

Improving Women’s Access to Long-Acting Reversible Contraception

Role of Medicaid Reimbursement Policy Change

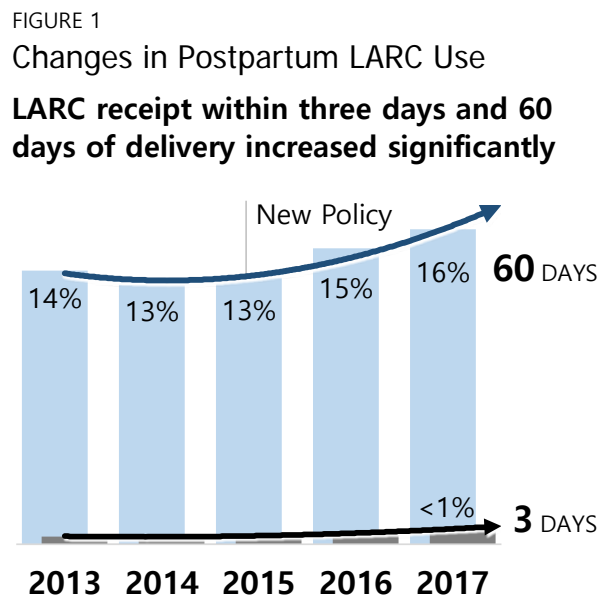
Jingping Xing, PhD • Dorothy Lyons, MPA • Z. Joyce Fan, PhD • Andrew Glenn, PhD
Barbara E.M. Felver, MES, MPA

In collaboration with Washington State Health Care Authority

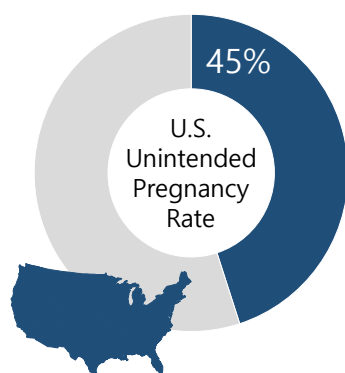
LONG-ACTING REVERSIBLE CONTRACEPTION (LARC) is highly effective at preventing unintended pregnancy, yet is underutilized in the United States. In an effort to improve women’s access to LARC, the Washington State Medicaid program increased provider payments for provision of LARC as of September 2015 and started to provide separate payment for immediate postpartum LARC insertion. The objective of this policy brief is to examine the changes in LARC utilization among women of reproductive age 15-44 years old receiving public health insurance in Washington State before and after the Medicaid reimbursement policy change. LARC utilizations by eligibility of full-scope Medicaid and Family Planning Only (FPO) were examined when applicable.

Key Findings

- 1. After the LARC reimbursement policy change in 2015, there was a significant increase in the use of LARC in the postpartum period of three and 60 days after delivery.** One in five Hispanic women or teenagers used LARC within 60 days of delivery in 2017, higher than women of other racial/ethnic or age groups.
- 2. For all women aged 15-44 who were at risk of unintended pregnancy, the proportion of LARC users among FPO recipients was twice that of full-scope Medicaid clients.** On average, one in six FPO recipients used LARC as compared to one in 12 Medicaid clients. LARC use was higher among women aged 20-34 than among women from other age groups.
- 3. From 2013 to 2017, there was a decreasing trend of intrauterine devices (IUDs) use and an increasing trend of contraceptive implant use.** While IUDs continued to be the dominant LARC method, the use of copper IUD increased and hormonal IUDs decreased during the same period.

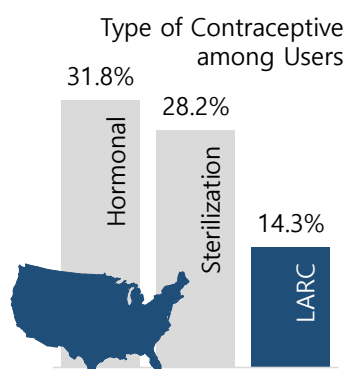


Background



Unintended pregnancy is a major public health problem in the United States. Nearly half (45%) of the pregnancies in the United States were unintended and unintended pregnancy disproportionately affects low-income women (i.e., women with incomes less than 200% of the federal poverty level (FPL)) (1, 2). The American College of Obstetricians and Gynecologists recommends increasing access to long-acting reversible contraception (LARC) methods, the most effective methods of reversible contraception, to reduce unintended pregnancy (3). LARC methods include two types of contraceptives: intrauterine devices (IUDs) and subcutaneous hormone-releasing implants. LARC can prevent pregnancy for three to 10 years, depending on the method.

Medicaid, the leading source of public financing for family planning services among low-income individuals, accounted for 75% of all public expenditures for family planning services in 2015 (4). In addition to the full-scope Medicaid program, many states including Washington State have expanded Family Planning Only (FPO) services coverage to individuals who have not been otherwise eligible for full-scope Medicaid coverage (5). Starting in October 2013, the Washington FPO Program provided family planning services to individuals at or below 260% of FPL (6).



