Medicaid Expansion and Missouri's Health Care Workforce: Insights from a Provider Survey

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Goals and Background

In 2020, Missouri voters passed a constitutional amendment to expand the state's Medicaid program (also known as MO HealthNet) to cover the non-disabled adult population (18 to 64) with incomes up to 138% of the federal poverty line (FPL). This marks a major change in state health policy, as Missouri's previous income limits for non-disabled adults were only 21% FPL for parents and 0% FPL (i.e., no eligibility) for non-parents. As of June 2023, there were 351,849 Missouri Medicaid enrollees in the expansion population (Missouri Medicaid Enrollment Dashboard n.d.) with a greater proportion of new enrollees likely to come from rural and other health care workforce shortage areas (Siegler 2020). The Medicaid expansion population will increase demand on health care access and availability, particularly in remote and underserved rural areas of Missouri. This increased demand may expose cultural and capacity barriers among existing providers to accept and care for new Medicaid enrollees. This echoes a concern shared by experts and policymakers since the Patient Protection and Affordable Care Act first made Medicaid expansion possible for states: "There is considerable agreement that health care reform's success will significantly hinge on whether systems will be able to provide good access to high quality care, and there is considerable fear that these systems will be greatly challenged in their ability to provide such access" (Hill, Wilkinson, and Holahan 2014).

The purpose of this study was to explore the experience and perspectives of Medicaid providers in Missouri and the factors that make them more or less likely to take on new Medicaid patients following expansion. We drew on rich, original data from interviews with primary care providers, specialists, and dentists in rural Missouri conducted during the first phase of the study to develop a quantitative survey for providers across the state. Key themes from interviews showed that participants had generally favorable views about Medicaid expansion and increased access to healthcare, though they were concerned about capacity within their practice and the health care workforce. Participants also reported challenges working with the Medicaid program, challenges treating Medicaid patients, and having received little formal training on Medicaid or expansion. The goal of the survey phase of this study was to elaborate on these themes for both rural and nonrural Missouri providers.

The findings presented in this report are consistent with themes emerging from the interviews: participating providers are generally favorable toward Medicaid, Medicaid patients, and expansion as a policy. At the same time, they identify significant problems with the Medicaid program (e.g., low reimbursement rates, high administrative burden) and difficulties with Medicaid patients (particularly failure to show up for appointments). They also admit to having only modest knowledge about expansion as a policy, and express openness to attending a training to learn more. In terms of patient load and capacity, respondents report increases in the number of patients seen per month that are consistent with increased coverage rates due to both expansion and the recently concluded Public Health Emergency (which allowed many Missourians to keep continuous Medicaid coverage who would otherwise have lost eligibility). Overall, though, they indicated that they, or at least their practices, still have excess capacity to accept new patients. These findings offer important insights into the views and experiences of Missouri providers, and the ability of the state's health care system to provide care for newly covered residents, though the small sample and its divergence from the population of providers on some dimensions are important caveats.

Survey Research Design and Process

To assess Missouri providers' views and experiences with the Medicaid program and their capacity and inclination to take on new patients, we surveyed primary care and specialist health care providers in Missouri. Our sample included a convenience sample and a targeted probability sample. The convenience sample included referrals from organizations and other providers based on their professional networks. The probability sample included Missouri providers on the American Medical Association (AMA) Physician List. This list was obtained through a data-use agreement with Medical Marketing Services (MMS) and the Center for Health Policy and the Institute of Public Policy at the University of Missouri. The full MMS list consists of AMA providers by county and their specialty along with generalized biographical data like gender and year of birth. Inclusion criterion included providers who saw at least 10 Medicaid patients in the previous year. This inclusion criteria is informed by the findings of existing studies that providers with a substantial number of existing Medicaid patients are more likely to accept new Medicaid patients than those with different coverage profiles (Bradbury 2015; Neprash et al. 2018; Tipirneni et al. 2019). We further restricted our full sampling frame to providers who treat Missouri Medicaid patients. This resulted in an MMS sample of 10,000 providers, of which MMS provided a direct email campaign to 7,591 providers to participate in our survey. Of these, 149 participated resulting in a probability sample response rate of 2 percent. Eight of these participants were identified as duplicate respondents and were removed from the final analysis. Our full sample of convenience and probability participants was open to all Missouri providers, including those practicing in rural and non-rural settings.

We complemented our methods by offering a \$20 incentive for participants. To boost participation, we advertised a special recruitment opportunity in which 20 participants received a \$100 incentive for participation during the week of May 15, 2023. Recruitment proved challenging

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nevertheless, and the initial target sample of 400 primary care providers and 200 specialists was deemed unrealistic. Given the project timeline and existing recruitment efforts, the research team determined that we had exhausted all available recruitment efforts and closed the survey on June 26, 2023. This sample size is comparable to that of other provider survey studies (e.g., Kannan 2015; McManus, McManus, and Dillingham 2018; Reynolds et al. 2017). The completed sample includes 93 primary care providers, 156 specialists, and one participant that did not indicate a provider type. Of the 250 survey participants, 109 were recruited from the convenience sample and 141 participated from our probability sample. Our report combines the convenience and probability samples in order to provide a more robust sample for the analysis since the MMS AMA probability sample includes only physicians while the convenience sample includes more diverse provider types such as dentists, mental health professionals, and nurses.

An additional challenge of our survey was a large number of fraudulent survey responses that threatened the integrity of our survey. After reviewing the flood of responses during the first wave of our survey, we identified all fraudulent respondents among our actual survey participants. These were identified using time-to-complete estimates and location and IP data provided by the survey administration tool. Following this incident, we equipped our survey with additional measures of security, including CAPTCHA (Completely Automated Public Turing Test to tell Computers and Humans Apart) security puzzle to enter the survey, Bot Detection – a tool to flag potential bots, Security Scan Monitor – a tool to flag potential bots or fraudulent survey participants, RelevantID – a tool that utilizes metadata to identify and prevent fraudulent responses to the rise in fraudulent responses on digital surveys (Storozuk et al. 2020). Even with these security measures in place, each iteration of the online survey was subsequently targeted by fraudulent survey takers – likely through a combination of AI computer bots and nefarious actors. To address this challenge, one member of the research team would identify potentially fraudulent survey responses and then a second member of the research team would confirm the legitimacy of these responses. The full research team would determine which participants to include in the analysis. Additionally, some providers completed the survey multiple times. These providers were identified in the data collection process and their first response was recorded as the participating response and their subsequent survey responses were discarded from the full analysis. With these protocols, the research team has full confidence that the resulting participants included in the report are Missouri providers and reflect individual provider responses.

Our survey tool asked providers questions regarding their practice designation, general Medicaid knowledge and experience, their experience with Medicaid expansion and their practice capacity, and their patient population makeup and issues they experience. The survey tool (included in the appendix) was developed in partnership between the Institute of Public Policy and faculty at the University of Missouri Truman School of Government and Public Affairs and the School of Journalism Health Communications division. The survey tool was pilot tested with six participants between January and February 2023, leading to revisions to improve clarity and reliability. This study was reviewed and approved as exempt by the University of Missouri Institutional Review Board in April 2022 and amended and approved March 2023 (IRB #2072342).

