Impact of changes in US Medicaid reimbursement for long-acting reversible contraceptives in the immediate postpartum period

Sarah Walker[1], Simone Crespi[2], Emilia Kourmaeva[1], Gursimer Jeet[1], Greta Lozano-Ortega[1]
[1] Broadstreet HEOR, Vancouver, B.C., Canada; [2] Organon & Co, Jersey City, New Jersey

Poster HPR61
ISPOR 2024

Background & Objective

- Medicaid reimbursement for long-acting reversible contraceptives (LARC) provided in the immediate post-partum period (IPP) during the same hospital visit as birth has historically been part of the diagnosis-related group (DRG) fee
- To rectify the financial disincentive providers faced, some states implemented policies to reimburse hospitals for IPP-LARC in addition to the DRG fee (Medicaid carve-out)
- This study aimed to characterize outcomes associated with these Medicaid policies for the provision of IPP-LARC

Figure 1. Components reimbursed under carve-out by state[21]

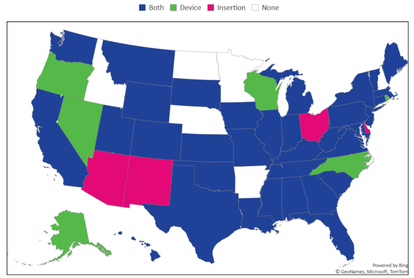
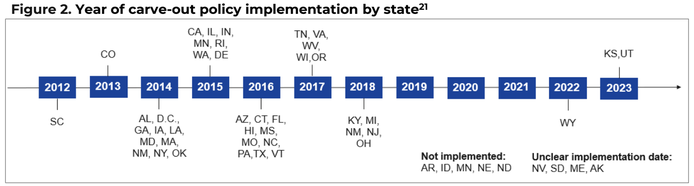


Figure 2. Year of carve-out policy implementation by state[21]



Study Design & Methods

- A systematic literature review was conducted on November 2022 using Medline, EMBASE, and CINAHL
- All studies were screened by title/abstract and full text by two independent reviewers and included if they were a U.S. observational study of women or girls receiving IPP-LARC under a Medicaid carve-out
- Two independent reviewers extracted outcomes of interest including IPP-LARC use rates, pregnancy or birth rate, and authors' conclusions on the success of the policy

Results

N=20 studies included

Study design

- N=15 were **multisite**
- N=16 compared outcomes **pre-policy vs. post-policy** implementation
- N=6 compared outcomes between insurance types
- N= 7 studies were conducted in urban settings

Patient characteristics

Age range: **22.2** to **31** years

Racially diverse:
- **6.2% to 90.1%** of patients were Black and **2.2% to 42.4%** were Hispanic

Carve-out characteristics

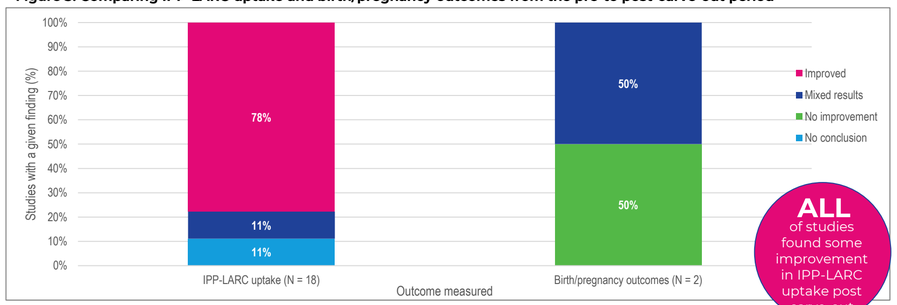
- Medicaid carve-outs were investigated in **14 states**
- N=6 studies discussed associated **co-interventions**

Results, continued

IPP-LARC Uptake

- Studies which calculated the statistical significance of differences in IPP-LARC uptake pre vs. post carve-out (n=9) found that LARC uptake increased significantly after the carve-out implementation (p<0.05), except for two studies in Iowa in which the numerical increases did not reach statistical significance
- Eighteen studies reported a descriptive change in IPP-LARC uptake in the post-carve-out period compared to the pre-policy period (Figure 3), ranging from a 0.16 percentage point increase between 2016 to 2017 in Wisconsin, to an 11.1 percentage point increase from 2015/2016 to 2016/2017 in Missouri

Figure 3. Comparing IPP-LARC uptake and birth/pregnancy outcomes from the pre-to post-carve-out period

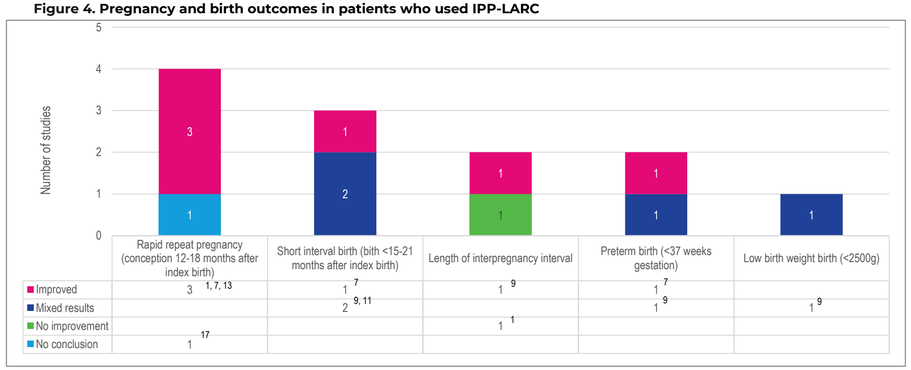


Mixed results included studies where authors found both positive and no significant effect from the Medicaid carveout across outcomes or demographics measured, as well as studies which found no statistically significant effect.