Although proven to be highly efficacious and safe, LARC is underutilized in the United States. In 2014 among women using some form of contraception, 14.3% used LARC methods while 28.2% and 31.8% used sterilization and moderately effective hormonal methods, respectively (7). Low payment rates for LARC devices and/or for placement services present a barrier to increasing the adoption of LARC. Not providing additional payment for the cost of LARC and not providing additional payment to either the hospital or the practitioner for insertion services discourage immediate postpartum provision of LARCs (8, 9), which has the potential to reduce unintended and short-interval pregnancy.

Beginning on September 1st, 2015, Washington State Health Care Authority (HCA) paid an enhanced rate for procedure codes directly related to insertion or implant of LARCs. The rates have increased significantly for 3 Current Procedural Terminology (CPT) codes (10).

TABLE 1

Rate for Procedure Codes Related to Insertion or Implant of LARCs Before and After Medicaid Reimbursement Policy Change

CPT code	Before September 1, 2015		After September 1, 2015	
	Non-Facility Maximum Allowable Fee	Facility Maximum Allowable Fee	Non-Facility Maximum Allowable Fee	Facility Maximum Allowable Fee
11981 (Insertion, non-biodegradable drug delivery implant)	\$82.66	\$48.38	\$382.74	\$347.03
11983 (Removal with reinsertion, non-biodegradable drug delivery implant)	\$129.35	\$101.80	\$429.94	\$400.71
58300 (Insertion of IUD)	\$42.28	\$31.13	\$340.98	\$329.49

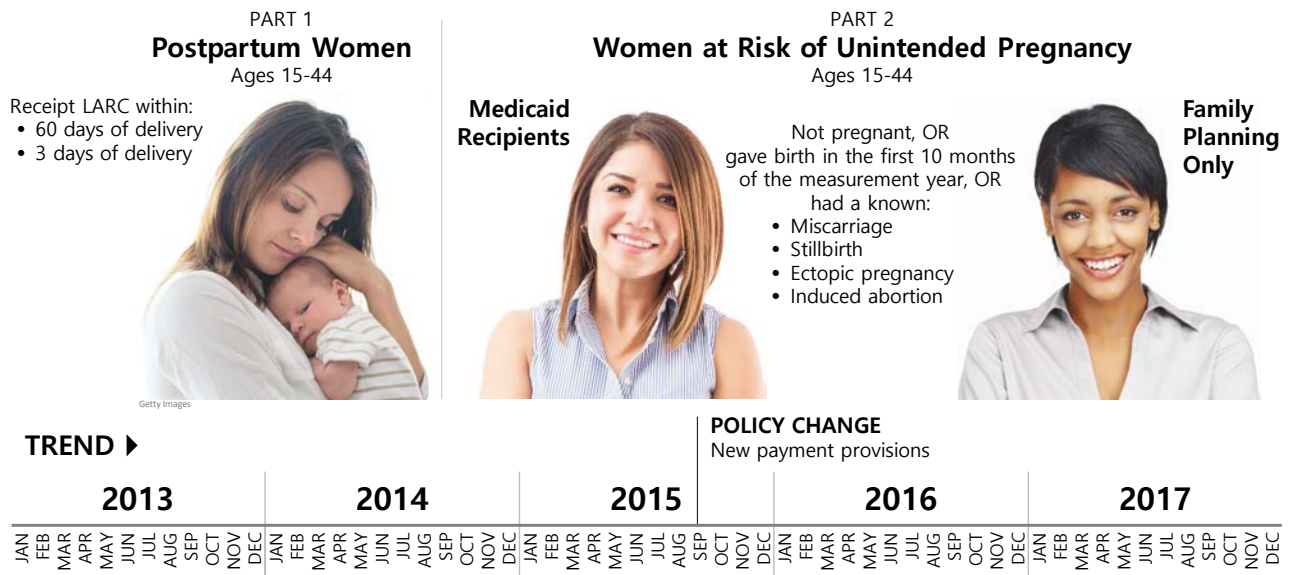
In addition, HCA reimburses professional services for immediate postpartum IUD or contraceptive implant insertion procedures if billed separately from the professional global obstetric procedure codes and the facility delivery claim and reimburses for the cost of IUD or contraceptive implant device. Previously, immediate postpartum provision of LARCs was not carved out for separate payment from the global fee for delivery; the hospital provider received the same payment for delivery regardless of whether or not LARC was provided. By providing separate payment for LARC use, facilities should not be financially driven to forego offering postpartum women access to LARC prior to hospital discharge (11). The objective of this policy brief is to examine the changes in LARC use among women of reproductive age 15-44 receiving public health insurance in Washington State before and after the Medicaid reimbursement policy change. In addition, we described LARC use by selected demographic characteristics and types of LARC used.

Methods

Study population and outcome measures

We examined the changes in time trends of LARC use before and after the reimbursement policy change for two groups of women of reproductive age 15-44: postpartum women and all women at risk of unintended pregnancy. For women aged 15-44 who had a live birth, LARC provision within three days of delivery is used to monitor the provision of LARC in the immediate postpartum period, while LARC provision within 60 days of delivery is used to monitor the provision of LARC throughout the postpartum period.

