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Original Research

Extended Pregnancy Medicaid During COVID-19 and Enrollment and Health Care Use in the Postpartum Year

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Policy Points:

- The continuous coverage provision of the March 2020 Families First Coronavirus Response Act resulted in extended postpartum Medicaid for individuals with pregnancy Medicaid coverage, which increased postpartum Medicaid enrollment, improved continuity of coverage, and increased Medicaid-paid emergency department visits and mental and behavioral health diagnoses in the 3 to 12 months postpartum.
- These findings provide insight into the extent to which increased coverage translated into changes in postpartum Medicaid-paid care.
- Communication and outreach are likely needed to ensure that individuals are aware of and able to use their extended postpartum Medicaid coverage.

Context: Before the COVID-19 pandemic, persons with pregnancy Medicaid coverage were typically disenrolled after 60 days postpartum, at which point they could retain Medicaid only if they qualified through another eligibility category (most commonly as a parent). The March 2020 Families First Coronavirus Response Act (FFCRA) extended postpartum Medicaid coverage by requiring states to pause disenrollment in exchange for enhanced federal funding.

Methods: This study examined 2019-2022 Medicaid claims data from 15 states to determine the association between extended postpartum Medicaid coverage and Medicaid-paid care. We employed a continuous difference-in-difference design, leveraging variations in FFCRA-associated eligibility changes (state-level differences in pre-FFCRA pregnancy and parental Medicaid eligibility as a percentage of the federal poverty level [FPL]). The study population

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included individuals with a birth between January 2019 and December 2021 that was paid for by pregnancy Medicaid coverage. The study population was followed for 12 months after childbirth. Outcomes included Medicaid enrollment, continuity of coverage, outpatient and emergency department visits, and pregnancy-related and mental-health–related diagnoses. Care outcomes were measured from 3 to 12 months postpartum.

Findings: In adjusted models, we found that a 100 percentage-point FPL increase in postpartum Medicaid eligibility under the FFCRA was associated with 2.9 additional months of enrollment (95% CI: 0.9, 4.3), a 27.3 percentage-point increase in 12-month continuous Medicaid (95% CI: 2.3, 44.6), 107.2 more emergency department visits per 1,000 beneficiaries (95% CI: 18.7, 167.6), and a 3.2 percentage-point (95% CI: 1.7, 5.4) increase in services with mental and behavioral health diagnoses.

Conclusions: Continuous Medicaid coverage during the FFCRA was associated with longer postpartum enrollment and increases in some health care utilization. However, no increases in Medicaid-paid outpatient care or care for pregnancy-related conditions were found, which may have been due to enrollees' limited awareness of their continued eligibility. Improved communication around extended postpartum Medicaid coverage may improve the translation of coverage into health care access.

Keywords: Medicaid, postpartum period, maternal health, delivery of health care, health services, COVID-19.

Introduction

Increasing Medicaid coverage in the postpartum period is a key national strategy to increase access to health care after childbirth and improve maternal health outcomes in the United States.[1] The United States has the highest maternal mortality rate among high-income nations.[2] Most pregnancy-related deaths are preventable and occur between one day and one year after childbirth, including 30% that take place between 43 and 365 days postpartum.[2,3] Medicaid, which covers more than 40% of deliveries in the United States, can play a crucial role in improving health outcomes in the postpartum period.[4,5] Medicaid coverage through the pregnancy eligibility pathway (hereafter "pregnancy Medicaid") is available to individuals at higher income levels than Medicaid for parents and other adults; however, pregnancy Medicaid coverage traditionally ended after 60 days postpartum. As a result, enrollees in pregnancy Medicaid were left without continuous postpartum Medicaid coverage if they did not meet the lower state Medicaid income eligibility threshold for parents. Consequently, only 68% of prenatal Medicaid enrollees consistently reported Medicaid coverage through the late postpartum period in 2019.[6] Approximately one-half of people with a Medicaid-paid birth were enrolled through the pregnancy eligibility pathway in 2018.[7] Only 45% of individuals in this group retained Medicaid coverage for the full year postpartum compared to approximately 80% among those enrolled through the parental or low-income adult pathways.[7]

