med. 2017;177(9):1287–95. [PubMed: 28692718]

 Mark TL, Olesiuk W, Ali MM, Sherman LJ, Mutter R, Teich JL. Differential reimbursement of psychiatric services by psychiatrists and other medical providers. Psychiatr Serv. 2018;69(3):281– 5. [PubMed: 29191138]

- 28. Zuckerman S, Skopec L, Epstein M. Medicaid physician fees after the ACA primary care fee bump [Internet]. Washington (DC): Urban Institute; 2017 Mar [cited 2022 Feb 23]. Available from: https://www.urban.org/sites/default/files/publication/88836/2001180-medicaid-physician-fees-after-the-aca-primary-care-fee-bump.pdf
- 29. Saunders H, Guth M, Eckart G. A look at strategies to address behavioral health workforce shortages: findings from a survey of state Medicaid programs [Internet]. San Francisco (CA): Henry J. Kaiser Family Foundation; 2023 Jan 10 [cited 2023 Feb 24]. Available from: https://www.kff.org/medicaid/issue-brief/a-look-at-strategies-toaddress-behavioral-healthworkforce-shortages-findings-from-a-survey-of-state-medicaidprograms/
- Alonso J. Medicaid, Medicare reimbursement rates for doctors in Md. to be equalized.
   Maryland Daily Record [serial on the Internet]. 2022 May 5 [cited 2023 Feb 2]. Available from: https://thedailyrecord.com/2022/05/05/medicaid-medicaidreimbursement-rates-for-doctors-inmd-to-be-equalized/
- 31. Baden D, McDermott S, Jardine D. Behavioral health rate investment: fee-for-service proposal update [Internet]. Salem (OR): Oregon Health Authority; 2022 Aug 4 [cited 2023 Feb 2]. Available from: https://www.oregon.gov/oha/HSD/OHP/Tools/BH-Rate-Increase-Webinar0812.pdf
- 32. Saulsberry L, Seo V, Fung V. The impact of changes in Medicaid provider fees on provider participation and enrollees' care: a systematic literature review. J Gen Intern Med. 2019;34(10):2200–9. [PubMed: 31388912]
- 33. Centers for Medicare and Medicaid Services. Fact sheet: calendar year (CY) 2023 Medicare Physician Fee Schedule final rule [Internet]. Baltimore (MD): CMS; 2022 Nov 1 [cited 2023 Feb 2]. Available from: https://www.cms.gov/newsroom/fact-sheets/calendar-year-cy-2023-medicare-physician-fee-schedulefinal-rule
- 34. Cunningham PJ, O'Malley AS. Do reimbursement delays discourage Medicaid participation by physicians? Health Aff (Millwood). 2009;28(1):w17–28. [PubMed: 19017679]
- 35. Dunn A, Gottlieb JD, Shapiro A, Sonnenstuhl DJ, Tebaldi P. A denial a day keeps the doctor away [Internet]. Cambridge (MA): National Bureau of Economic Research; 2021 Jul [last updated 2023 Jan; cited 2023 Feb 2]. (NBER Working Paper No. 29010). Available from: https://www.nber.org/papers/w29010
- 36. Decker SL. No association found between the Medicaid primary care fee bump and physician-reported participation in Medicaid. Health Aff (Millwood). 2018;37(7):1092–8. [PubMed: 29985691]

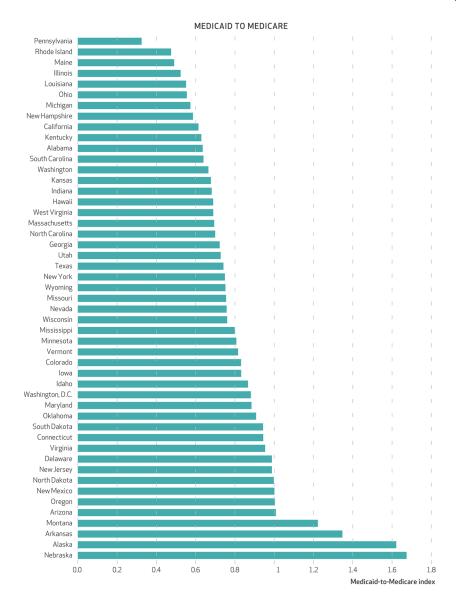


EXHIBIT 2. Medicaid-to-Medicare index, comparing Medicaid reimbursement rates for selected mental health services with rates for the same services in Medicare, 2022 SOURCE Authors' analysis of publicly available 2022 Medicaid fee-for-service physician fee schedules for a set of common mental health services. NOTES The Medicaid-to-Medicare index is a composite measure of each state's physician reimbursement relative to Medicare reimbursement in each state. Fee ratios were calculated as the state's Medicaid fee schedule rate divided by the Medicare payment rate for the set of mental health services included in this analysis.