FIGURE 2
Study Populations



Based on the Centers for Medicare & Medicaid Services (CMS) technical specifications, women at risk of unintended pregnancy were defined as those not pregnant at any point in the measurement year, those who had a live birth in the first 10 months of the measurement year, or those who had a known miscarriage, stillbirth or ectopic pregnancy, or induced abortion (12, 13). Use of a LARC method was defined as having either a contraceptive implant or an IUD, including both hormonal and non-hormonal devices (copper). We identified the use of a LARC method by ICD-9/10-CM, CPT codes, Healthcare Common Procedure Coding System (HCPCS) codes, and National Drug Code (NDC) (12, 13). To further differentiate the types of IUD, HCPCS and/or NDC were used.

This analysis was limited to women who were continuously enrolled in full-scope Medicaid or FPO programs during the measurement year, or, for postpartum evaluation, from date of delivery to sixty days postpartum. For women at risk of unintended pregnancy, a client was defined as FPO if the client received FPO services at any point in the measurement year. This brief report is based on analysis of Medicaid fee-for-services claims and managed care encounter data from ProviderOne, Washington’s Medicaid Management Information System. In addition to the descriptive analyses, we examined the changes in monthly LARC use and conducted interrupted time series regression models to evaluate the impact of LARC reimbursement policy change on postpartum LARC use (see technical notes for details).

PART 1 | Results for Postpartum Women

LARC receipt within three days and 60 days of delivery increased significantly

After the reimbursement policy change in 2015, there appeared to be an increasing trend for the percentage of women that were provided LARC within 60 days of delivery (Figure 1).

Although the proportion of women who were provided LARC in the immediate postpartum period of three days after delivery remained very low (<1%, Figure 1), the proportion of women having LARC within three days of delivery doubled from 2013 (0.39%) to 2017 (0.78%).