In an effort to improve access to health services during the COVID-19 public health emergency, the Families First Coronavirus Response Act (FFCRA) offered states enhanced federal funding in exchange for the continuous enrollment of Medicaid beneficiaries. As all states opted into this provision of the act, the FFCRA created a national extension of Medicaid beyond 60 days postpartum for individuals with pregnancy Medicaid coverage. One previous descriptive study using national Medicaid claims found that continuous enrollment through the FFCRA increased consistent postpartum Medicaid enrollment during the postpartum year, particularly among individuals with pregnancy Medicaid, but this study did not examine changes in health care use.[7] Another study used multistate survey data and found increases in postpartum Medicaid enrollment but no changes in postpartum health care; however, this study was limited to postpartum visits and contraceptive use for health care outcomes and did not capture the full year postpartum because of the time period covered by its data source.[8] In addition, survey data relying on self-reported postpartum insurance status may underestimate Medicaid enrollment, as recent evidence shows that many people were unaware that they remained enrolled in Medicaid during the FFCRA.[9,10] This finding underscores the importance of estimating whether gains in postpartum coverage during the FFCRA were associated with changes in Medicaid-financed health care utilization.

The current study investigated this question using Medicaid claims data from 15 states and a quasi-experimental design to examine a broader set of health services outcomes during the postpartum year.[7,8,11–14] It also adds to the literature by focusing on individuals with pregnancy Medicaid, the group who would benefit from extended postpartum Medicaid. As individuals may have been unaware of their extended postpartum Medicaid enrollment during the FFCRA, these findings can provide insight into the extent to which increased coverage translated into changes in the use of Medicaid-paid care during the postpartum year.

Methods

Data and Study Population

This cohort study used Medicaid claims data from the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) from January 2019 through December 2022. This dataset, provided by the Mathematica Data Innovation Lab, includes state-month–level data for 15 states selected by Mathematica Data Innovation Lab for their high-quality data (Alabama, Georgia, Idaho, Louisiana, Minnesota, North Dakota, Nebraska, Nevada, New York, Oklahoma, Oregon, Rhode Island, South Dakota, Utah, and West Virginia).[15] This dataset included information on eligibility, enrollment, service utilization, and diagnoses among Medicaid beneficiaries

(see Appendix 1).[16] The study population included individuals aged 20 to 49 years with pregnancy Medicaid coverage at delivery, whose postpartum eligibility would be most directly affected by the FFCRA,[17] excluding individuals with other Medicaid eligibility types such as low-income adult/parental Medicaid or emergency Medicaid. State study populations are listed in Appendix 2. We included individuals who gave birth between January 2019 and December 2021, and the measures recorded were based on their Medicaid enrollment records and claims through one year postpartum. We excluded birthing people aged 19 years and younger because of differences in public coverage eligibility for children and adolescents. This study using de-identified data was found to be exempt by the Rutgers University institutional review board.

Variables

The enrollment outcomes tracked in this study included the number of months of postpartum Medicaid enrollment (from 0 to 12) for each individual and the percentage of the birthing population with continuous enrollment through one year postpartum. These enrollment outcomes included Medicaid coverage of any kind and did not have to be the same as the coverage type used at delivery. We also descriptively examined the month through which postpartum individuals maintained Medicaid coverage before and during the FFCRA. To capture the period when pregnancy Medicaid coverage would have ended before the FFCRA, we measured the following health care utilization outcomes between 3 and 12 months postpartum: the number of Medicaid-paid outpatient visits or emergency department visits (measured per 1,000 beneficiaries); the percentage of enrollees with at least one Clinical Classifications Software-Refined (CCSR) service code with a diagnosis for mental, behavioral, or neurodevelopmental disorders on Medicaid-paid visits; and the percentage of enrollees with at least one CCSR service code with a diagnosis for pregnancy, childbirth, and the puerperium on Medicaid-paid visits (described further in Appendix 1). CCSR codes considered for mental and behavioral health included diagnoses such as anxiety, depression, and substance use–related disorders, and CCSR codes considered for pregnancy included screenings and care related to pregnancy as well as complications of pregnancy that occurred in the postpartum period. The CCSR outcomes tracked in this study included diagnosis codes that were identified as admitting, primary, or secondary diagnoses for inpatient claims and as primary or secondary diagnoses for outpatient claims. Because CCSR outcomes included secondary diagnosis codes, visits were included even when the CCSR condition was not the primary reason for care. Each CCSR measure thus represents the percentage of enrollees with at least one visit containing a diagnosis code included in that CCSR category. The CCSR classification system is based on ICD-10-CM diagnosis codes and does not include Current Procedural Terminology (CPT) or Healthcare Common Procedure Coding

System (HCPCS) procedure codes. As a result, the CCSR outcomes captured diagnostic categories for conditions rather than care use.