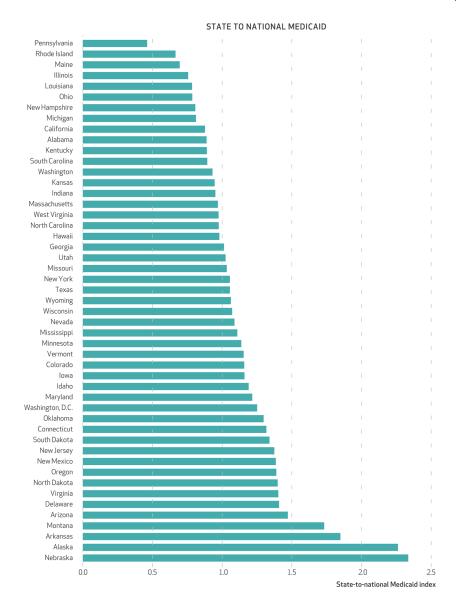


EXHIBIT 3. State-to-national Medicaid fee index comparing reimbursement rates for selected mental health services across state Medicaid programs with a national average, 2022 SOURCE Authors' analysis of publicly available 2022 Medicaid fee-for-service physician fee schedules for a set of common mental health services. NOTES The state-to-national Medicaid index is a weighted sum of the ratios of each state's Medicaid reimbursement for a given service to the corresponding national average. The weight for each service was its share of total service volume among the entire set of services evaluated. Fee ratios were calculated as the state's Medicaid fee schedule rate divided by an enrollment-weighted national average Medicaid payment rate.

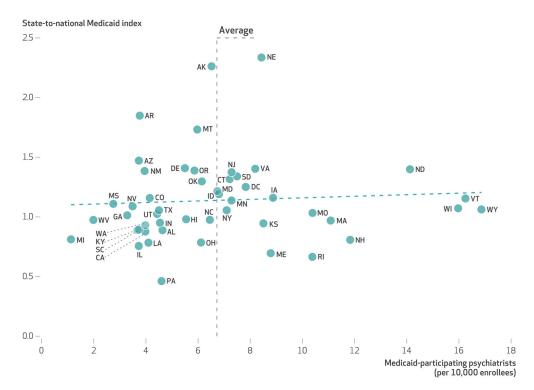


EXHIBIT 4. State-to-national Medicaid fee indices for mental health services and Medicaid-participating psychiatrists per 10,000 enrollees, 2022

SOURCE Authors' analysis of 2018 Transformed Medicaid Statistical Information System Analytic Files (TAF) and publicly available 2022 Medicaid fee-for-service physician fee schedules for a set of common mental health services. NOTES This exhibit plots state-tonational Medicaid fee indices for mental health services (see exhibit 3) against numbers of Medicaid-participating psychiatrists per 10,000 population, as derived from counts of psychiatrists with at least 1 claim in the TAF data. The trend line shows a linear correlation coefficient of 0.01. The average number of Medicaid-participating psychiatrists per 10,000 enrollees across all states in the sample was 6.72.

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**EXHIBIT 1** 

Summary statistics of fees for Current Procedural Terminology (CPT) codes commonly billed by psychiatrists in Medicaid, 2022

CPT code	Description	Mean	Median	IOR
90785	Add-on code for interactive psychiatric diagnostic interview	\$ 9.51	\$ 10.48	4.00-12.84
90791	Psychiatric diagnostic evaluations without medical services	134.73	125.39	103.07-154.21
90792	Psychiatric diagnostic evaluations with medical services	149.77	137.89	105.37-171.65
90832	Other psychiatric diagnostic procedures, psychotherapy services and procedures	59.90	57.45	47.30–66.99
90833	Add-on code for individual psychotherapy, 30 minutes	54.27	57.05	39.59-65.31
90834	Individual psychotherapy for 45 minutes, outpatient	82.77	77.81	67.19–90.43
90836	Add-on code for individual psychotherapy, 45 minutes	72.46	71.56	57.82-88.78
90837	60-minute individual psychotherapy session	118.14	110.86	95.19-134.57
80838	Add-on code for individual psychotherapy, 60 minutes	99.93	95.41	79.16–116.35
90847	Family psychotherapy (with patient present)	89.42	87.93	76.17-101.84
90853	Group psychotherapy, 45-60 minutes	25.59	23.33	20.68-28.17
02806	Electroconvulsive therapy	117.25	109.42	82.97–145.06
99202	New patient office or other outpatient visit, 15-29 minutes	54.46	53.36	43.32–60.51
99203	New patient office visit, 30-44 minutes	80.91	79.67	65.48-92.90
99204	New patient office visit, 45-59 minutes	120.31	116.95	95.52-139.25
99205	New patient office visit, 60-74 minutes	155.43	152.52	122.21-183.89
99211	Established patient office that may not require the presence of	17.80	16.97	14.97–19.45
99212	a physician or other qualified health care professional Established patient office visit, 10–19 minutes	37.17	33.20	26.63-43.77
99213	Established patient office visit, 20-29 minutes	58.92	56.84	41.01–71.50
99214	Established patient office visit, 30-39 minutes	84.67	81.88	62.67-100.26
99215	Established patient office visit, 40–54 minutes	119.62	113.27	86.77-139.06

SOURCE Authors' analysis of publicly available 2022 Medicaid fee-for-service physician fee schedules for a set of common mental health services.