

# Learning from Baseline Data to Leverage the Postpartum Medicaid Extension in Illinois

May 9, 2024

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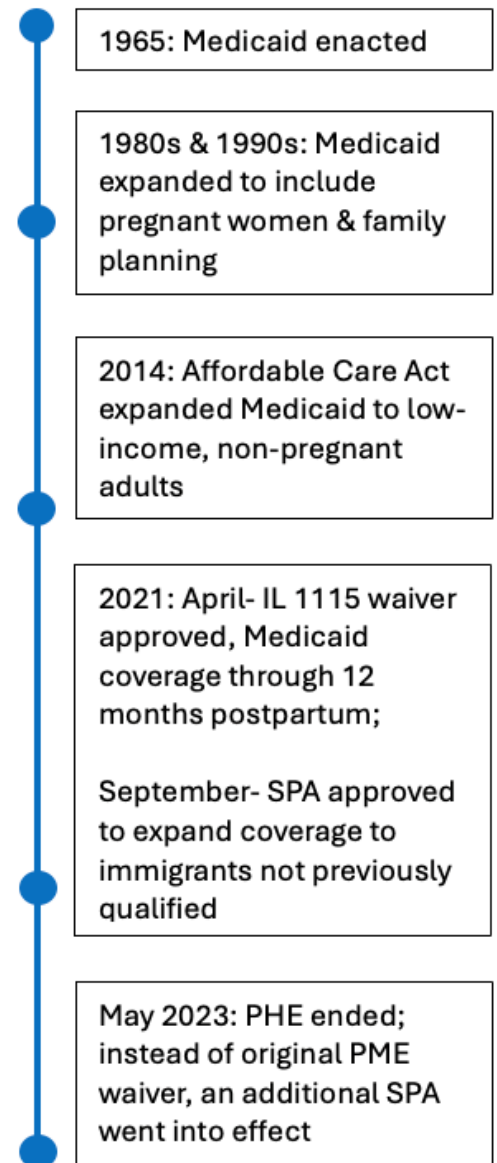
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# LEARNING FROM BASELINE DATA TO LEVERAGE THE POSTPARTUM MEDICAID EXTENSION IN ILLINOIS

## Background

Given increased attention to the maternal health crisis, its heavy toll on Black birthing persons, and recognition that most pregnancy-related deaths occur in the extended postpartum period, Illinois implemented a Postpartum Medicaid Extension (PME).

- Medicaid’s role in providing coverage for women’s reproductive and pregnancy health has expanded greatly since its enactment in 1965.<sup>1</sup> Changes beginning in the mid-1980s ultimately led to the decoupling of cash assistance receipt from Medicaid coverage during pregnancy through 60 days postpartum. Expansions continued in the mid-1990s with the Family Planning Medicaid expansion,<sup>2</sup> and later with the provision of Medicaid coverage to low-income non-pregnant adults through the Affordable Care Act (2014).<sup>1</sup>
- Given increased attention to the maternal health crisis,<sup>3,4</sup> the latest Medicaid expansion extends Medicaid coverage beyond 60 days postpartum to 12 months postpartum. In April 2021, Illinois became the first state to have a 1115 waiver approved by the Centers for Medicare and Medicaid Services (CMS), providing full benefit Medicaid coverage through 12 months postpartum (effective through December 2025). In September 2021, CMS approved a Title XXI (CHIP) Health Services Initiative State Plan Amendment (SPA) that enabled Illinois to extend coverage to immigrants who did not qualify under the 1115 waiver.
- Although Illinois maintained the distinction of having the first approved Postpartum Medicaid Extension (PME), this waiver never went into effect due to the COVID-19 Public Health Emergency (PHE) in which coverage automatically continued for all Medicaid recipients. During this period, an additional SPA was obtained to replace the 1115 waiver. When the PHE ended in May 2023, the second SPA (rather than waiver) for the Illinois PME went into effect.
- Evaluations of PMEs, such as the one implemented in Illinois, are necessary to determine their effect on improving maternal/women’s health.