We used multiple sources of data to measure study covariates. Centers for Disease Control and Prevention (CDC) Vital Statistics natality data were used to measure the state-month proportions of Medicaid-paid births to birthing individuals who were married, had educational attainment of high school or less, had any previous live births, were born in the United States, had a cesarean section as their delivery method, and resided in a metropolitan county. Because the natality data do not distinguish between Medicaid eligibility pathways, these covariates were measured among all Medicaid-paid births rather than only among those with pregnancy-related coverage at delivery, as in the analytic sample from the claims data. Medicaid expansion status was determined on the basis of whether the state had expanded Medicaid under the Affordable Care Act (ACA) in the month of the birth. The monthly state unemployment rate, available from the US Bureau of Labor Statistics, was also included. Finally, the study considered severe maternal morbidity (SMM) at delivery or within 42 days of delivery among individuals with Medicaid-paid live births, which is available in the TAF data. These covariates were selected because of their association in the literature with coverage and health care use, including demographic characteristics,[18] Medicaid expansion,[19,20] the unemployment rate,[21] the delivery method,[22] and SMM.[23]

Study Design

We used a continuous difference-in-difference research design to estimate the association of extended Medicaid eligibility under the FFCRA with Medicaid enrollment and use of Medicaid-paid health care in the postpartum year. Similarly to previous analyses, this approach exploited state variations in the change in Medicaid eligibility for new parents after 60 days postpartum.[8,13] Specifically, the impact of the FFCRA on postpartum Medicaid eligibility in each state depended on the pre-FFCRA difference in the Medicaid eligibility levels for pregnant people and for low-income parents (presented in Appendix 3). States that had larger gaps between pregnancy and parental eligibility saw commensurately larger increases in effective postpartum eligibility under the FFCRA. In this model, a state with a smaller pre-FFCRA difference in the Medicaid eligibility levels would be expected to experience a smaller corresponding change in outcomes compared to a state with a larger increase in postpartum Medicaid eligibility during the FFCRA. By using a continuous measure of percentage-point change in eligibility, the model assumes linearity in the effect of an increase in eligibility (i.e., it assumes that an increase in eligibility from 50% of the FPL to 100% of the FPL would be the same as an increase from 100% of the FPL to 150% of the FPL). This specification allows the association between the size of the postpartum Medicaid eligibility change and changes in outcomes to be interpreted as

a continuous, linear effect of extended postpartum Medicaid eligibility. Among the states included in this study, the change in postpartum Medicaid eligibility during the FFCRA (the difference between state thresholds for pregnancy Medicaid eligibility and parental Medicaid eligibility) ranged from 0 percentage points of the FPL (Idaho) to 190 percentage points of the FPL (Georgia), with a median change in state Medicaid eligibility of 90 percentage points of the FPL, which was slightly higher than the national median increase of 85 percentage points of the FPL (Appendix 3). This approach allowed changes in outcomes during the same time period to be compared across states, thereby controlling for changes affecting all states during the COVID-19 pandemic (discussed further in Appendix 4).

Statistical Analysis

We estimated linear probability models for each outcome with an interaction between the change in Medicaid eligibility levels for new parents under the FFCRA and an indicator for whether the birth occurred before (2019) or during (2020-2021) postpartum continuous enrollment under the FFCRA. We scaled the estimates to reflect changes associated with an increase in postpartum Medicaid eligibility by 100 percentage points of the federal poverty level (FPL). All models included fixed effects for state and birth year. To enhance the precision of our estimates, adjusted models controlled for birth-month fixed effects and for the proportions of Medicaid-paid births to birthing people who had SMM, who were married, who had educational attainment of high school or less, who had any previous live births, who were born in the United States, and who resided in a metropolitan county, as well as for state Medicaid expansion status and state unemployment rate. We additionally included two covariates to control for the context of the COVID-19 pandemic: whether a stay-at-home order was in place in the state in the month during which the birth took place and the state-month COVID-19 mortality rate, available from the CDC. We calculated wild cluster bootstrap standard errors by state because of the small number of state clusters.[24] We weighted analyses by the number of pregnancy Medicaid-covered live births in each state-month. To identify FFCRA-associated changes in the duration of postpartum Medicaid enrollment, we examined the month through which postpartum individuals maintained Medicaid coverage before and during the FFCRA.