Survey participation took approximately 10-15 minutes and was conducted via Qualtrics web tool. Survey consent was incorporated into the start of the survey. Probability sample survey recruitment was conducted exclusively via email while convenience sample survey recruitment was conducted via email, professional network communication, and in-person conference recruitment – regardless of the recruitment approach, the individual survey response mode was not

altered. Survey recruitment ended on June 26, 2023, and analysis was conducted in July 2023. Results are included in the findings section below.

Findings

Makeup of the Samples (Descriptive Statistics)

Before we consider the views and experiences of respondents related to Medicaid, it is important to consider the demographics and other characteristics of the participants. Recall that the response rate of the MMS survey was poor, and that the remainder of the participants were recruited through convenience (non-probability) sampling, resulting in a sample that is likely to differ from the population of Missouri providers in some ways.

Table 1 displays descriptive statistics for the MMS, convenience, and total samples. As one would expect, the convenience sample is more diverse in terms of provider type, since MMS respondents are American Medical Association members and therefore overwhelmingly likely to be physicians, while the convenience sample includes a large contingent of dentists and other providers. This is also reflected in the specialty breakdown. In addition, the convenience sample is more diverse (though not necessarily more representative) on a number of other dimensions, including provider gender, career tenure (with the MMS sample skewed toward later-career providers), practice type, and geography (region and rurality). Overall, though, the total sample is heavily White, metropolitan, concentrated in and around St. Louis and Kansas City, and weighted toward the physician (MD/DO) side as opposed to other providers. Figure 1 displays the geographic county representation of our sample, highlighting that St. Louis, Jackson (Kansas City), and Boone counties comprised the majority of our sample population.

Variable	Category	MMS	Convenience	Total
Total		141 (56.4%)	109 (43.6%)	250 (100.0%)
Gender identity	Male	86 (61.4%)	41 (37.6%)	127 (51.0%)
	Female	53 (37.9%)	64 (58.7%)	117 (47.0%)
	Non-binary	0 (0.0%)	1 (0.9%)	1 (0.4%)
	Prefer not to say	1 (0.7%)	3 (2.8%)	4 (1.6%)
Race/ethnicity	White	120 (85.7%)	87 (79.8%)	207 (83.1%)
	Black or African American	4 (2.9%)	4 (3.7%)	8 (3.2%)
	American Indian or Alaska Native	0 (0.0%)	1 (0.9%)	1 (0.4%)
	Asian	10 (7.1%)	10 (9.2%)	20 (8.0%)
	Multiethnic/multiracial	4 (2.9%)	2 (1.8%)	6 (2.4%)
	Other race/ethnicity	2 (1.4%)	5 (4.6%)	7 (2.8%)
Years practicing	0-5 years	0 (0.0%)	30 (27.8%)	30 (12.1%)
	6-10 years	10 (7.1%)	31 (28.7%)	41 (16.5%)
	11-15 years	13 (9.3%)	16 (14.8%)	29 (11.7%)
	16-20 years	33 (23.6%)	6 (5.6%)	39 (15.7%)
	20+ years	84 (60.0%)	25 (23.1%)	109 (44.0%)
Provider type	Physician (MD/DO)	140 (99.3%)	41 (37.6%)	181 (72.4%)
v 1	Dentist	0 (0.0%)	37 (33.9%)	37 (14.8%)
	Other provider type	1 (0.7%)	31 (28.4%)	32 (12.8%)
Specialty	Family or Internal Medicine	46 (32.6%)	22 (20.4%)	68 (27.3%)
	Pediatrics	23 (16.3%)	2 (1.9%)	25 (10.0%)
	Obstetrics and Gynecology	8 (5.7%)	2 (1.9%)	10 (4.0%)
	Dentistry	0 (0.0%)	42 (38.9%)	42 (16.9%)
	Radiology	5 (3.5%)	10 (9.3%)	15 (6.0%)
	Orthopedic Surgery	8 (5.7%)	0 (0.0%)	8 (3.2%)
	Other specialty	51 (36.2%)	30 (27.8%)	81 (32.5%)
Practice type	Federally Qualified Health Center	9 (6.4%)	33 (30.3%)	42 (16.9%)
21	Rural Health Center	2 (1.4%)	14 (12.8%)	16 (6.4%)
	Hospital or healthcare system	93 (66.4%)	27 (24.8%)	120 (48.2%)
	None of these	30 (21.4%)	31 (28.4%)	61 (24.5%)
	Don't know	6 (4.3%)	4 (3.7%)	10 (4.0%)
BRFSS region	Kansas City Metro	14 (10.7%)	20 (19.4%)	34 (14.5%)
8	St. Louis Metro	72 (55.0%)	38 (36.9%)	110 (47.0%)
	Central	21 (16.0%)	21 (20.4%)	42 (17.9%)
	Southwestern	14 (10.7%)	3 (2.9%)	17 (7.3%)
	Southeastern	6 (4.6%)	6 (5.8%)	12 (5.1%)
	Northwestern	3 (2.3%)	5 (4.9%)	8 (3.4%)
	Northeastern	1 (0.8%)	10 (9.7%)	11 (4.7%)
NCHS urban-rural code	Large central metro	11 (8.4%)	10 (9.7%)	21 (9.0%)
	Large fringe metro	75 (57.3%)	47 (45.6%)	122 (52.1%)
	Medium metro	5 (3.8%)	0 (0.0%)	5 (2.1%)
	Small metro	32 (24.4%)	16 (15.5%)	48 (20.5%)
	Micropolitan	7 (5.3%)	15 (14.6%)	22 (9.4%)
	Noncore	1 (0.8%)	15 (14.6%)	16 (6.8%)

Table 1. Descriptive statistics by sample.

Percentages may not add to 100% due to rounding.



Figure 1. Geographic county representation of sample.

How well does our combined sample represent the population of Medicaid providers in the state of Missouri? Unfortunately, we lack reliable state-level population data for providers on many of these dimensions, but the state Medicaid provider file¹ does allow us to benchmark our sample against all listed providers in terms of provider type, specialty, region, and urban-rural code. Table 2 displays our combined sample percentages alongside 2021 statistics from the provider file. This comparison indicates that not just physicians, but also dentists are overrepresented in our sample relative to the population of Medicaid providers. The miscellaneous "other provider type" category that makes up just 12.8% of our sample actually represents a slight majority of providers in the population. Much of this disparity can be explained by our lack of success in sampling nurses; nurse practitioners make up 18.1% of the entries in the provider file, while certified registered nurse anesthetists make up another 4.3%. Psychologists (10.4% of the

¹ Our team was granted access to the Missouri Medicaid provider file by the state's Medicaid program, known as MO HealthNet, through a data sharing agreement with MO HealthNet and the Center for Health Policy at the University of Missouri. The file provides a list of Medicaid providers by location and specialty information.

provider file) stand out as another common provider type that is not represented in our sample. In terms of specialty, our sample is skewed toward general practice (including pediatrics) and dentistry, and away from specialty and other care, though two specific medical specialties (radiology and orthopedic surgery) are overrepresented in our sample.