FIGURE 3

Unadjusted Trends in Postpartum LARC Use, 2013-2017

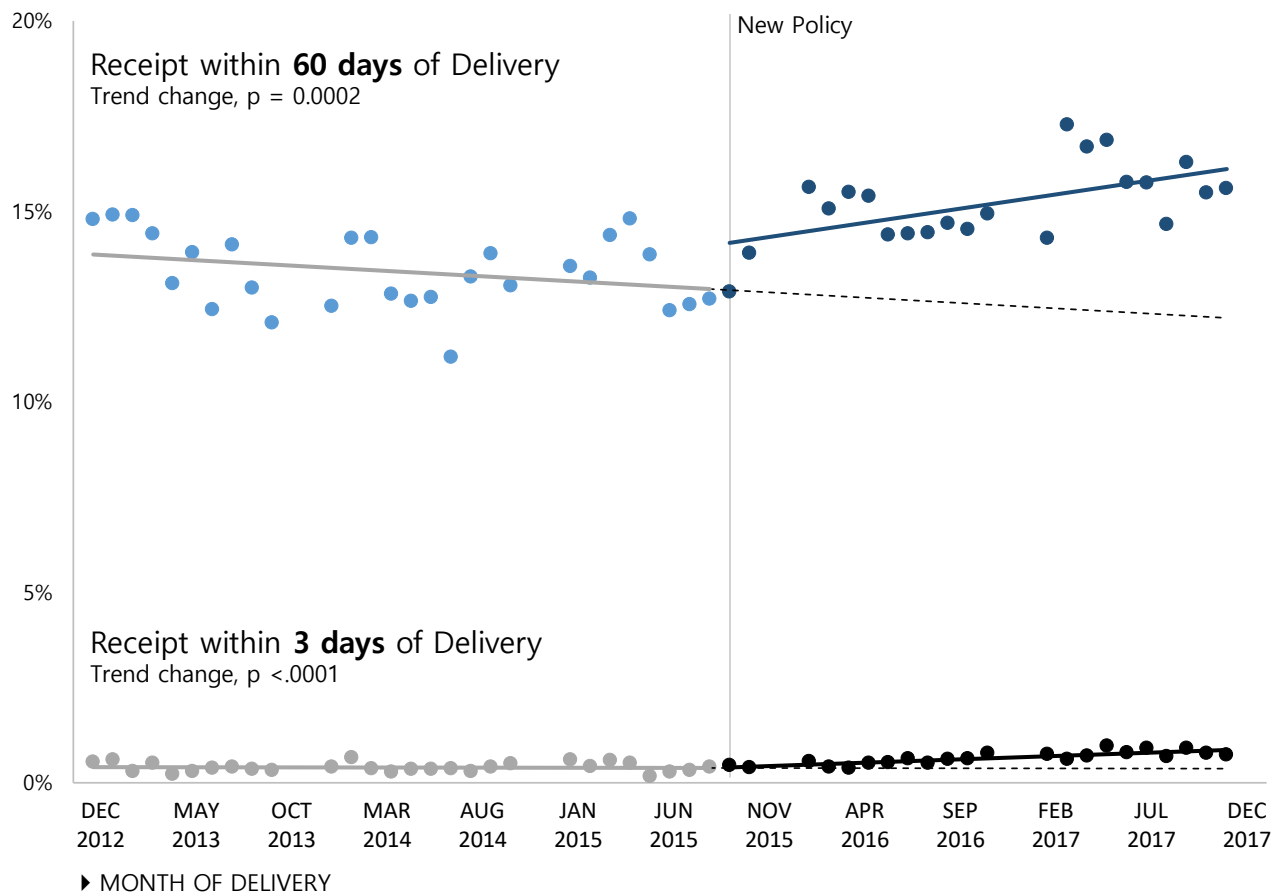


TABLE 2

Changes in Postpartum LARC Use Before and After Medicaid's Change to LARC Reimbursement

RESULTS SUMMARY	3 days		60 days	
	Estimate percentage point	p-value	Estimate percentage point	p-value
Pre-trend	-0.004	0.2377	-0.062	0.0186
Trend change	0.021	<.0001	0.121	0.0002
Post-trend	0.017	<.0001	0.059	0.0121

The monthly plot of postpartum LARC use and interrupted time series analysis showed that there was a significant increase in LARC use in the postpartum period of three days and 60 days after delivery since the policy change (Figure 3 and Table 2). The trend of postpartum LARC use within 60 days of delivery changed from downward to upward as the LARC reimbursement policy implemented in September 2015.

Prior to the policy change, the trend in the percentage of women that were provided LARC within 60 days of delivery was decreasing by 0.062 percentage points each month ($p=0.0186$). Following the policy change, the trend in postpartum LARC provision within 60 days of delivery increased by 0.121 percentage points each month ($p=0.0002$).

The trend of immediate postpartum LARC was not changing significantly before the policy change. The policy change was associated with a statistically significant increase in the trend in immediate postpartum LARC by 0.021 percentage points ($p<0.0001$) per month.

LARC use by race/ethnicity

A higher proportion of Hispanic women used LARC within 60 days of delivery as compared to women of other racial/ethnic groups. In 2017, 23% of Hispanic women who had a live birth had LARC within 60 days of delivery.

FIGURE 4

LARC Use Rates in Selected Race/Ethnicity Groups within 60 Days of Delivery

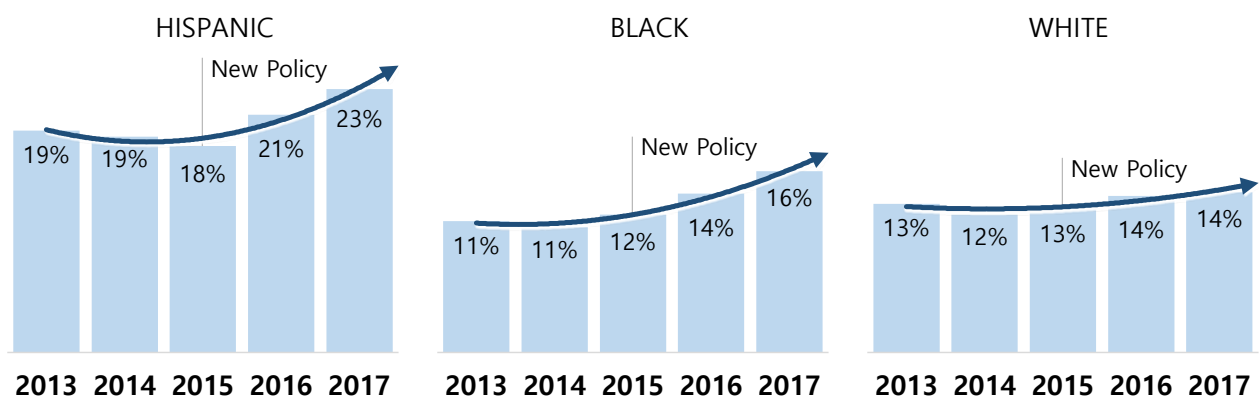


TABLE 3

LARC Use Rates by Race/Ethnicity within 60 Days of Delivery

POSTPARTUM WOMEN	2013 (N=24,150)	2014 (N=25,877)	2015 (N=26,511)	2016 (N=26,242)	2017 (N=25,052)
Hispanic	19.1%	18.6%	17.8%	20.5%	22.7%
Non-Hispanic					
White	12.8%	11.9%	12.6%	13.5%	13.8%
Asian	11.6%	12.6%	11.3%	13.2%	12.4%
Black	11.3%	10.8%	11.9%	13.7%	15.6%
American Indian/Alaska Native	13.4%	9.0%	13.0%	14.1%	14.4%
Hawaiian/Pacific Islander	10.0%	8.8%	11.5%	12.4%	13.0%
More Than One Race	11.4%	11.8%	12.6%	12.2%	15.2%
Other/Unknown	14.5%	13.6%	11.3%	13.1%	14.4%

LARC use by age

While the policy change increased the postpartum LARC use across all age groups, the proportion of women who were provided LARC within 60 days of delivery decreased with age. Postpartum LARC use was highest among females aged 15-19 years and lowest among females aged 35-44 years.