Supplemental Analyses

The continuous difference-in-difference design relies on the assumption of strong parallel trends, which presumes that the trends in the outcomes for states with smaller changes in eligibility reflect how the outcomes in states with larger changes in eligibility would have evolved had they instead experienced smaller changes.[25] This

assumption requires that the trends in outcomes among states with smaller changes in postpartum Medicaid eligibility approximate the counterfactual trends that would have been observed in states with larger changes in postpartum Medicaid eligibility had they instead experienced smaller changes in eligibility. To examine trends, we measured the evolution of the outcomes in the pre-FFCRA period using an event study model, examining the interaction between the change in postpartum Medicaid eligibility under the FFCRA and each birth-quarter, omitting the last birth-quarter of 2019 as the reference period (Appendix 4). We additionally explored the differences in outcomes by state-level changes in eligibility by 1) examining the trends in outcomes by state tercile of change in postpartum eligibility, 2) presenting trends in the number of months of Medicaid enrollment by state, and 3) plotting the relationship between the change in outcomes and the change in postpartum eligibility during the FFCRA (Appendices 5-7). Furthermore, we examined the trends in all outcomes during the study period (Appendix 8). We found no evidence of meaningful differences in pre-FFCRA trends across states in terms of the magnitude of the postpartum eligibility change.

Finally, we conducted additional difference-in-difference analyses. First, we estimated Medicaid-paid health care utilization in the period from 0 to 2 months postpartum as a placebo analysis, as this postpartum period would have typically been covered under the pre-FFCRA 60-day postpartum period for pregnancy Medicaid enrollees (Appendix 9). Second, we estimated models using two alternative outcome measures of care use: the percentage of enrollees with at least one outpatient visit and the percentage of enrollees with at least one emergency department visit, both in the period from 3 to 12 months postpartum (Appendix 10). Third, we conducted a sensitivity analysis excluding individuals whose deliveries occurred in January and February 2020 (Appendix 11). We included this period in primary models, as individuals with pregnancy Medicaid who had deliveries in January 2020 would have otherwise lost pregnancy coverage after March 2020, making them the first postpartum cohort with extended eligibility under the FFCRA. Fourth, we estimated models excluding 1) Idaho and Utah, which adopted Medicaid expansion in January 2020, coinciding with the FFCRA, and 2) Idaho, Utah, Nebraska, and Oklahoma, as Nebraska and Oklahoma additionally adopted Medicaid expansion during the FFCRA (Appendix 12). Fifth, we used an alternative difference-in-difference strategy estimating changes in outcomes during the FFCRA among individuals with pregnancy Medicaid compared to low-income adult/parental Medicaid at delivery (Appendix 13).

Results

The study population included 488,601 individuals with pregnancy Medicaid coverage at delivery. Based on overall national vital statistics in the states and months

included in this analysis, 34.1% of individuals with Medicaid-paid deliveries were married, 62.7% had educational attainment of high school or less, 67.7% were multiparous, 77.8% were born in the United States, 79.0% resided in a metropolitan county, and 31.6% had a cesarean section (Table 1). According to the TAF data, 2.1% had SMM at delivery or within 42 days thereof, and 56.1% gave birth in a Medicaid expansion state. Characteristics of the population were similar before and during the FFCRA, except for a significant increase in the proportion of births in Medicaid expansion states by 9.4 percentage points (95% confidence interval [CI]: 0.4, 18.4) from 49.8% to 59.2% and a significant increase in the state unemployment rate by 2.5 percentage points (95% CI: 2.0, 3.0) from 3.6% to 6.1% during the FFCRA.

Figure 1 shows the proportion of individuals with continuous Medicaid coverage for the following time periods: only in the delivery month (month 0), through 1 to 3 months postpartum, through 4 to 6 months postpartum, through 7 to 9 months postpartum, and through 10 to 12 months postpartum (listed separately for each postpartum month in Appendix 14). Before the FFCRA, 14% of individuals with pregnancy Medicaid were enrolled only during the month of delivery (month 0), and 40% had coverage for just 1 to 3 months postpartum, reflecting the period when pregnancy Medicaid typically ended after 60 days postpartum. Only 37% of individuals with pregnancy Medicaid pre-FFCRA had continuous Medicaid coverage through the period from 10 to 12 months postpartum. During the FFCRA, a similar share had Medicaid only in the delivery month (16%), but only 3% lost coverage between 1 and 3 months postpartum. Continuous Medicaid coverage through 10 to 12 months postpartum rose substantially during the FFCRA, to 77% of individuals maintaining Medicaid throughout this period.