## Objective

In preparation for the evaluation of the Postpartum Medicaid Extension in Illinois, it is important to examine baseline data from the pre-PME period to ascertain the sub-groups of eligible persons for whom improved outcomes can be expected.

- The objective of this analysis was to generate estimates of self-reported Well-Woman Visit (WWV) rates prior to the Illinois PME. WWV receipt was selected because it is a healthcare utilization outcome expected to improve as a result of the PME. This analysis used data prior to 2020 from two population-based datasets, the Pregnancy Risk Assessment Monitoring System (PRAMS) and the Behavioral Risk Factor Surveillance System (BRFSS), to identify the sub-groups of eligible persons most likely to be positively affected by the PME.

## Methods and Results

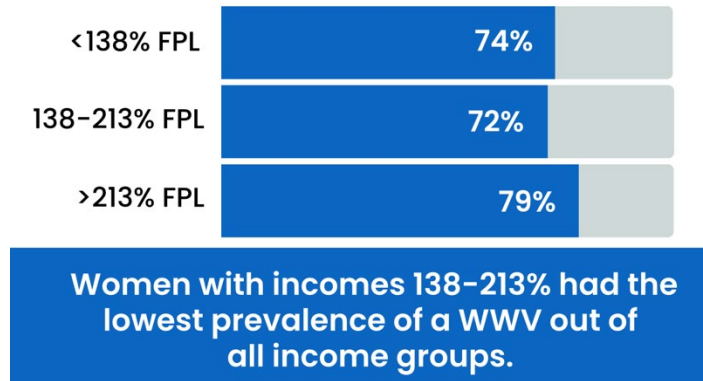
This analysis focused on the WWV as the outcome of interest because it can be measured in the later postpartum period and is recommended for non-pregnant women. Pre-PME prevalence estimates for self-reported WWV receipt using BRFSS and PRAMS data within income strata (<138% Federal Poverty Level [FPL], 138-213% FPL, and >213% FPL) were generated. Using multivariable binomial regression, adjusted prevalence differences (aPDs) were produced to compare estimates across income groups, overall and within racial/ethnic sub-groups. The aim of generating aPDs is to determine whether there are differences in the prevalence of the WWV prior to the PME between income groups, after statistically controlling for other differences between these groups. All analyses used the complex sample survey procedures in SAS 9.4 and Stata 13.1 to account for the sampling design of BRFSS and PRAMS.

### BRFSS Analysis

- Illinois 2018-2019 BRFSS<sup>5</sup> data were used to examine women's receipt of a WWV prior to the PHE and the implementation of the PME. The sample was restricted to women of reproductive age (WRA), 18-44 years (hereafter referred to as "women"), who were not missing information on income and household size or WWV receipt, resulting in a sample size of 1718 individuals. BRFSS data were weighted to produce estimates representative of all women of reproductive age in Illinois.
- Using household income and size, income as a percentage of the FPL was calculated<sup>6</sup> and categorized as follows: <138% FPL, 138-213% FPL, and >213% FPL to align with Medicaid income eligibility for non-pregnant (<138% FPL) and pregnant ( $\leq$ 213% FPL) persons in Illinois. The PME enables birthing persons in the 138-213% FPL group to remain on Illinois Medicaid beyond 60 days postpartum to one year postpartum.
- The outcome of interest was self-reported receipt of a WWV in the past 12 months. We estimated pre-PME WWV prevalence and differences by income group and demographic characteristics. Adjusted prevalence differences (aPDs) and 95% confidence intervals (CI) were generated.