In terms of geography, our sample is a more reasonable approximation of the population, though there are some disparities. In terms of region, only the Kansas City metro area and the Southwestern region are substantially underrepresented. In terms of geography, it is not rural (micropolitan or noncore) areas that are underrepresented, but large central metros (the center cities of St. Louis and Kansas City) and medium metro counties (namely the Springfield metro area). Large fringe metros (especially the suburbs of St. Louis) and small metros (especially Boone County) are overrepresented.

Any interpretation of our results must be made with the makeup of the sample in mind. While we report 95% confidence intervals (also known as margins of error) for all population estimates in our presentation of the findings, these only capture uncertainty arising from random error in the sampling process (a function of the sample size and the sample standard deviation of the variables). They do not account for systematic error introduced by a biased sample. If it were possible to survey the entire population of Missouri Medicaid providers, the probability that their answers would fall outside of these intervals may well exceed 5%.

vailable variables (20. Variable		Sample %	Provider file	
	Category		%	
Provider type	Physician (MD/DO)	72.4%	45.1%	
	Dentist	14.8%	2.1%	
	Other provider type	12.8%	52.9%	
Specialty	Family or Internal Medicine	27.3%	16.5%	
	Pediatrics	10.0%	4.9%	
	Obstetrics and Gynecology	4.0%	2.2%	
	Dentistry	16.9%	1.8%	
	Radiology	6.0%	2.7%	
	Orthopedic surgery	3.2%	1.4%	
	Other specialty	41.8%	70.6%	
BRFSS region	Kansas City Metro	14.5%	19.5%	
	St. Louis Metro	47.0%	40.2%	
	Central	17.9%	11.2%	
	Southwestern	7.3%	15.3%	
	Southeastern	5.1%	7.8%	
	Northwestern	3.4%	2.8%	
	Northeastern	4.7%	3.2%	
NCHS urban-rural				
category	Large central metro	9.0%	27.4%	
	Large fringe metro	52.1%	32.2%	
	Medium metro	2.1%	9.5%	
	Small metro	20.5%	14.2%	
	Micropolitan	9.4%	9.7%	
	Noncore	6.8%	7.0%	

 Table 2. Comparison of the combined sample with the Missouri Medicaid provider file on available variables (2021 statistics).

Percentages may not add to 100% due to rounding.

Another important piece of context has to do with the overall patient load of these providers. Figure 2 shows participants' mean estimates of the percentage of their patients covered by private insurance, Medicare, Medicaid, and Medicare/Medicaid "dual eligible" coverage, as well as the percentage with no insurance coverage. MMS and convenience sample respondents are

plotted separately, with 95% confidence intervals (margins of error). Medicaid patients make up a significant part of respondents' workloads as the second-leading source of coverage overall behind private insurance. For convenience sample respondents, the estimated percentage of patients with Medicaid is greater than the percentage for private insurance, though only slightly so. Medicaid and uninsured patients make up significantly less of the load for MMS than convenience respondents – an unsurprising finding, given that the convenience sample includes more providers from FQHCs and RHCs (see Table 1), which serve disadvantaged populations and must accept Medicaid. In any case, Medicaid is clearly important to the practices of respondents from both samples.





Views of Medicaid and Medicaid Patients

Views on Medicaid Patients

We now turn to what providers think about the Medicaid program and Medicaid patients, beginning with two simple questions on how favorably they feel toward each. The results show that respondents feel favorably toward both on average, though not strongly so. On a scale ranging from "Very unfavorable" (1) to "Very favorable" (5), the average responses fall between the neutral category (3) and "Favorable" (4). Respondents are significantly more positive about the patients (mean=3.7, 95% confidence interval 3.6-3.8) than the program (mean=3.2, 3.0-3.3), which may reflect frustration with state bureaucracy, providers' generally positive feelings about their patients, or a mixture of the two. These results reflect the findings from our qualitative interviews with Medicaid providers where participants expressed frustration with dealing with the Medicaid program while voicing the need to treat these patients.

Still, respondents' feelings toward Medicaid patients are better described as lukewarm than positive, on average. Further exploration of their responses offers some clues as to why. The survey asked respondents to rate their agreement with six statements about Medicaid patients relative to privately insured patients, formulated as sentences beginning with "Medicaid patients are more likely than privately insured patients to…" Each of the six statements describes a problematic characteristic or behavior: "Miss appointments due to negligence," "miss appointments due to a lack of transportation," "Have low levels of health literacy," "Fail to comply with treatment plans," "Have bad health behaviors," and "Engage in drug-seeking." Figure 3 displays respondents' mean agreement with each of these statements on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5), with 3 as the neutral category. As the figure indicates, respondents were generally in agreement with most of these statements on average. The one exception was the drugseeking item, with a mean rating of 2.7 (2.6-2.8), indicating more disagreement than agreement. Respondents agreed most strongly with the statement that Medicaid patients are more likely to noshow appointments due to transportation issues (mean=4.0, 4.0-4.1). While these perceptions may be rooted in personal experience and reflective of real patterns in patient characteristics and

> "I think the biggest barrier that we see on the patient side is,

> > often, transportation. Transportation can be a

challenging one." -Dentist

"One of the biggest challenges

we often run into is getting patients to show up. "-Dentist

behavior, they may also contribute to reluctance to serve this vulnerable population. In the *Factors Affecting the Decision to Accept Medicaid Patients* section, we return to the question of whether providers' perceptions about Medicaid affect their access

to care.

Figure 3. Respondent agreement with statements about Medicaid patients relative to other patients ("Medicaid patients are more likely to..."; means with 95% confidence intervals).



Views on Medicaid Program

Other survey items offer some insight into providers' ambivalence toward the Medicaid program itself. Figure 4 shows respondents' agreement with six negative statements about the program:

"And so over time, the practice just became less financially stable and got to the point where the administrative burden was so high, the number of people we had employed to just kind of submit to Medicaid and figure out which patients we could have what and couldn't have things, that overhead cost just became so high that unable to sustain being a private entity. "-Orthopedic Surgeon "Reimbursement rates are too low," "It takes too long to be reimbursed," "Program rules negatively affect my ability to provide good care," "Complying with all the rules takes too much staff time," "The coverage the program provides for patients is not adequate," and "It is hard to make referrals because too few specialists accept Medicaid." All of these statements drew significantly more agreement than disagreement. Respondents

agreed most emphatically with the statements that reimbursement rates are too low (mean=3.9,

3.7-4.0) and that referrals are difficult to make (mean=3.7, 3.6-3.9).