In adjusted difference-in-difference models, we found that a 100 percentage-point FPL increase in postpartum Medicaid eligibility during the FFCRA was associated with an increase in Medicaid enrollment by 2.9 months (95% CI: 0.9, 4.3) and an increase in having continuous Medicaid for 12 months postpartum by 27.3 percentage points(95% CI: 2.3, 44.6) (Table 2). In the period from 3 to 12 months postpartum, a 100 percentage-point FPL increase in postpartum Medicaid eligibility during the FFCRA was associated with an increase in Medicaid-paid emergency department use by 107.2 visits per 1,000 beneficiaries (95% CI: 18.7, 167.6) and an increase in the percentage of enrollees receiving at least one service with a mental and behavioral health CCSR diagnosis by 3.2 percentage points (95% CI: 1.7, 5.4). We found no statistically significant evidence of FFCRA-associated changes in outpatient visits or the percentage of enrollees receiving at least one service with a CCSR pregnancy diagnosis in the period from 3 to 12 months postpartum.

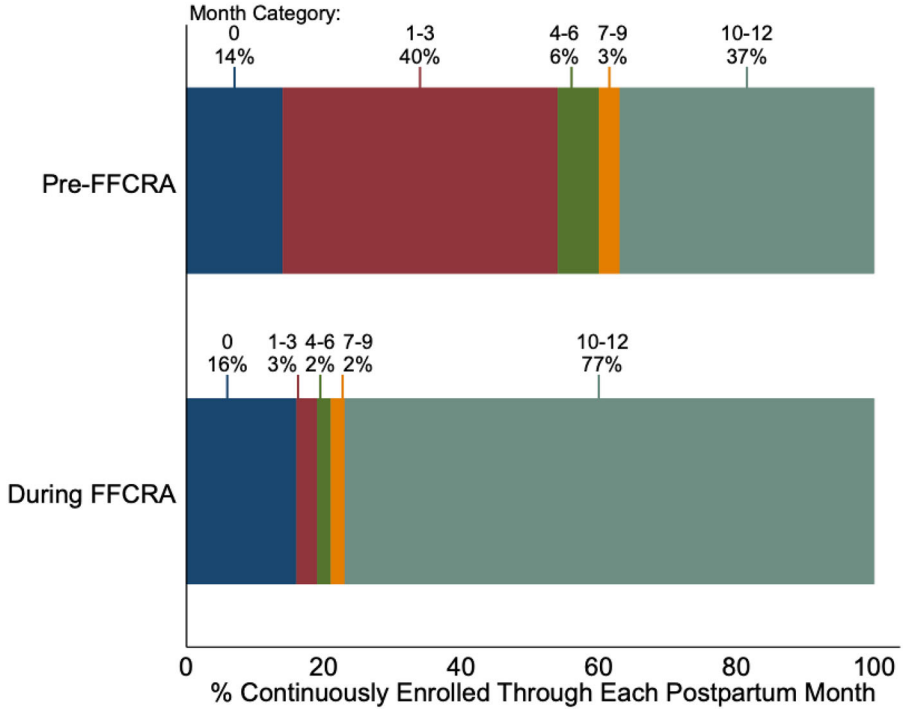
In placebo analyses, we found no evidence of significant FFCRA-associated changes in Medicaid-paid health care in the period from 0 to 2 months postpartum (Appendix 9). In analyses using alternative outcome definitions for Medicaid-paid outpatient and emergency department care, we found that a 100 percentage-point FPL increase in

Table 1. Demographic Characteristics by FFCRA Period of Delivery, 2019-2021[a]

Characteristic	Overall, 2019-2021 (%)	Pre-FFCRA, 2019 (%)	During the FFCRA, 2020-2021 (%)	Difference, Pre- to During the FFCRA
Married	34.1	35.0	33.6	−1.4 (−2.8 to −0.0)
High school or less educational attainment	62.7	62.5	62.8	0.3 (−0.5 to 1.1)
Any previous live births	67.7	67.8	67.6	−0.2 (−0.7 to 0.3)
Born in the United States	77.8	76.5	78.5	1.9 (−0.4 to 4.3)
Residence in a metropolitan county	79.0	79.6	78.7	−0.9 (−2.9 to 1.2)
Cesarean section delivery method	31.6	31.2	31.8	0.6 (−0.0 to 1.2)
Severe maternal morbidity	2.1	2.1	2.2	0.1 (−0.0 to 0.2)
Medicaid expansion state	56.1	49.8	59.2	9.4* (0.4 to 18.4)
Monthly state unemployment rate	5.3	3.6	6.1	2.5*** (2.0 to 3.0)

FFCRA, Families First Coronavirus Response Act.
*$P < .05$, **$P < .01$, ***$P < .001$.
[a] Data from the authors' analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) data for 15 states, 2019-2022.