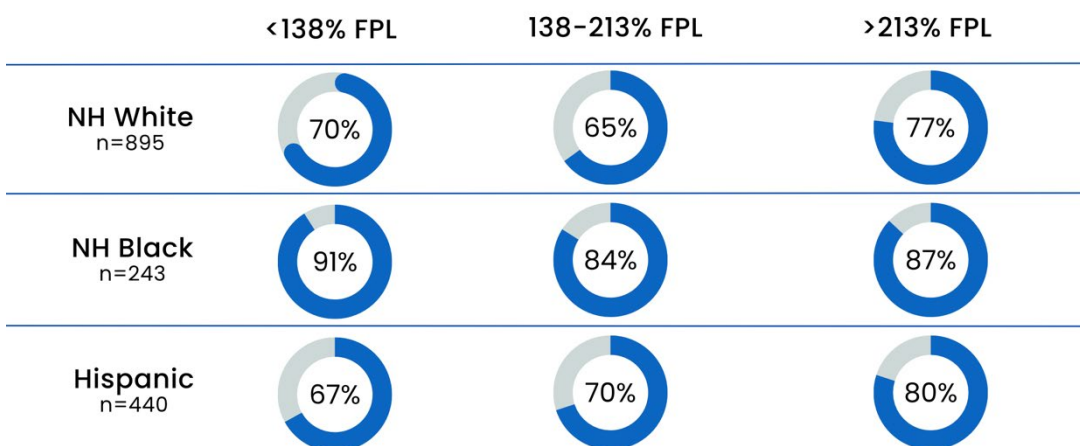
- The self-reported prevalence of receiving a WWV in the past 12 months for women with income levels of <138%, 138-213%, and >213% FPL was 73.8%, 72.1%, and 79.0%, respectively (Figure 1).
- After adjusting for age, race/ethnicity, and education, women with incomes 138-213% FPL had a WWV prevalence 7.5 percentage points lower (95% CI: -14.3, -0.7) than WRA with incomes >213% FPL.

**Figure 1. Self-Reported Prevalence of Receiving a WWV in the Past 12 months by Income Group among women, Illinois BRFSS 2018-2019**



- Within each income group, the prevalence of receiving a WWV was highest for non-Hispanic (NH) Black compared to NH White and Hispanic women (Figure 2).
- After adjustment, there was a significantly lower prevalence of receiving a WWV among White women with incomes 138-213% FPL and among Hispanic women with incomes <138% FPL compared to women in the same racial/ethnic group with incomes >213% FPL (Figure 2).
- All other adjusted associations, including those among NH Black women, were not statistically significant.

**Figure 2. Self-Reported Prevalence of Receiving a WWV in the Past 12 months by Income Group among women, Stratified by Race/Ethnicity, Illinois BRFSS 2018-2019**

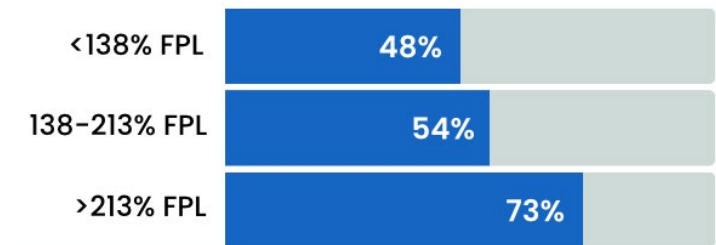


NH White women with incomes 138-213% FPL and Hispanic women with incomes <138% FPL had a significantly lower prevalence of receiving a WWV compared to women in the same racial/ethnic group with incomes >213%, even after adjusting for covariates.

### PRAMS Analysis

- An analysis was conducted using Illinois Phase 8 PRAMS data from 2016-2019.<sup>7</sup> PRAMS data were weighted to produce estimates representative of multiparous birthing persons with a recent live birth in Illinois.
  - To mimic well-woman care utilization in the extended postpartum period to the extent possible, self-reported receipt of a prepregnancy check-up within 12 months prior to the PRAMS index pregnancy was measured among multiparous PRAMS participants.
  - Income as a percentage of the FPL prior to the birth of the index infant was calculated by combining household income and household size.<sup>6</sup> Cutoffs for the three-category income variable were the same as for the BRFSS analysis. After restricting to those with complete information for income as a percentage of the FPL, the total sample size was 2905. Prevalence estimates were generated for the receipt of a prepregnancy check-up.
  - To assess the relationship between income group and receipt of a self-reported prepregnancy check-up, multivariable binomial regression models were run using >213% FPL as the common comparison group. Overall prevalence differences and 95% CIs adjusted for maternal race/ethnicity, age, and education were generated. Then, aPDs and 95% CIs adjusted for age and education were generated within each racial/ethnic group.
- The self-reported prevalence of receiving a prepregnancy checkup for multiparous birthing persons with income levels of <138%, 138-213%, and >213% FPL was 48.4%, 53.8% and 72.8%, respectively (**Figure 3**).
  - Those with **incomes <138% FPL had a prepregnancy checkup prevalence 11 percentage points lower** (95% CI: -16.7, -5.4) and those in **the 138-213% FPL group had a prevalence 9 percentage points lower** (95% CI: -15.7, -2.9) compared to birthing persons with incomes >213% FPL, after adjusting for covariates.