Views on Medicaid Patients' Health Care Access

Providers' concerns about Medicaid patients' access to certain types of care or services are further highlighted in Figure 5, which displays the distribution of responses (percentages with margins of error) to questions about how "Fees are always going to be the number one. They're going to look at the fees, and they're going to determine whether or not it's going to be worth it for them to sign on as a provider." -Dentist

"And of course, like I said, some of the fees are so low they can't pay their employees. I don't know if you realize this, but some dental offices have overhead of 80% with regular fees. Do the math. If the Medicaid fees are 30%, you go out of business really fast trying to do that, so." -Dentist

often providers' patients (Medicaid and privately ensured) have difficulty accessing specialty care, medications, mental health care, dental or oral health care, treatment for substance use disorder, and support for health behavior change. While respondents do report some access issues for their

"The hardest part is getting them into a specialist and specialty because not everybody does take Medicaid. "-Nurse Practitioner privately insured patients ("never" is a rare response to each question), their assessment for their Medicaid patients is clearly worse. The situation is especially dire for dental health care –

56% (50%-62%) of respondents reported that their Medicaid patients "often" have difficulty accessing dental care, and another 19% (15%-25%) reported that they have such trouble "sometimes."



Figure 4. Respondent agreement with statements about the Missouri Medicaid program (means with 95% confidence intervals).





Views on Medicaid Expansion

Given their ambivalence about the program and concerns about serving Medicaid patients, it is worth considering how providers feel about the state's expansion of eligibility. We begin by examining respondents' agreement with five statements about Medicaid expansion, three positive (that it is the "right thing to do" for patients, for the respondent's practice, and for society) and two

"Health care is one of the few rights, in my opinion, that all people should have, along with education, clean water. I mean, there are certain things that they should have, and healthcare is, I believe, one of those things. So, yeah, I'm certainly in favor of Medicaid expansion. " -Neurologist

negative (that it will hurt the respondent's practice financially and that it "puts us on a path to socialism"). The responses show a clear consensus among respondents in favor of expansion, with the three positive statements drawing substantially more agreement than disagreement. Responses on expansion being the

right thing to do for Missourians and for society (mean=4.2, 4.1-4.3 for each) were significantly more positive than responses on it being the right thing to do for the respondent's own practice

(mean=3.9, 3.7-4.0), though the substantive difference on the five-point scale is not large. On the other hand, both negative statements drew substantial disagreement, especially the ideological statement about socialism (mean=2.3, 2.2-2.5). Thus, on average, respondents view expansion as a net positive for the state and for their practice.

"I'm a fan. It's a good thing. No, I mean, I have concerns about too much government control over medicine in general, but I'm also, I think, more concerned about the people who are needing the care, who need it. And so while I can't say that I'm completely all in on getting as much Medicaid as we can out there, I think, for me, the big picture, if I'm taking risks and benefits, I'm definitely on the side of expanding it as much as we can to cover those people who need it. "- Primary Care Physician

Respondents also generally agree that expansion has had a meaningful impact on a range of patient outcomes, as demonstrated by Figure 6. Specifically, respondents were asked to "think about what has changed for your patients who were previously uninsured and are now covered by Medicaid in Missouri (MO Health Net)," and rate the extent to which coverage has had an impact on seven outcomes: better control of chronic conditions, improved medication adherence, better ability to work or attend school, improved ability to live independently, improved health behaviors, improved emotional wellbeing, and early detection of serious illness.² Response options were "no impact" (1), "little impact" (2), "some impact" (3), and "great impact" (4). Average responses across the seven items are similar and clustered around 3 ("some impact"). Respondents saw significantly more impact on management of chronic conditions (mean=3.1, 3.0-3.3) and early detection of serious illness (mean=3.2, 3.0-3.3) than on some of the other items, though the differences are modest.





 $^{^{2}}$ This was modeled on a similar survey item fielded by Tiperneni and colleagues (2019) in their survey of providers in Michigan.

Knowledge and Training

Role of Patient Insurance Status During Clinic Visits

While the providers in our sample offer opinions and assessments about Medicaid and Medicaid expansion, this does not mean that their knowledge of the relevant policies is extensive. Providers' primary job is to provide care – they are not policy experts, and many have little involvement with the business side of their practices. In fact 44% (37%-50%) of respondents expressed either disagreement or strong disagreement with the statement "I know what kind of insurance a patient has at the beginning of an encounter," and 42% (36%-48%) expressed either agreement or strong agreement with the statement "I ignore a patient's insurance status on purpose so it doesn't affect my recommendations."³

Knowledge of Medicaid Expansion

Thus, it is not surprising that few respondents profess extensive knowledge about expansion. Only 17% (13%-22%) of respondents described themselves as "very knowledgeable" about Medicaid expansion, and only 9% (6%-13%) reported attending a training session on

"I honestly can't say that I've received any formal training on Medicaid expansion in the last two years." -Nurse Practitioner

"I think for private practitioners, it's a lot more daunting task because now if you accept Medicaid, now you have to learn all of this and there's not really a great place to do that. "-Dentist expansion. When asked if they would be likely to attend such a session, though, respondents were generally open to the idea with the majority responding that they were "somewhat likely" or "very likely" to attend a training session, as Figure 7 indicates. Only about one in four respondents answered that they were "not at all likely" to attend such a training.

Overall, these responses suggest both a need and an opportunity for medical education programs to provide training and information for providers on Medicaid and Medicaid expansion in Missouri.

³ These items are also drawn from Tiperneni et al (Tipirneni et al. 2019).

Figure 7. Respondents' likelihood of attending a training session about Medicaid expansion if one were offered (percentages with 95% confidence intervals).



Patient Load and Capacity

While expansion should improve patient access to care, this depends on newly covered Missourians being able to find providers that can accept them. Given growing concern about provider overwork and burnout during and after the COVID-19 pandemic (Shanafelt et al. 2022), it is important to assess Missouri providers' current patient loads and their capacity to take on new patients.

We begin by considering recent trends in providers' monthly patient loads, as measured by their responses to the question "Thinking back to July of 2021, would you say that the average number of patients seen at your practice in a month has..." with five response options ranging from "decreased a lot" to "increased a lot." The results suggest that the workload of Missouri providers has indeed increased in recent years – only about 6% (4%-10%) of respondents responded that the number of patients had decreased either "a little" or "a lot," while 23% (18%-29%) said that it had "increased a lot" and another 43% (37%-49%) indicated that it had "increased a little."

Is the growing workload of providers a barrier to access for newly covered Missourians? And, given the scarcity of providers in rural areas, is the situation more dire in such areas? The survey asked respondents whether they personally or their practice generally has the capacity to accept more patients. The proportions answering "yes" for each are displayed in Figure 8, with separate estimates for respondents from large central or fringe metropolitan areas (e.g., Jackson County, St. Louis County) and all other respondents (including medium metro counties like Greene to noncore counties such as Camden and Gasconade). Given a larger sample size, we would compare responses across all six NCHS rurality categories, but the small numbers of nonmetropolitan respondents in the present sample (roughly in proportion to their numbers in the population, per Table 2) makes this infeasible. In any case, providers' responses to these items are somewhat encouraging. While only about half responded that they personally have the capacity for more patients (53%, 47%-59%), a clear majority answered that their practice did have excess capacity (70%, 65%-75%). Moreover, as the figure makes clear, the responses of large metro and other providers to these questions are indistinguishable.