FIGURE 5

LARC Use Rates by Age Group within 60 Days of Delivery, 2013-2017

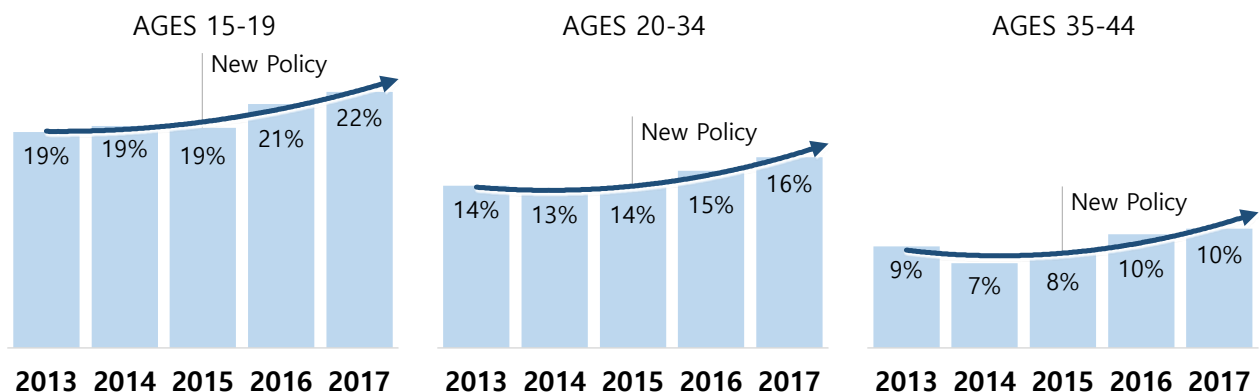
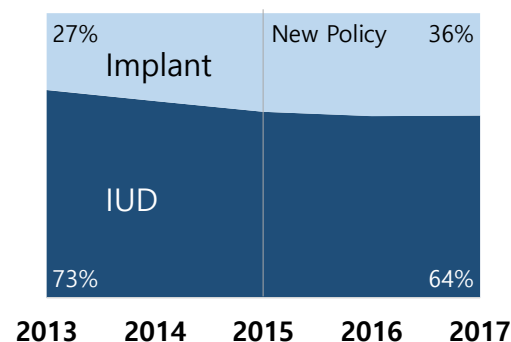


FIGURE 6

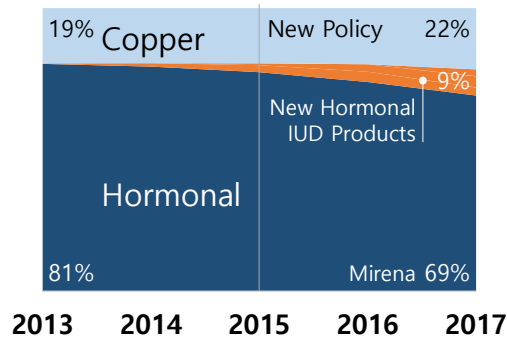
LARC Methods within 60 Days of Delivery, 2013-2017



Implants versus IUDs

Among postpartum women who had received LARCs, the majority used IUDs. From 2013 to 2017, the proportion of postpartum women using IUDs decreased from 73% to 64%, while the percentage of postpartum women using contraceptive implants increased from 27% to 36%.

FIGURE 7
IUD Types within 60 Days
of Delivery, 2013-2017



IUD types

Among IUD users whose IUD type can be determined, more than three fourths of postpartum women used a hormonal IUD. In 2013, almost all women who used a hormonal IUD in the postpartum period of 60 days after delivery used Mirena, the first FDA approved hormonal IUD.

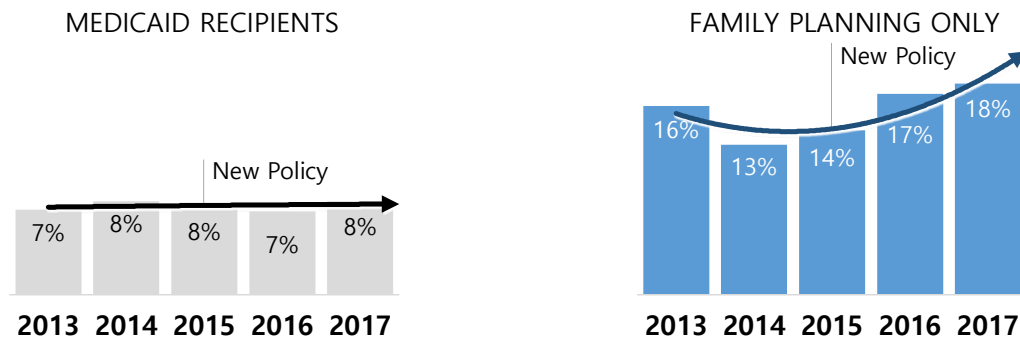
As new types of hormonal IUDs entered the market (Skyla, Liletta, and Kyleena) over time, the proportion of postpartum women who were provided Mirena decreased by 12%. In 2017, 69% of the postpartum women were provided Mirena, whereas 9% used new hormonal IUDs.