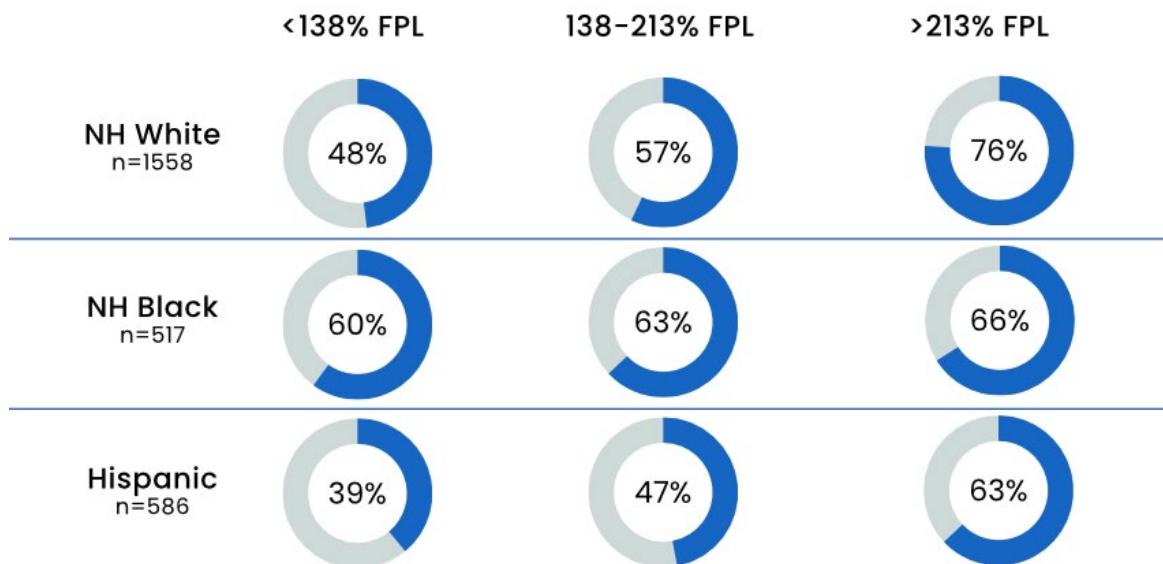
**Figure 3. Self-Reported Prevalence of Receiving a Prepregnancy Checkup by Income Group among Multiparous Birthing Persons, Illinois PRAMS 2016-2019**



**Those with incomes <138% FPL and 138-213% FPL had a significantly lower prevalence of receiving a prepregnancy checkup compared to those with incomes >213% FPL.**

- In the two lowest income groups, **NH Black multiparous birthing persons had the highest self-reported prevalence of receiving a prepregnancy check-up (Figure 4).**
- Among NH White multiparous birthing persons, those in the <138% income group had a 16-percentage point lower adjusted prevalence (95% CI: -23.8, -8.1), and those in the 138-213% FPL group had a 12-percentage point lower adjusted prevalence (95% CI: -20.3, -2.9) of receiving a prepregnancy checkup compared to the >213% FPL income group.
- There were no significant differences in receiving a prepregnancy checkup between income groups among NH Black and Hispanic multiparous birthing persons.