Factors Affecting the Decision to Accept Medicaid Patients

While a given practice may have the capacity to take on new patients, this does not necessarily mean that they will take patients with any type of coverage. The findings discussed above (see *Views of Medicaid and Medicaid Patients*) demonstrate that Missouri providers see significant problems with the program and experience difficulties with Medicaid patients more often than other patients. Do these issues make practices less likely to accept new Medicaid patients?

Before we seek to answer this question, it is important to understand that providers are not always the primary decision-maker on whether to accept particular patients or types of coverage. For providers at FQHCs or RHCs, the question is moot since the law requires these facilities to accept Medicaid patients. Many other providers, especially those in employee rather than leadership roles in their practice, focus on clinical responsibilities while business decisions about insurance coverage are left to leaders and administrative staff. When asked about the level of influence they have over the decision to accept Medicaid patients, about 40% of our respondents (34%-46%) responded "I have no influence," while another 23% (18%-29%) had no influence due to working at an FQHC or RHC. Only about 10% (7%-14%) answered that "the decision is entirely mine," with the remainder reporting that they have either "a lot of influence" or "some influence" Thus, efforts to improve access to care for new Medicaid enrollees should consider other decision-makers within practices in addition to providers, though a substantial minority of the providers in our sample (more than one in three) do play a role in the decision.

Whether they control the decision or not, providers have insight into the type of factors that matter for a practice's decision to accept new Medicaid patients. We asked respondents to choose and rank five issues from a list of twelve potential concerns about Medicaid and Medicaid patients in terms of their importance to the decision to accept new patients. We generated this list from issues that came up in our qualitative interviews. Unfortunately, this proved to be a more challenging survey item for respondents than we anticipated, possibly due to a lack of familiarity with Qualtrics' drag-and-drop tool for ranking items. As a result, only 143 of the 250 respondents completed the question, an important caveat to these findings. Compared to the full sample, the respondents who completed the sample included a significantly smaller percentage of providers who are MD/DOs, who specialize in internal medicine, who work at hospitals or healthcare systems, and who are located in the St. Louis metro area.

Table 3 displays the percentage of respondents who gave each ranking to each concern. While respondents chose from a list of all twelve items, here we group them into program-related and patient-related concerns. Perhaps unsurprisingly, reimbursement rates emerge as the most important issue, ranked in the top 3 by 50% of respondents, though time spent complying with program rules (39%), inadequate coverage for patients (39%), and the ability to make referrals to specialists (35%) were also deemed particularly important. Respondents generally did not rank problems with patients themselves (such as drug-seeking and low health literacy) as important, with one exception: patient no-shows emerged as the fifth-most important issue, ranked in the top three by 33% of respondents. This is consistent with the extensive discussion in our qualitative interviews of patient no-shows as a major challenge and a financial drain for Medicaid providers.

"I believe I know that-- just from knowing other dentists and knowing what their practices are doing and so on, they don't want to pay their employees to sit there, right? If I mean, some guy's got three or four people working for him-- some dentist has three or four people working for him, it may be \$100 an hour to pay those people. And when somebody schedules an hour of your time and then they just don't show up, that-- not only does it cost you money, but there's opportunity cost. You could have been actually making money. People don't want to mess with that. It's bad enough anyway, but when it's such a problem as it is, it's frustrating." -Dentist

	% of respondents ranking concern				
	Top 2 nd Top 3 rd Top 4 th Top				
	Concern	Concern	Concern	Concern	Concern
Program concerns					
Reimbursement rates	28%	15%	7%	4%	3%
Time spent complying with program rules	14%	17%	8%	7%	8%
Inadequate coverage for patients	12%	12%	15%	13%	3%
Ability to make referrals to specialists	10%	13%	12%	13%	13%
Effect of program rules on quality of care	8%	9%	13%	7%	10%
Time it takes to get reimbursed	1%	6%	8%	12%	6%
Patient concerns					
Patient no-shows	10%	10%	13%	10%	10%
Capacity to take additional patients	9%	6%	4%	4%	7%
Poor treatment compliance by patients	5%	6%	7%	13%	8%
Low health literacy among patients	1%	3%	4%	3%	10%
Bad health behaviors among patients	1%	2%	4%	4%	7%
Drug-seeking by patients	-	-	1%	1%	3%

 Table 3. Respondent rankings of the importance of potential concerns in the decision to accept new Medicaid patients

Future Work

Our findings suggest several directions for future work on Medicaid providers in Missouri:

- Surveying a larger representative sample of Missouri providers about their experience with Medicaid and Medicaid expansion.
- Methodological research on benchmarking and adjusting of provider samples in health care research.
- Research on promising avenues for reducing administrative burden in the Medicaid program for both providers and patients.
- Incorporating non-provider decision-making individuals in research on which patients can access care.
- Research around patient no-shows resulting from a lack of transportation.

The first direction for future work is simply to pursue the same questions considered here, but with a larger and more representative sample of the provider population. Of course, this is much easier said than done, as health care providers are a notoriously difficult population to sample. Our own experience suggests this is only getting more difficult over time. In a 2013 article on online surveys of clinicians, Dykema and colleagues (Dykema et al. 2013), citing research from the previous decade, noted that "[response] rates of under 20%, particularly for physician surveys, are not uncommon." The situation has clearly deteriorated from there - in a 2016 experiment on methods of boosting response rates in online physician surveys, Cook and colleagues (Cook et al. 2016) reported a response rate of 9% among "email-only" reminder recipients (the closest analog to our study). Our email probability sample response rate of less than 2% makes these rates from the recent past, a cause for alarm at the time, seem enviable by comparison. While this may be the result of flaws in our specific recruitment process, it is consistent with declining response rates in survey research in general (e.g., Kennedy and Hartig 2019), particularly since the onset of the COVID-19 pandemic (Krieger et al. 2023) and with growing health care provider overwork and burnout (Shanafelt et al. 2022). It is unclear if researchers will be able to overcome these obstacles in the future, though a shift away from "online-only" recruitment in probability samples of health care providers is likely to be an important stopgap. Beyond that, bolstering probability sampling with convenience sampling through intermediary organizations and at in-person meetings of providers as we have done here may be the only way to ensure reasonable sample sizes, especially in state-level research where the provider population is not large. This suggests future methodological research on benchmarking and adjusting convenience samples in health care research will be highly valuable.

The next direction for future research thankfully avoids issues of survey participation among clinicians. To the extent that our respondents' experience is indicative of that of Missouri providers, business decisions about which patients are able to access care are largely in the hands of other personnel at most practices. Understanding the decision-making process of these individuals (e.g., billing and administrative staff) is therefore an important research goal, and they are likely to be easier to reach than clinicians.