Pregnancy and Birth Outcomes

- Of studies investigating pregnancy or birth outcomes (n=6), 2 reported overall positive impact of the carve-out, 3 reported mixed results, and 1 study didn't provide a relevant comparison (Figure 4). Two studies compared pregnancy or birth outcomes between the pre and post carve-out periods (Figure 3)
  - The carve-out policy change was found to lower risk of short-interval pregnancies (n=3 with p<0.05) and short interval births (n=1 with p<0.05)
- In South Carolina, improvements in birth outcomes reached statistical significance only in adolescents (p<0.01), but not adults (p=0.14), and in Ohio, although there was a decrease in the number of patients with repeat pregnancies among those receiving IPP-LARC, the mean interpregnancy interval in these patients was shorter than those who chose not to receive IPP-LARC.

Figure 4. Pregnancy and birth outcomes in patients who used IPP-LARC



Studies with mixed results were those where authors found both positive and negative effect from the Medicaid carve-out across outcomes or demographics measured, as well as studies which found a positive but no statistically significant effect. Superscript numbers indicate study references.

Additional Results

Table 1. Factors affecting the success of carve-out programs, as identified by study authors

State / Factors important to carve-out success, or limitations	OH[1]	TN[2]	WI[3]	GA, IA, MD, NY, RI[4]	DE[5]	IA, LA[6]	SC[7]	SC[7]	SC[8]	SC[9]	SC[10]	SC[11]	GA[12]	PA[13]	WA[14]	MO[15]	MO[16]	-[17]
Receiving reimbursement from Medicaid (e.g. ability to reform hospital billing practices)		✓	✓	✓				✓										
Having provider champion(s) at a hospital, regional, or state level		✓		✓	✓	✓		✓										
Raising awareness and providing training in IPP-LARC use for physicians and admin			✓		✓	✓	✓	✓										
Additional co-interventions (laws, other policies etc.)	✓	✓			✓	✓		✓										
Ability to stock and supply devices	✓					✓	✓											
Inequality in IPP-LARC use and the impact of the carve-out (e.g. the impact of hospital size or location, concerns about contraceptive coercion of minorities or young patients)	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Impact of carve-out on patients not covered under Medicaid	✓	✓		✓	✓								✓			✓	✓	

Abbreviations: IPP-LARC, immediate postpartum long-acting reversible contraception; LARC, long-acting reversible contraceptives
Check marks indicate that the factor was discussed in the study.
Superscript numbers indicate study references.

- A key determinant of carve-out success at the hospital level was support from policy champions (e.g. to update billing systems) or co-interventions (e.g. additional state policies supporting LARC use, or local campaigns aimed at increasing hospital staff training, raising awareness, or advocating for a global increase in LARC access) (Table 1)
- Many studies (n=15) provided evidence or raised concerns of the demographics of patients able to access IPP-LARC through the carve-out, specifically the potential for contraceptive coercion of racial minorities and women living in poverty

Conclusions

- Medicaid's IPP-LARC reimbursement carve-outs were found to be effective at increasing LARC usage and improving birth outcomes, such reducing short interval pregnancies, reduction in short interval births, preterm birth, and low birth weight births, as well as an increase in the length of the interpregnancy interval.
- States can improve carve-out implementation by providing co-interventions and promoting hospital policy champions.

Disclosures & Funding

This study was funded by Organon.

- SW, EK, GJ and GLO are employees of Broadstreet HEOR which received funding from Organon for this work. SC is an employee of Organon.

References

1. AR Brant et al. *Obstet Gynecol* 2021;138(5):732-737.
2.MM Lacy et al. *AJOG* 2020;222(4S):S910 e911-S910 e918
3.RD Kramer et al. *WHI* 2021;31(4):317-323
4.MW Steenland et al. *JAMA Netw Open* 2022a;5(10):e2237918
5.ML Caudillo et al. *JMCH* 2022;26(8):1657-1666
6.MW Steenland et al. *Health Aff* 2021;40(2):334-342
7.A Liberty et al. *AJOG* 2020;222(4s):S886 e881-S886 e889
8.A Mattison-Faye *University of South Carolina 2019*
9.MW Steenland et al. 2022b;176(3):296-303
10.AH Crockett et al. *Contraception* 2017;95(1):71-76
11. MW Steenland et al. *JAMA 2019;322(1)*
12.M Smith et al. *Matern Child Health J.* 2021;25(9):1361-1368
13. AKQ Hess et al. *Obstet Gynecol 2022;139(SUPPL 1):8S-9S*
14.J Xing et al. *WA State Dept. of Social and Health Services* 2019
15.SK Koch *Contraception* 2022;113:57-61
16.AK Addante *Obstet Gynecol* 2020;135(SUPPL 1):110S
17.EM De La Garza *Obstet Gynecol* 2017;129(SUPPL 1):19S
18. EM Okoroh AJOG 2018;218(6):590 e591-590 e 597
19.RB Paul *Obstet Gynecol 2018;131(SUPPL 1):80S-81S*
20. J Bakk *AJOG* 2021;138(5):732-737
21. ACOG 2023; https://www.acog.org/programs/long-acting-reversible-contraception-larc/activities-initiatives/medicaid-reimbursement-for-postpartum-larc.