**Figure 4. Prevalence of Receiving a Prepregnancy Checkup by Income Group among Multiparous Birthing Persons, Stratified by Race/Ethnicity, Illinois PRAMS 2016–2019**



**Among multiparous birthing persons in the two lowest income groups, those identifying as NH Black had the highest self-reported prevalence of receiving a prepregnancy check-up.**

## Summary of Findings

The Illinois PME has the potential to improve the receipt of well-woman care in the 138-213% FPL income group, the group eligible for the PME:

- Based on BRFSS data from 2018-2019, women in the 138-213% FPL income group have the lowest prevalence of self-reported receipt of a WWV in the past year, although the prevalence was similar to that for the <138% FPL group.
- Based on PRAMS data from 2016-2019, multiparous birthing persons in the 138-213% FPL group have the second lowest prevalence of a self-reported prepregnancy checkup in the 12 months prior to pregnancy, with the lowest prevalence among those <138% FPL, suggesting substantial room for improvement in both groups.
- Adjusted prevalence differences between the 138%-213% and >213% FPL groups were significant in both the BRFSS and PRAMS analyses, suggesting potential to narrow the gap between women/birthing persons eligible for the PME and their higher income counterparts.

Due to their higher self-reported utilization of well-woman care, the analysis also suggests that Black women in Illinois may not be the group most likely to benefit from extended access to postpartum care through the PME **without additional focused attention** to the quality of care received and to their particular health and social needs and experiences:

- Whether examining the racial/ethnic-specific prevalence of the WWV (BRFSS data) or the racial/ethnic-specific prevalence of a prepregnancy check-up (PRAMS data), Black women/birthing persons have the highest estimates of self-reported well-woman care in the <138% and 138-213% FPL groups in both datasets, and in the >213% FPL group based on the BRFSS data.

## Implications for Policy and System Change

Given the higher prevalence of self-reported well-woman care receipt among Black women in the pre-PME period, results from both datasets suggest that there is more room for improvement as a result of the PME in utilization of well-woman care for Hispanic and White compared to Black women/birthing persons in Illinois. As such, **unless attention is paid to the content and quality of those well-woman visits, Black women/birthing persons will not fully reap the benefits of their higher rates of attendance, particularly because they face other barriers related to the structural and social determinants of health including racism and lack of respectful care.**<sup>8</sup> Increased focus on the quality and content of care in the extended postpartum period will in turn benefit all women/birthing persons as they take advantage of the additional health care coverage available through the PME.

## Recommendations for System Change

- 1) Conduct an extensive outreach and communications campaign focused on the PME in Illinois so that all birthing persons covered by Medicaid and their providers know that postpartum coverage continues through 12 months.
- 2) Design and implement new approaches to care to maximize the benefits of the PME, including elevation of the medical care home for women's primary/interconception care,<sup>9</sup> efforts to reduce provider bias in the delivery of care, and implementation of comprehensive and holistic postpartum care models such as the Two-Generation approach at the [University of Illinois Health](#) system.<sup>10-11</sup>
- 3) Develop a [Performance Measurement System within Medicaid](#) as proposed by the Illinois Maternal Health Task Force, focused on the extended postpartum period. Such a system is necessary to ensure that Medicaid providers are aware of the PME and pay particular attention to health care delivery in the extended postpartum period.
- 4) Structure enhanced postpartum/interconception care benefits that include reimbursement for case management/care coordination, home visiting, doula supports, and other services to address the structural/social determinants of health.<sup>8,12</sup>



## Conclusion

As the PMEs are rolled out in Illinois and other states across the nation, it is important to recognize that extended coverage is not tantamount to the additional changes needed to actually ensure access to quality care. Zephyrin and Johnson<sup>13</sup> note that providing additional months of Medicaid coverage through the PME is only one component of what must happen to improve outcomes. With this in mind, the Illinois PME may be considered necessary but not sufficient for addressing racial/ethnic inequities in maternal health in the state. While access to care in the extended postpartum period is essential, without extra attention to the quality of health care received and the structural determinants of health including institutional and interpersonal racism, the benefits of the PME for Black women may not be fully realized. Leveraging the opportunity that the PME provides to design and support delivery models that maximize the effects of such coverage will be essential to address the maternal health crisis in Illinois and the US.