PART 2 | Results for All Women at Risk of Unintended Pregnancy

Family Planning Only (FPO) services recipients versus full-scope Medicaid recipients

For all women aged 15-44 at risk of unintended pregnancy, the proportion of LARC users among FPO recipients was twice that of full-scope Medicaid clients. On average, one in six FPO recipients used LARC as compared to one in 12 full-scope Medicaid clients. From 2013 to 2017, there was little change in the percentage of Medicaid women who were provided LARC, while an increasing trend was observed after the policy change in 2015 for women receiving FPO services.

FIGURE 8
Changes in LARC Use among All Women at Risk of Unintended Pregnancy, 2013-2017



LARC use by race/ethnicity

Among Medicaid clients, similar proportion of women at risk of unintended pregnancy used LARC across different race/ethnicity groups. Among women receiving FPO services, Hispanics had higher rate of LARC use than women of other race/ethnicity groups.

FIGURE 9
LARC Use in Selected Race/Ethnicity Groups for Medicaid Recipients

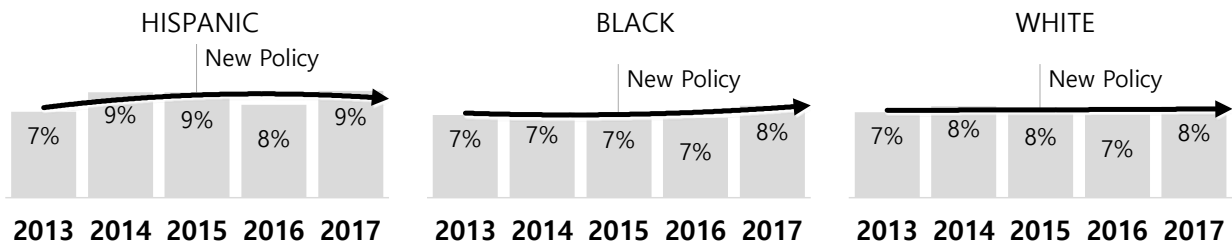


FIGURE 10

LARC Use in Selected Race/Ethnicity Groups for FPO Services Recipients

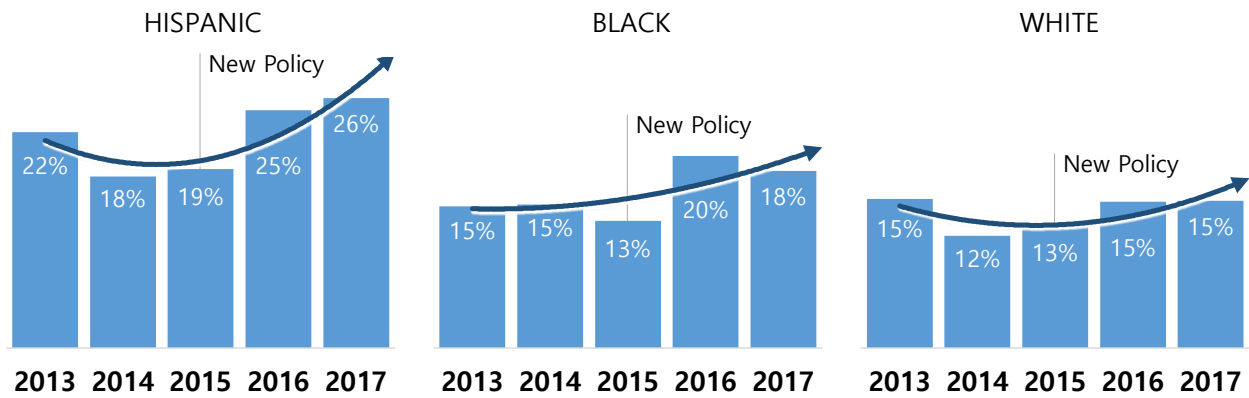


TABLE 4

LARC Use by Race/Ethnicity AND Public Health Insurance Coverage

MEDICAID RECIPIENTS	2013 (N=106,106)	2014 (N=206,617)	2015 (N=280,822)	2016 (N=296,133)	2017 (N=287,142)
Hispanic	7.4%	9.1%	9.1%	8.0%	9.2%
White	7.4%	7.9%	7.7%	7.2%	7.9%
Asian	4.2%	6.2%	5.9%	5.9%	6.6%
Black	7.2%	7.4%	7.4%	6.9%	8.0%
American Indian/Alaska Native	8.3%	8.2%	7.9%	6.9%	8.4%
Hawaiian/Pacific Islander	5.6%	6.2%	6.3%	5.7%	6.8%
More Than One Race	7.6%	9.1%	8.4%	8.4%	9.5%
Other/Unknown	8.1%	8.2%	7.5%	6.6%	6.9%