Figure 1. Month Through Which Individuals Maintained Continuous Medicaid Coverage in the Postpartum Year Before and During the FFCRA, 2019-2022



FFCRA, Families First Coronavirus Response Act. Data from the authors' analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) data for 15 states, 2019-2022. Colors represent different months in the postpartum year through which individuals maintained continuous Medicaid coverage. See Appendix 14 for full results by postpartum month.

postpartum Medicaid eligibility during the FFCRA was associated with an increase in the percentage of enrollees with at least one outpatient visit by 14.6 percentage points (95% CI: 7.7, 18.5) and an increase in the percentage of enrollees with at least one emergency department visit by 5.8 percentage points (95% CI: 1.5, 8.6) in the period from 3 to 12 months postpartum (Appendix 10). In sensitivity analyses that excluded deliveries from January to February 2020 and that omitted states that adopted Medicaid expansion in 2020-2021, estimates were similar to those from the main models for both effect size and statistical significance (Appendices 11 and 12).

Table 2. Association of Continuous Medicaid Eligibility with Medicaid Enrollment and Health Care Use in the Postpartum Year, 2019-2022[a]

Outcome	Pre-FFCRA, 2019	During the FFCRA, 2020-21	Change, Pre- to During the FFCRA	Unadjusted Difference-in-Difference, 95% CI	Adjusted Difference-in-Difference, 95% CI
Months of Medicaid enrollment	5.8	9.6	3.8*** (3.1, 4.5)	2.5 (−0.6, 4.1)	2.9** (0.9, 4.3)
Percentage with continuous Medicaid in postpartum year	36.1	76.1	40.0*** (34.2, 45.7)	24.0 (−8.5, 42.1)	27.3* (2.3, 44.6)
Outpatient visits per 1,000 beneficiaries	3304.4	5043.1	1738.6*** (1323.7, 2141.6)	370.0 (−648.1, 1097.1)	589.2 (−259.4, 1,394.7)
Emergency department visits per 1,000 beneficiaries	325.9	487.8	161.9*** (133.0, 190.1)	100.1 (−27.0, 171.2)	107.2* (18.7, 167.6)
Percentage of enrollees with mental and behavioral CCSR diagnoses	14.8	21.9	7.1*** (5.6, 8.5)	2.3 (−0.8, 6.3)	3.2** (1.7, 5.4)
Percentage of enrollees with pregnancy CCSR diagnoses	13.5	17.8	4.3*** (3.4, 5.1)	0.7 (−0.4, 3.0)	1.0 (−0.4, 3.1)

CCSR, Clinical Classifications Software-Refined; FFCRA, Families First Coronavirus Response Act.
*$P < .05$, **$P < .01$, ***$P < .001$
[a] Data from the authors' analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) data for 15 states, 2019-2022.

In models using an alternative difference-in-difference approach estimating changes among individuals with pregnancy Medicaid compared to individuals with low-income adult/parental Medicaid at delivery during the FFCRA, we found estimates that were consistent with the main models, with overlapping confidence intervals for increases in months of Medicaid enrollment, continuous postpartum Medicaid eligibility, emergency department visits, and mental and behavioral health CCSR diagnoses (Appendix 13). In these models, we also found significant increases in outpatient visits (845.3 visits per 1,000 beneficiaries, 95% CI: 493.8, 1196.9) and in the percentage of enrollees with pregnancy CCSR diagnoses (1.9 percentage points, 95% CI: 1.1, 2.6) among pregnancy Medicaid enrollees relative to adult/parental Medicaid enrollees during the FFCRA. The similar estimates for enrollment, emergency department visits, and mental and behavioral health diagnoses reinforce the findings from the main continuous difference-in-difference approach. These alternative models suggest that, although pregnancy Medicaid enrollees in states with larger increases in postpartum Medicaid eligibility did not experience correspondingly larger changes in outpatient care or pregnancy-related diagnoses, pregnancy Medicaid enrollees overall had larger increases in these outcomes than adult/parental Medicaid enrollees during the FFCRA, whose postpartum eligibility was less affected by the FFCRA continuous coverage provision.