Respondents' frustration with the Medicaid program suggests that research on means of reducing administrative burden in the program could be fruitful in terms of improving providers' and practices' experience with the program and, ultimately, improving patient care. It comes as no surprise that providers would like the program's reimbursement rates to be higher – Missouri ranks 41st out of 50 states and the District of Columbia in terms of Medicaid-to-Medicare fee ratio (Zuckerman, Skopec, and Aarons 2021) – but our results suggest that making the program easier to deal with for both providers and patients could be a less costly avenue for improvement.

Another important research priority emerging from our findings concerns patient no-shows resulting from a lack of transportation. Survey responses on this issue echo the frustration we heard in our qualitative interviews. When a patient cannot make it to an appointment, it creates a no-win scenario for both the patient and the practice. The fact that this problem is so prevalent among Medicaid patients is noteworthy – while it is understandable that low-income Missourians are less likely to have access to transportation on their own, MO HealthNet's Non-Emergency Medical Transportation (NEMT) program should alleviate this issue. The fact that it has not suggests that the program is failing to reach the Missourians who need it most. Future research should pinpoint these gaps and recommend solutions.

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Professional Organizations Assisting in Survey Recruitment

American College of Cardiology - Missouri Chapter Association of Missouri Nurse Practitioners AT Still University, Kirksville College of Osteopathic Medicine, Area Health Education Center Community Asset Builders/Mobile Integrated Health Network Community Health Partnership for Carroll County/Carroll County Memorial Hospital DHSS-Office of Rural Health and Primary Care Great Mines Health Center/Mobile Integrated Health Network Greater STL Dental Society Healthy Blue Home State Health Missouri Behavioral Health Council Missouri Chapter of the American Academy of Pediatrics Missouri Coalition for Oral Health Missouri Dental Association Missouri Department of Mental Health Missouri Dermatological Society Missouri Emergency Medical Services Association Missouri Emergency Medical Services Association Board Missouri Hospital Association Missouri Kansas Neurological Society Missouri Mental Health Counselors Association Missouri Oncological Society Missouri Ozarks Community Health Missouri Primary Care Association Missouri Psychiatric Physicians Association Missouri Public Health Association Missouri Radiological Society Missouri Rural Health Association Missouri Society of Anesthesiologists Missouri State Medical Association Missouri State Orthopedic Association

Missouri TeleHealth Non-Urban Missouri Healthcare Coalition Office of Rural Health and Primary Care St. Louis University, Area Health Education Center The Missouri Coalition of Nurses in Advanced Practice United Healthcare University of Missouri Columbia School of Medicine, Ob-Gyn Student Interest Group University of Missouri School of Medicine Psychiatry Department University of Missouri, Area Health Education Center University of Missouri, Kansas City School of Medicine, Ob-Gyn Interest Group Washington University in St. Louis Ob-Gyn Interest Group

Appendix HRSA Health Care Workforce Survey Tool

The survey you are about to take is being conducted with health care professionals about health care in general, Medicaid, and Medicaid expansion in Missouri and is hosted by a research team at the University of Missouri. When we refer to Medicaid, we are referring to the program. When we refer to Medicaid expansion, we are referring to the recently expanded program.

Your individual responses to the questions in the survey will be kept private. You may skip questions you do not want to answer and move on to the next question.

If you have questions or concerns about the survey, you can contact the Missouri Medicaid Workforce Research Team at the University of Missouri at 573-882-1739 or <u>medicaidresearchproject@missouri.edu</u>. We appreciate your consideration to participate in this study.

Project Title: Health Care Workforce Interviews and Surveys **Principal Investigator/Researcher**: Dr. Kathleen Quinn **IRB Reference Number**: 2072342

You are being invited to take part in a research project. Your participation is voluntary, and you may stop being in this study at any time. The purpose of this research project is to discuss health care in Missouri and upcoming changes associated with Medicaid expansion. You are being asked to participate in an online survey. The survey questions will address your role as a health care professional and your thoughts about Medicaid expansion. Your participation should last 10-15 minutes. For your time and effort, we will be offering compensation in the amount of \$20 via digital gift card. The information you provide will be kept confidential and only the research team will have access.

If you have questions about this study, you can contact the University of Missouri researcher at 573-882-1739 or <u>medicaidresearchproject@missouri.edu</u>. If you have questions about your rights as a research participant, please contact the University of Missouri Institutional Review Board (IRB) at 573-882-3181 or <u>muresearchirb@missouri.edu</u>. The IRB is a group of people who review research studies to make sure the rights and welfare of participants are protected. If you want to talk privately about any concerns or issues related to your participation, you may contact the Research Participant Advocacy at 888-280-5002 (a free call) or email <u>muresearchrpa@missouri.edu</u>. You can ask the researcher to provide you with a copy of this consent for your records. Please enter the pin number included in your survey invitation email.

Please select your provider type:

- Physician (MD/DO)
- Advanced Practice Nurse
- Dentist
- Occupational Therapist
- Optician/Optometrist
- Physical Therapist
- Physician Assistant
- o Psychologist/Professional Counselor/Social Worker
- Chiropractor
- Speech Therapist
- o Pharmacist
- Other (Please Specify)

Please select your medical specialty:

- Family or Internal Medicine
- Pediatrics
- Obstetrics and Gynecology
- o Dentistry
- Pharmacy
- Other (Please Specify)

In what state is your primary practice based?

- o Arkansas
- o Illinois
- o Iowa
- o Kansas
- o Missouri
- o Oklahoma
- o Tennessee

Please select the county where you practice. (*NOTE:* If you practice in more than one county, please select the county in which you see the highest number of patients in a typical week)

▼ Adair ... Wright

What is the zip code where your practice is located?

Do you currently treat patients who live in any of the following states? (Select all that apply)

- \circ Arkansas
- \circ Illinois
- o Iowa
- o Kansas
- o Missouri
- o Oklahoma
- o Tennessee

Do you currently see Medicaid patients?

- o No
- o Yes

Are you willing to treat Medicaid patients?

- o No
- o Yes

Please select the gender you identify with.

- o Male
- o Female
- Transgender
- Non-binary
- Prefer not to say

Please select your race/ethnicity.

- White
- Black or African American
- American Indian or Alaska Native
- o Asian
- o Native Hawaiian or Pacific Islander
- Multiethnic/multiracial
- Other

How long have you been a practicing health care provider?

- \circ 0-5 years
- 6-10 years
- 11-15 years
- o 16-20 years
- \circ 20+ years

What is your job title where you practice? (If you have more than one title, please list them all.)

Who owns the practice?

- I own the practice/part of the ownership group
- Independently owned
- A larger physician group
- A hospital
- A healthcare system (may include a hospital)
- A nonprofit organization
- Other

Which of the following describes your primary practice location?

- A Federally Qualified Health Center (FQHC)
- A FQHC "look-alike" (do not select unless you have this designation)
- A Rural Health Center (RHC)
- A hospital or healthcare system
- Not designated as any of these
- o Don't know

Please estimate the percent of your patients who have each of the following as their primary source of insurance coverage:

Private insurance : _____ Medicaid or MO Health Net : _____ Medicare : _____ Medicare/Medicaid dual eligible : _____ No insurance (i.e., self-pay) : _____

Total : _____

After voters approved an amendment to the state constitution in 2020, Missouri has adopted the expansion of Medicaid eligibility included in the Affordable Care Act, commonly known as "Medicaid expansion."