FAMILY PLANNING ONLY	2013 (N=33,435)	2014 (N=17,245)	2015 (N=5,809)	2016 (N=4,960)	2017 (N=4,905)
Hispanic	22.3%	17.7%	18.5%	24.6%	25.9%
White	15.4%	11.6%	12.7%	15.1%	15.2%
Asian	16.6%	11.9%	15.6%	14.5%	17.8%
Black	14.6%	14.8%	13.2%	19.9%	18.3%
American Indian/Alaska Native	18.5%	12.2%	19.8%	16.9%	12.2%
Hawaiian/Pacific Islander	13.2%	12.3%	17.4%	16.0%	20.0%
More Than One Race	16.8%	10.2%	15.9%	11.0%	14.7%
Other/Unknown	15.6%	14.4%	14.7%	20.1%	18.3%

LARC use by age

Among Medicaid women at risk of unintended pregnancy, LARC use was highest among women aged 20-34 years-old. The proportion of LARC use among adolescents was only half of that of women aged 20-34. Among FPO recipients, LARC use was similar across age groups and displayed similar increasing trend after the policy change in 2015.

FIGURE 11

LARC Use by Age Group for Medicaid Recipients, 2013-2017

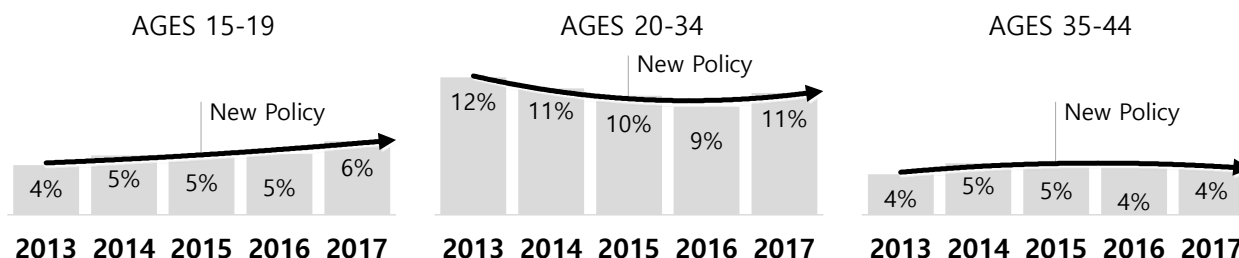
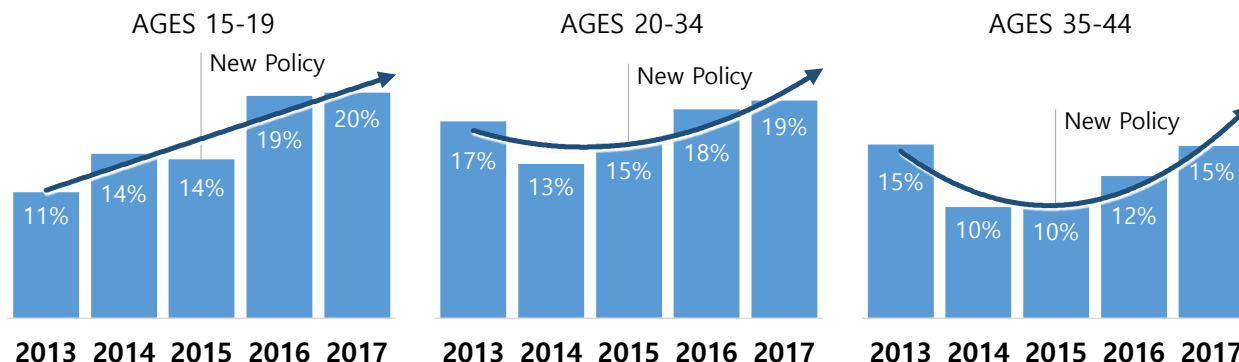


FIGURE 12

LARC Use by Age Group for FPO Services Recipients, 2013-2017

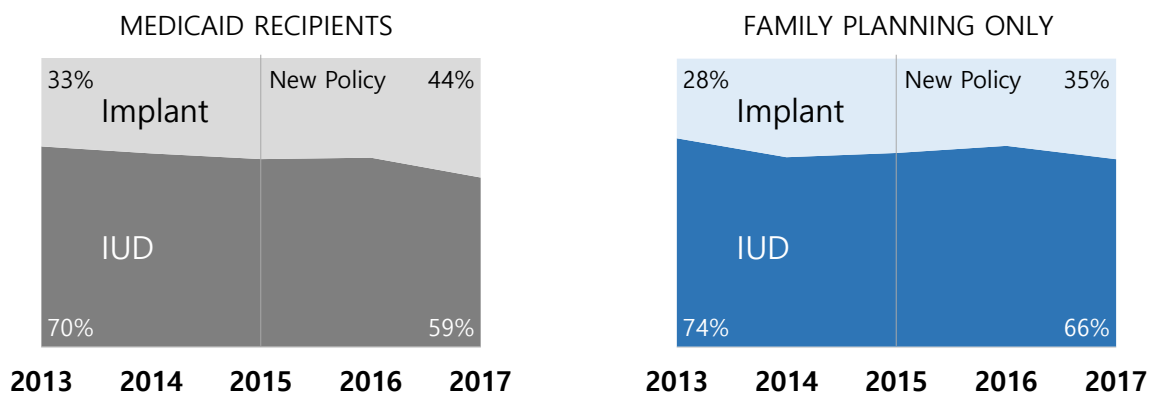


Implants versus IUDs

IUDs continued to be the most common LARC method for both FPO recipients and full-scope Medicaid clients. From 2013 to 2017, however, there was a decreasing trend for IUD use and an increasing trend for contraceptive implant use. In 2017, among LARC users, 44% of full-scope Medicaid women and 35% of women receiving FPO services were provided contraceptive implant.

