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Author manuscript JAMA Pediatr. Author manuscript; available in PMC 2022 May 31.

Published in final edited form as:

JAMA Pediatr. 2022 March 01; 176(3): 233-235. doi:10.1001/jamapediatrics.2021.5695.

## Association of Comprehensive Immediate Postpartum Contraception with Infant Outcomes

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There have been and continue to be efforts to improve comprehensive access to contraception for all individuals that is person-centered. The immediate post-partum time period is one of the most critical times to assure access due to the additional barriers that are present upon the birth of a child and after hospital discharge for most women.<sup>1</sup> These barriers include not only insurance coverage issues, but also the logistics of scheduling and attending an appointment while also caring for a newborn.<sup>2</sup> While the post-partum visit is intended to provide a follow-up from delivery for these women, as many as 40% of women do not complete that visit—and those who are uninsured or have underlying medical issues to address, have more significant challenges to attending that visit.<sup>3</sup>

The focus on contraception access during the postpartum period prior to hospital discharge is important due to the potential sequelae of a subsequent unintended pregnancy or short interpregnancy intervals. <sup>4</sup> In addition to the increased risk of preterm birth, low birth weight and maternal morbidities such as preeclampsia and delivery complications, there is increased risk of infant and maternal mortality.<sup>5–7</sup> These sequelae also impact marginalized communities to a higher degree and are especially important to address given the sustained impact these outcomes can have on families.

For these reasons, efforts to increase access to contraception prior to hospital discharge have been underway.<sup>1</sup> Particular attention has been focused on postpartum long-acting reversible contraception access due to the reimbursement issues that are present with the bundle payment strategy for deliveries. Starting in 2012, state Medicaid programs began unbundling these procedures to remove the reimbursement barrier and assure that postpartum patients had access to all contraceptive options, including intrauterine devices and implants, or long-acting reversible contraception (LARC). LARC methods are the most effective reversible forms of contraception.

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**Conflicts**: Dr. Peipert has served on an advisory board for Bayer and CooperSurgical, and has received research support from Merck, Bayer, and CooperSurgical/Teva. Dr. Wilkinson has no conflicts to report.

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A majority of states now have explicit Medicaid policies regarding immediate postpartum LARC and research has shown impacts on repeat pregnancy rates and interpregnancy intervals. However, there is additional need for research examining infant-specific outcomes. The recent publication by Steenland et al (CITATION) draws on data from South Carolina, which was the first state to have an explicit Medicaid policy on immediate postpartum LARC reimbursement, to examine the association of this policy change on rates of preterm delivery and low birthweight.

Despite the policy change that occurred in 2012, the implementation of providing immediate postpartum LARC was not universal due to remaining barriers such as provider training, device stocking and changes to billing procedures. This ultimately created a natural experiment with approximately half of birthing hospitals offering shorter-acting contraception options and the other half offering comprehensive options—including immediate postpartum LARC.

Study investigators were able to create a linked dataset based on maternal information with birth records that consisted of 186,953 births in the state between 2009–15 that were covered by Medicaid. Variables examining birth intervals in days, birthweight and gestational age was created based on the initial index delivery. Stratified analysis was done based on race and ethnicity to examine these infant outcomes that are known to have racial disparities.

Not surprisingly, before this policy change, few patients received immediate postpartum LARC and this number increased after the policy was in effect within hospitals that implemented increased access. Overall, rates of preterm delivery, low birthweight, and short pregnancy interval (defined as a subsequent birth within 15mos) continued to decrease and there were not significant differences in pre-policy temporal trends.

However, when examining probabilities of a patient having a subsequent birth being preterm or low birth weight infant, decreases were noted in hospitals that had comprehensive postpartum contraception access. Furthermore, when examining the outcomes by race, the policy change implementation was associated with an overall decline in the probability of a preterm term delivery for non-Hispanic black and white individuals. There was no impact seen during this stratified analysis on subsequent delivery of a low birthweight infant or between racial groups. However, a decrease in probability of a subsequent short pregnancy interval and an increase of 27 days between births among non-Hispanic Black individuals was statistically significant.

The examination of policy impacts on patient outcomes is rare, and this study is an important addition to the research literature with state level data. The study by Steenland et al shows an association between comprehensive contraception access at the time of delivery and decreased probability of a subsequent preterm delivery or low birth weight infants in patients. Both these outcomes are important to overall efforts to impact infant mortality rates. While this study didn't specifically link data to infant mortality data, preterm deliveries and low birthweight are important contributors to infant mortality risk factors. Furthermore, the study had a generous definition of an implementing hospital, and as that implementation grows, the likely measurable impact will increase.