Please rate your level of knowledge about Medicaid expansion.

- Very knowledgeable
- Somewhat knowledgeable
- Not at all knowledgeable

Please rate your agreement or disagreement with the following statements about the Medicaid program. (If you are not sure about your agreement with a statement, please select 'neither agree nor disagree.')

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Reimbursement rates are too low	0	0	0	0	0
It takes too long to be reimbursed	0	0	0	0	0
Program rules negatively affect my ability to provide good care	0	Ο	Ο	O	Ο
Complying with all the rules takes too much staff time	0	0	0	0	0
The coverage the program provides for patients is not adequate	0	0	0	0	0
It is hard to to make referrals because too few specialists accept Medicaid	0	O	0	0	0

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
It is the right thing to do for society	0	0	0	0	0
It is the right thing to do for my practice	0	0	0	0	0
It is the right thing for Missourians	0	0	0	0	0
It puts us on the path toward socialism	0	0	0	Ο	Ο
It will hurt my practice financially	0	0	0	0	0

Please rate your level of agreement toward the following statements related to Medicaid expansion as a policy.

Based on your experiences in treating Medicaid patients, please rate how favorably you feel toward each of the following.

	Very unfavorable	Unfavorable	Neither favorable nor unfavorable	Favorable	Very favorable	N/A
Medicaid patients	0	0	0	0	0	0
The Missouri Medicaid program	0	0	0	0	0	0

Have you ever attended a training session or received any training on Medicaid expansion?

- o Yes
- o No
- o Not sure

If you had the opportunity to attend a training session on Medicaid expansion, how likely would you be to attend?

- o Not at all likely
- Somewhat likely
- Very likely

Since July 2021, what modifications to your practice have you completed or do you plan to undertake? (If you have completed a modification before July 2021, please select 'Haven't completed and don't plan to.')

	Completed between July 2021 and July 2022	Completed since July 2022	Haven't completed, but planning to	Haven't completed and don't plan to
Physical changes to practice (e.g. parking lot, waiting room, examinations rooms)	0	0	0	0
Hiring more staff	0	0	0	0
Hiring more providers/practitioners	0	0	0	0
Adopting or updating an electronic health records system	0	0	0	0
In recent years, the number of people on Missouri's Medicaid program has increased, both because of the expansion of Medicaid eligibility and because of a temporary federal policy that has prevented people from losing coverage during the COVID-19 pandemic.

Which of these changes to your practice are due to the recent growth in the number of people on the Medicaid program?

	Related to Medicaid growth	Not related to Medicaid growth	Not sure	Haven't done this type of expansion
Physical changes to practice (e.g. parking lot, waiting room, examinations rooms)	O	0	0	0
Hiring more staff	0	0	0	0
Hiring more providers/practitioners	0	0	0	0
Adopting or updating an electronic health records system	0	0	0	0

Thinking back to July of 2021, would you say that the average number of patients seen at your practice in a month has...

- Increased a lot
- Increased a little
- Stayed the same
- o Decreased a little
- Decreased a lot

Was the increase in your patient load since July 2021 related to the recent growth in the number of people on the Medicaid program?

- o Related to Medicaid growth
- Not related to Medicaid growth
- Not sure

Would you say that you, personally, have the capacity to care for more patients at this time? (Please answer regarding yourself, not other providers at your practice, hospital, etc.)

- Yes, I have the capacity to care for more patients at this time
- o No, I do not have the capacity to care for more patients at this time

Would you say that your practice, hospital, or clinic has the capacity to care for more patients at this time? (Please answer regarding the entire practice, hospital, or clinic, not just your own practice.)

- Yes, we have capacity to care for more patients at this time
- No, we do not have capacity to care for more patients at this time
- Not applicable

How much influence do you have in making the decision to accept or not accept Medicaid patients in your practice?

- The decision is entirely mine
- I have a lot of influence
- I have some influence
- I have no influence

Please rate your agreement with each of the following statements. (If you are not sure about your agreement with a statement, please select 'neither agree nor disagree.')

6	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
All providers should care for some Medicaid patients	0	0	0	0	0
Caring for Medicaid patients enriches my clinical practice	0	0	0	0	0
Caring for Medicaid patients increases my professional satisfaction	o	0	0	0	0
It is my responsibility to provide care for patients regardless of their ability to pay	0	Ο	0	0	Ο

Please rate your agreement or disagreement with the following statements about Medicaid patients as compared to non-Medicaid patients. (If you are not sure about your agreement with a statement, please select 'neither agree nor disagree.')

Medicaid patients are more likely than other patients to

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Miss appointments because of their own negligence	0	0	0	0	0
Miss appointments because they lack transportation	0	O	0	0	0
Have low levels of health literacy	0	O	0	0	0
Fail to comply with treatment plans	0	Ο	0	0	0
Have bad health behaviors	0	O	0	0	0
Engage in drug-seeking	0	0	0	0	0

Now we are interested in your thoughts about patients in the new Medicaid expansion population as compared to patients on traditional Medicaid.

Please rate your agreement or disagreement with the following statements about expansion Medicaid patients as compared to previously existing Medicaid patients. (If you are not sure about your agreement with a statement, please select 'neither agree nor disagree.')

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Miss appointments because of their own negligence	0	0	0	0	0
Miss appointments because they lack transportation	0	0	0	0	0
Have low levels of health literacy	0	O	0	0	0
Fail to comply with treatment plans	0	0	0	0	0
Have bad health behaviors	0	0	0	0	0
Engage in drug-seeking	0	0	0	0	0

Expansion Medicaid patients are more likely than existing Medicaid patients to....

Please pick and rank up to five concerns related to the Medicaid program and Medicaid patients in descending order of importance to your decision to accept or not accept Medicaid patients. (The most important concern should be 1, the second-most important concern should be 2, etc.)

Top 5 most important concerns Patient no-shows Low health literacy among patients Bad health behaviors among patients Poor treatment compliance by patients Drug-seeking by patients Reimbursement rates Time spent complying with program rules (including peer-to-peer discussions) Effect of program rules on the quality of care you provide Time it takes to get reimbursed Inadequate coverage for patients Ability to make referrals to specialists Capacity to take additional patients (staff, space, etc.)

You can move items into the box and reorder them by clicking and dragging them with your mouse.

Do you have patients at your practice that are newly covered by Medicaid in Missouri?

- Yes
- o No
- o I don't know

	Great impact	Some impact	Little impact	No impact
Better control of chronic conditions	0	0	0	0
Improved medication adherence	0	0	0	0
Better ability to work or attend school	0	0	0	0
Improved ability to live independently	0	0	0	0
Improved health behaviors	0	0	0	0
Improved emotional wellbeing	0	0	0	0
Early detection of serious illness	0	0	0	0

Please think about what has changed for your patients <u>who were previously uninsured</u> and are now covered by Medicaid in Missouri (MO Health Net). Rate the extent to which you believe gaining coverage under this program has had an impact on each of the following for these patients.