Discussion

In this quasi-experimental analysis using Medicaid claims data from 15 states, the FFCRA continuous enrollment provision was found to be associated with a longer duration of Medicaid enrollment and greater continuity of coverage in the postpartum year. In the period from 3 to 12 months postpartum, the period of newly extended postpartum Medicaid eligibility for pregnancy Medicaid enrollees, continuous coverage under the FFCRA was associated with increases in the percentage of enrollees who had at least one Medicaid-paid visit with a mental or behavioral health diagnosis and in Medicaid-paid emergency department use, equivalent to just under one in ten enrollees having an additional emergency department visit, on average. Enrollment and health care use during this later period from 3 to 12 months postpartum have the potential to affect maternal health, as pregnancy-related conditions that are leading causes of maternal morbidity and mortality, such as hypertension and depression, often persist or newly develop during this period.[26–31] These findings are consistent with prior work finding increases in continuous Medicaid enrollment during the FFCRA and no change in postpartum visits in the early postpartum period.[8]

This study builds on the prior literature on the impact of continuous postpartum Medicaid eligibility by examining a broader set of postpartum health care services and focusing on care use during the period from 3 to 12 months postpartum, when

extended Medicaid coverage under the FFCRA would be expected to influence care use.[7,8,11–13] Additionally, although some prior studies have focused on individuals with pregnancy Medicaid eligibility, FFCRA-related changes for this population remain less extensively studied.[7,13] This study specifically assessed changes in coverage and care use among those individuals with pregnancy Medicaid at delivery whose postpartum eligibility was extended under the FFCRA continuous coverage provision. Although the study population excluded individuals with emergency Medicaid coverage, some of the 16% of enrollees who had Medicaid coverage only in their delivery month or for a short duration may have received hospital presumptive eligibility for pregnancy Medicaid and did not subsequently transition to Medicaid enrollment. Recent research found that only 37.1% of individuals who received hospital presumptive eligibility for Medicaid in the emergency department in California subsequently enrolled in Medicaid within six months, suggesting that nearly two-thirds of those with presumptive Medicaid eligibility did not successfully transition to Medicaid enrollment.[32] Individuals who received presumptive eligibility but were not subsequently determined to be eligible for Medicaid were not considered to be validly enrolled beneficiaries and therefore were not eligible for continuous coverage under the FFCRA.[33,34]

Recent studies have shown that, during the FFCRA, many Medicaid enrollees were unaware that they still had coverage.[9,10] This lack of awareness may have limited the extent to which extended coverage improved access to medical care. A prior policy that increased postpartum Medicaid enrollment, namely, Medicaid expansion under the Affordable Care Act, was associated with modest increases in postpartum outpatient care, estimated at just under one additional visit in the period from 2 to 6 months postpartum.[19] Previous analyses have estimated that individuals with full coverage in the postpartum year typically have only two or three outpatient visits in the first 6 months postpartum.[19,20] Together, these findings suggest that, even with extended postpartum coverage, large increases in outpatient care may not be expected, particularly if clear communication about extended eligibility is absent or if other barriers to care persist.[35] However, although this study did not find an association between increased postpartum Medicaid eligibility during the FFCRA and the number of outpatient visits, the results showed that the FFCRA was associated with a significant increase in the percentage of enrollees who had at least one outpatient visit. This suggests that extended coverage may have facilitated initial connections to outpatient care, even if it did not lead to significant increases in the overall average frequency of outpatient visits. In addition, the results suggest that pregnancy Medicaid enrollees experienced larger increases in postpartum outpatient visits during the FFCRA compared with adult/parental Medicaid enrollees, whose postpartum eligibility was less directly affected by the continuous coverage provision.

Of the health care outcomes included in this study, increases in emergency department use and in the percentage of enrollees with any visit that documented a mental

or behavioral health diagnosis were consistently associated with the FFCRA. Because the data included only Medicaid-paid visits, the study could not capture health care that was paid for out of pocket, received but not billed to Medicaid, or paid for with private coverage. Therefore, it is not possible to determine from this study whether the observed increases in emergency department use represents an increase in use overall or a shift to Medicaid-paid care from noninsurance or private insurance. Even though reduced emergency department use is often cited as a motivation for insurance expansions, most previous evidence on recent Medicaid expansions has identified increases in emergency department visits,[36] suggesting that, at least in part, the findings of this study could represent real increases health care use, rather than shifts in the payer mix.[37]

Whereas other research has found that overall postpartum mental health diagnoses increased during the COVID-19 pandemic,[38] the analytic approach employed in this study controlled for pandemic effects that were consistent across states. However, if there were differential pandemic-related changes in demand for postpartum mental health care across the sample states, the estimates could be affected. Because the model identifies associations with the magnitude of the change in state postpartum Medicaid eligibility, the study's findings suggest that increases in postpartum mental and behavioral health diagnoses were at least partly driven by extended postpartum Medicaid eligibility rather than by broader pandemic-related mental health effects.