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For more information on this topic, the authors recommend the full report:

<https://doi.org/10.1101/2024.05.03.24306844>



### Acknowledgements:

We would like to acknowledge the support of the Illinois Department of Public Health (IDPH) Pregnancy Risk Assessment Monitoring System (PRAMS) and Behavioral Risk Factor Surveillance System (BRFSS) programs for providing access to the data used in this analysis and the Maternal and Child Health Block Grant Program (Illinois Title V) for financial support of this project. The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Illinois Department of Public Health.

The authors acknowledge the constructive feedback of Kay Johnson and Dr. Jennifer Kwok on earlier versions of this work.

### References

1. Johnson K. Medicaid and CHIP coverage for women and children: Politics and policy. In: Russel K, Verbiest S, eds. *Kotch's Maternal and Child Health: Problems, Programs, and Policy in Public Health*. 4th ed. Jones & Bartlett Learning; 2021.
2. Guttmacher Institute. *Medicaid Family Planning Eligibility Expansions*.; 2023. <https://www.guttmacher.org/state-policy/explore/medicaid-family-planning-eligibility-expansions>
3. Wang S, Rexrode KM, Florio AA, Rich-Edwards JW, Chavarro JE. Maternal mortality in the United States: Trends and opportunities for prevention. *Annu Rev Med*. 2023;74(1):199-216. doi:10.1146/annurev-med-042921-123851
4. Hoyert DL. *Maternal Mortality Rates in the United States, 2021*. National Center for Health Statistics; 2023. <https://stacks.cdc.gov/view/cdc/124678>
5. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System - Survey Data & Documentation. Centers for Disease Control and Prevention. Published

August 31, 2023. Accessed October 13, 2023.  
[https://www.cdc.gov/brfss/data\\_documentation/index.htm](https://www.cdc.gov/brfss/data_documentation/index.htm)

6. USDHHS. Prior HHS Poverty Guidelines and Federal Register References. Office of the Assistant Secretary for Planning and Evaluation. Accessed February 1, 2023.  
<https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references>
7. Centers for Disease Control and Prevention. Pregnancy Risk Assessment Monitoring System Methodology | CDC. Centers for Disease Control and Prevention. Published March 28, 2023. Accessed October 13, 2023. <https://www.cdc.gov/prams/methodology.htm>
8. Crear-Perry J, Correa-de-Araujo R, Lewis Johnson T, McLemore MR, Neilson E, Wallace M. Social and structural determinants of health inequities in maternal health. *Journal of Women's Health*. 2021;30(2):230-235. doi:10.1089/jwh.2020.8882
9. Hill I, Dubay L, Courtot B, et al. *Strong Start for Mothers and Newborns Evaluation: Year 5 Project Synthesis Volume 1: Cross-Cutting Findings*. Urban Institute; 2018.  
<https://downloads.cms.gov/files/cmml/strongstart-prenatal-finalevalrpt-v1.pdf>
10. Handler A, Bergo C, Dominik B, Bier E, Caskey R. A two-generation approach to postpartum care: Building on the well-baby visit. *Birth*. 2021;48(3):347-356. doi:10.1111/birt.12544
11. Glasgow, AE, Wagner-Schuman, M., Knepper, A., Holicky, A., Angulo, M., Handler, A, Harris, B., Hickey, E., Manrique, Y., Mauro, A., Rodriguez, A., Schulte, J., Scott, S., Wainright, S. and Caskey, R. Addressing Maternal Health Disparities: Building a Novel Two-Generation Approach to Comprehensive Postpartum Care. *Population Health Management*; 2023; 26(5): 275-281.DOI: 10.1089/pop.2023.0059
12. Zephyrin L, Johnson K, Coleman A, Nuzum R. State options for extending Medicaid postpartum coverage. The Commonwealth Fund. doi:10.26099/k20n-bq14
13. Zephyrin L, Johnson K. Optimizing Medicaid extended postpartum coverage to drive health care system change. *Women's Health Issues*. 2022;32(6):536-539. doi:10.1016/j.whi.2022.08.008