Please respond to the following statements about discussions related to out-of-pocket medical expenses (deductibles, copays, coinsurance, costs for services not covered) with a patient who has coverage through Medicaid expansion in Missouri.

	Never	Sometimes	About half the time	Most of the time	Always
I start the discussions	0	0	0	0	0
The patient starts the discussions	0	0	0	0	0
Somebody else in the practice starts the discussions (e.g., clinical or nursing staff)	0	0	0	0	0

Thinking of the most recent time you discussed out-of-pocket medical expenses with a patient who has coverage through Medicaid expansion in Missouri, did the conversation result in a change in the management plan for the patient?

- o Yes
- o No
- Don't remember
- I've never had this kind of discussion

Please rate your level of agreement with the following statements. (If you are not sure about your agreement with a statement, please select 'neither agree nor disagree.')

C	Strongly	Disagree	Neither agree	Agree	Strongly
	disagree	Disugree	nor disagree	115100	agree
I know what kind of insurance a patient has at the beginning of an encounter	0	0	0	0	0
I ignore a patient's insurance status on purpose so it doesn't affect my recommendations	O	0	0	0	0
If I need to know a patient's insurance status it is easy to find out	O	0	0	0	0
I only find out about a patient's insurance coverage if they have trouble getting something I recommend	0	0	0	0	0

5	Often	Sometimes	Rarely	Never	Don't know
Specialists	0	0	0	0	0
Medications	0	0	0	0	0
Mental health care	0	0	0	0	0
Dental/oral health care	0	0	0	0	0
Treatment for substance use disorder	0	0	0	0	0
Counseling and support for health behavior change	0	0	0	0	0

How often do your Medicaid patients have difficulty accessing the following?

You indicated Medicaid patient difficulty in accessing certain types of care. Please summarize the difficulties you have observed.

	Often	Sometimes	Rarely	Never	Don't know
Specialists	0	0	0	0	0
Medications	0	0	0	0	0
Mental health care	0	0	0	0	0
Dental/oral health care	0	0	0	0	0
Treatment for substance use disorder	0	0	0	0	0
Counseling and support for health behavior change	0	0	0	0	0

How often do your privately insured patients have difficulty accessing the following?

You indicated privately insured patient difficulty in accessing certain types of care. Please summarize the difficulties you have observed.

We are also interested in connecting with people who make decisions about accepting Medicaid patients. Earlier, you indicated that someone other than you has influence over the decision of whether to accept Medicaid patients at your practice. We would greatly appreciate it if you would connect us with the person at your practice, clinic, or hospital who is most responsible for making this decision.

Please enter the person's name, job title, and contact information below.

- Name (First and last)
- o Job title _____
- o Email_____ • Phone number

Thank you for participating in this research survey. In order to send you the \$20 e-gift card for participating, please complete the following information.

This information will not be included in the data analysis and will be completely separate from your other responses.

You will receive the information you need to use the gift card via email within 1-3 business days.

- 0 Name_____

References

- Bradbury, Christina J. 2015. "Determinants of Physicians' Acceptance of New Medicaid Patients." *Atlantic Economic Journal* 43(2): 247–60.
- Cook, David A et al. 2016. "Incentive and Reminder Strategies to Improve Response Rate for Internet-Based Physician Surveys: A Randomized Experiment." *Journal of Medical Internet Research* 18(9): e244.
- Dykema, Jennifer, Nathan R. Jones, Tara Piché, and John Stevenson. 2013. "Surveying Clinicians by Web: Current Issues in Design and Administration." *Evaluation & the Health Professions* 36(3): 352–81.
- Hill, Ian, Margaret Wilkinson, and John Holahan. 2014. *The Launch of the Affordable Care Act in Selected States: The Problem of Provider Capacity*. Urban Institute.
- Kannan, Sneha. 2015. "What the ACA Should Have Included: Physician Perspectives at the University of Pennsylvania." *AMA Journal of Ethics* 17(7): 680–88.
- Kennedy, Courtney, and Hannah Hartig. 2019. "Response Rates in Telephone Surveys Have Resumed Their Decline." *Pew Research Center*. https://www.pewresearch.org/shortreads/2019/02/27/response-rates-in-telephone-surveys-have-resumed-their-decline/ (July 21, 2023).
- Krieger, Nancy et al. 2023. "Decreasing Survey Response Rates in the Time of COVID-19: Implications for Analyses of Population Health and Health Inequities." *American Journal of Public Health* 113(6): 667–70.
- McManus, Kathleen A, Kelsey McManus, and Rebecca Dillingham. 2018. "National Survey of United States Human Immunodeficiency Virus Medical Providers' Knowledge and Attitudes About the Affordable Care Act." *Clinical Infectious Diseases* 67(9): 1403–10.
- "Missouri Medicaid Enrollment Dashboard." n.d. Washington University in St. Louis Institute for Public Health. https://public.tableau.com/views/CaseloadCounterDataoverTime/CaseloadCounterDBshr unk?:embed=y&:showVizHome=no&:host_url=https%3A%2F%2Fpublic.tableau.com% 2F&:embed_code_version=3&:tabs=no&:toolbar=yes&:animate_transition=yes&:display y_static_image=no&:display_spinner=no&:display_overlay=yes&:display_count=yes&:l anguage=en-US&:loadOrderID=0 (July 21, 2023).
- Neprash, Hannah T., Anna Zink, Joshua Gray, and Katherine Hempstead. 2018. "Physicians' Participation In Medicaid Increased Only Slightly Following Expansion." *Health Affairs* 37(7): 1087–91.
- Reynolds, Julie et al. 2017. "Evaluation of the Dental Wellness Plan: Experiences of Private Practice Dentists After Two Years." *Public Policy Center — University of Iowa*. https://ppc.uiowa.edu/publications/evaluation-dental-wellness-plan-experiences-privatepractice-dentists-after-two-0 (July 21, 2023).

- Shanafelt, Tait D. et al. 2022. "Changes in Burnout and Satisfaction With Work-Life Integration in Physicians During the First 2 Years of the COVID-19 Pandemic." *Mayo Clinic Proceedings* 97(12): 2248–58.
- Siegler, A. 2020. Missouri Medicaid Basics. Missouri Foundation for Health.
- Storozuk, Andie, Marilyn Ashley, Véronic Delage, and Erin A. Maloney. 2020. "Got Bots? Practical Recommendations to Protect Online Survey Data from Bot Attacks." *The Quantitative Methods for Psychology* 16(5): 472–81.
- Tipirneni, Renuka et al. 2019. "Factors Influencing Primary Care Providers' Decisions to Accept New Medicaid Patients under Michigan's Medicaid Expansion." *The American Journal* of Managed Care 25(3): 120–27.
- Zuckerman, Stephen, Laura Skopec, and Joshua Aarons. 2021. "Medicaid Physician Fees Remained Substantially Below Fees Paid By Medicare In 2019." *Health Affairs* 40(2): 343–48.