The findings reported here could provide insight into potential effects from 12-month state postpartum Medicaid extensions, adopted in 48 states and the District of Columbia under the American Rescue Plan Act (ARPA) as of January 2025.[39] Improving awareness of extended postpartum Medicaid eligibility under the ARPA may be necessary to achieve greater improvements in health care access than those observed under the FFCRA. Because this study's estimates represent the effects of a 100 percentage-point FPL eligibility increase, states with smaller differences between parental and pregnancy eligibility may see smaller effects on postpartum outcomes under the ARPA. The median change among the 49 jurisdictions that adopted the ARPA extensions was an 80 percentage-point FPL increase in 2023.[40] In addition, the ARPA extensions may have larger effects outside of a pandemic context, as COVID-19 dampened perinatal care use.[41,42] As the ultimate goal of the ARPA extensions is to improve maternal outcomes,[1] future research should examine the effects of extended postpartum Medicaid eligibility on maternal health.

Limitations

This study had several limitations. First, the data included only postpartum Medicaid-paid health care. As a result, no insight could be provided into whether the observed increases health care use represented improvements in health care access or shifts in the payer for care. With claims data, it was not possible to assess whether

there were changes in unmet need for care among postpartum individuals as a result of the FFCRA. However, this dataset did allow for the examination of a broad set of care use and outcomes in the postpartum year. Second, the continuous enrollment provision under the FFCRA coincided with the COVID-19 pandemic, which could have dampened increases in health care use among all states and may limit this study's generalizability to future periods. Third, because of data quality in the TAF, the Mathematica Data Innovation Lab included only 15 states in the dataset, which may not be generalizable to national estimates or to specific states not included in the study. The states in this study exhibited a similar median increase in postpartum Medicaid eligibility compared to the median change across all states (90 percentage-point FPL increase vs 85 percentage-point FPL increase); however, the impact of these eligibility changes on outcomes may vary across state contexts. Because demographic characteristics such as marriage, education, and metropolitan residence were not available in the claims data, we used CDC natality data for estimates of these variables among individuals with Medicaid coverage at delivery. As a result, there is likely some measurement error in these variables, as these characteristics could differ from those of the study population of individuals with coverage through the pregnancy Medicaid pathway, which limits the ability to adjust for these variables in the current study.

Finally, the continuous difference-in-difference models, which estimate the average association between a 100 percentage-point FPL change in postpartum eligibility and the outcomes across the states included in this study, assumes a linear relationship between the outcomes and the size of the eligibility change, such that an increase in the FPL eligibility has the same expected effect regardless of the baseline eligibility level. The plots of outcomes by state tercile of change in postpartum eligibility (Appendix 5) suggest that states with the largest increases in postpartum eligibility had correspondingly larger changes in the postpartum outcomes that were affected by the FFCRA. However, this assumption of linearity may not hold if the effects are nonlinear, including if there are diminishing effects after a certain threshold; varying effects across different baseline eligibility levels; or differences in policy implementation or other state-specific factors or policies, such as the use of presumptive eligibility.[33,34,43] Recent research found that state-level differences in factors such as communication strategies and political commitment led to variations in how the FFCRA continuous coverage policy was implemented and rolled back, suggesting that the observed average effects likely mask variations in state experiences.[43] However, despite this potential heterogeneity and nonlinearity, the estimates of the average effects reported herein were stable across specifications. The alternative model comparing changes in outcomes for individuals with pregnancy Medicaid at delivery to those with adult/parental Medicaid at delivery during the FFCRA did not rely on the linearity of effects across changes in postpartum eligibility and produced estimates that were comparable to those obtained using the main models (Appendix 13). This supports the validity of the primary findings of this study and suggests

that the main results were not driven solely by the assumption of linearity in the models. Although this does not exclude the possibility of nonlinear or state-specific differences, it indicates that the overall relationship between extended postpartum eligibility during the FFCRA and increases in coverage and care use for pregnancy Medicaid enrollees was consistent across analytic approaches.

Conclusions

Continuous enrollment under the FFCRA improved consistent postpartum Medicaid coverage and increased some types of health care use during the postpartum year. However, the extent to which extended coverage improved care access may have been limited by a lack of enrollee awareness of their continued eligibility. Because the data used in this study captured only Medicaid-paid services, observed increases in use may reflect shifts in payer rather than overall increases in utilization. Still, maintaining Medicaid coverage can reduce exposure to high health care costs and can support access to needed care, offering insight into potential benefits of state 12-month postpartum Medicaid extensions under the American Rescue Plan

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Supplementary Material

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