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The authors note that with increased access to any contraception, but particularly LARC, implementation efforts must be with a reproductive justice lens to assure that this increased access is equitable and non-coercive. Knowing the baseline disparities in these particular outcomes, this particular attention to implementation efforts is essential to assure that racial disparities are not exacerbated. In fact, racial disparities with regards to infant mortality are increasing in states like South Carolina and so efforts to assure that implementation is centered on these values is vital.<sup>8</sup> This ultimately means that plans to increase access to contraception should emphasize availability while avoiding coercion, and if a patient ultimately decides to discontinue a method, enable that to occur easily and seamlessly, including LARC device removal.<sup>9</sup>

Additional policy efforts, such as expanding Medicaid to 12mos postpartum, compared to the traditional 60 days, are also important elements to augment efforts focused on impacting maternal and infant outcomes.<sup>10</sup> South Carolina passed legislation earlier this year to enable this vital coverage for postpartum women.<sup>11</sup> Assuring comprehensive contraceptive access is present for all people during this year, but also beyond, will be important focuses as these efforts move forward.

In addition to guaranteeing access, delivering patient-centered contraceptive care at every interaction, including the postpartum period, is critical. Research continues to support that contraception use and uptake is enhanced when patients feel heard and decisions are centered on their priorities. <sup>12</sup> Future studies examining patient-centeredness of these postpartum LARC implementation efforts would be an important element to augment these data and show the impact in additional spheres beyond infant outcomes.

Steenland et al have contributed an important link between policy and subsequent preterm delivery and low birthweight infants within an early adopter state of this policy change. As evidence continues to mount in support of these efforts and these policies are further implemented, attention to delivering equitable, patient-centered care must be the focus to guarantee further benefits for all people and their communities.

### Funding:

This work was supported by the NICHD K23 Award (HD099274-01)

#### References

- 1. Postpartum Contraceptive Access Initiative. American College of Obstetricians and Gynecologists. Accessed October 26, https://pcainitiative.acog.org/
- 2. Postpartum Coverage Extension Kaiser Family Foundation. Accessed 2021, October 26. https://www.kff.org/medicaid/issue-brief/medicaid-postpartum-coverage-extension-tracker/
- 3. Bryant AS, Haas JS, McElrath TF, McCormick MC. Predictors of compliance with the postpartum visit among women living in healthy start project areas. Matern Child Health J. Nov 2006;10(6):511–6. doi:10.1007/s10995-006-0128-5 [PubMed: 16807794]
- Hall JA, Benton L, Copas A, Stephenson J. Pregnancy Intention and Pregnancy Outcome: Systematic Review and Meta-Analysis. Maternal and child health journal. 2017;21(3):670–704. doi:10.1007/s10995-016-2237-0 [PubMed: 28093686]
- Report of a Technical Consultation on Birth Spacing. 2005. https://www.who.int/ maternal\_child\_adolescent/documents/birth\_spacing05/en/

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- McKinney D, House M, Chen A, Muglia L, DeFranco E. The influence of interpregnancy interval on infant mortality. Am J Obstet Gynecol. 2017;216(3):316.e1–316.e9. doi:10.1016/ j.ajog.2016.12.018 [PubMed: 28034653]
- Schummers L, Hutcheon JA, Hernandez-Diaz S, et al. Association of Short Interpregnancy Interval With Pregnancy Outcomes According to Maternal Age. JAMA internal medicine. 2018;178(12):1661–1670. doi:10.1001/jamainternmed.2018.4696 [PubMed: 30383085]
- Infant Mortality and Selected Birth Characteristics-2019 South Carolina Rsidence Data. 2020. https://scdhec.gov/sites/default/files/Library/CR-012142.pdf
- Moniz MH, Spector-Bagdady K, Heisler M, Harris LH. Inpatient Postpartum Long-Acting Reversible Contraception: Care That Promotes Reproductive Justice. Obstet Gynecol Oct 2017;130(4):783–787. doi:10.1097/aog.0000000002262 [PubMed: 28885401]
- Extend Postpartum Medicaid Coverage. 2021. Policy Priorities. https://www.acog.org/advocacy/ policy-priorities/extend-postpartum-medicaid-coverage
- 11. National Academy for State Health Policy Accessed November, 8th, 2021. https://www.nashp.org/ view-each-states-efforts-to-extend-medicaid-coverage-to-postpartum-women/
- Dehlendorf C, Krajewski C, Borrero S. Contraceptive counseling: best practices to ensure quality communication and enable effective contraceptive use. Clin Obstet Gynecol. Dec 2014;57(4):659– 73. doi:10.1097/grf.000000000000059 [PubMed: 25264697]

JAMA Pediatr. Author manuscript; available in PMC 2022 May 31.