FIGURE 13

LARC Methods for All Women at Risk of Unintended Pregnancy, 2013-2017

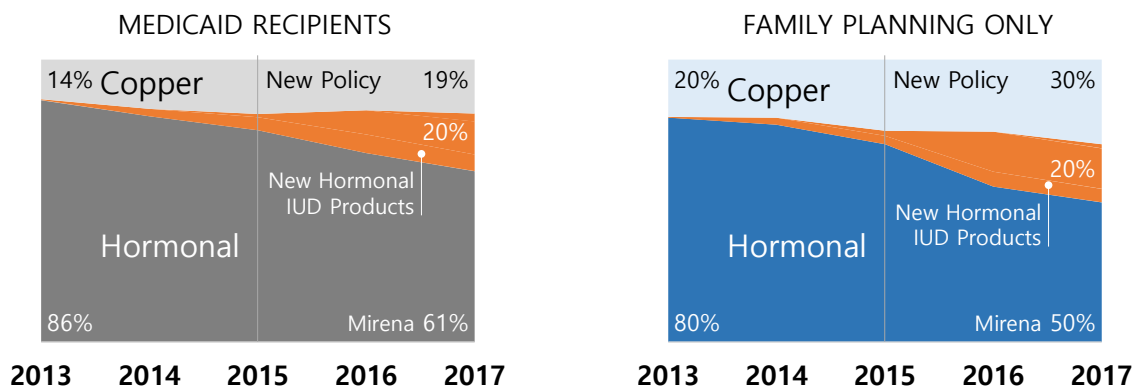


IUD types

A higher proportion of FPO recipients chose copper IUD compared to full-scope Medicaid clients. Among both FPP recipients and Medicaid clients, the proportion of women using copper IUD increased while the percentage of women using hormonal IUDs decreased from 2013 to 2017. Although Mirena continued to be the most widely used hormonal IUD, more women started to use new hormonal IUDs in recent years as they became available on the market.

FIGURE 14

IUD Types for All Women at Risk of Unintended Pregnancy, 2013-2017



Discussion

Interpregnancy intervals shorter than 18 months are associated with higher risks of adverse pregnancy outcomes. Improving postpartum initiation of effective contraception including LARC, especially if initiated immediately postpartum, is a key strategy to reduce unintended pregnancy and reduce rapid repeat pregnancy (14). However, more widespread adoption of postpartum LARC has been hampered by the inability to obtain sufficient reimbursement for LARC devices and services. We found a statistically significant increase in LARC use within three and 60 days of delivery after the increase in reimbursement rates in 2015. A recent study found that South Carolina Medicaid's shift to separate reimbursement for immediate postpartum LARC was associated with increases in postpartum LARC use prior to hospital discharge (15). These findings suggest that by removing a key financial barrier, the modification of Medicaid reimbursement policy improved the provision of the most effective forms of postpartum contraception.

Our results indicate that a higher proportion of Hispanic women used LARC within 60 days of delivery as compared to women of other racial/ethnic groups. Although other studies also suggested that acceptance of postpartum LARC among low-income Hispanic women was high (16, 17), the underlying reason remains unknown, which might involve possible cultural differences in approaches to contraception and differences in provider behavior based on women's race/ethnicity.

We found that adolescents aged 15-19 years had the highest LARC use during the postpartum period. After giving birth, young mothers might be particularly motivated to initiate a highly effective contraception method during the postpartum period. Researchers have found that adolescents who use LARC methods after their first delivery are at significantly lower risk of repeat adolescent pregnancy (18, 19, 20). Although postpartum LARC placement is useful for reducing rapid repeat pregnancy, other policies and services are needed for preventing unintended first pregnancies among adolescents.

Washington State's full-scope Medicaid program and the expanded FPO services cover all LARC methods, making LARC readily accessible to these clients. However for women of reproductive age 15-

44 at risk of unintended pregnancy, FPO recipients had higher LARC utilization than full-scope Medicaid clients. The differences in the age distribution between these two groups might contribute to their differences in LARC use. Overall about one-fourth of women receiving full-scope Medicaid services were adolescents aged 15-19, and 10% aged 40-44. On the other hand, nearly half of the women receiving FPO services were aged 25-34 years. LARC is not used sufficiently among the teen population (21), and those aged 40 and older had low levels of IUD and implant use (7).

Furthermore, clients who enrolled in the FPO program were those who were actively seeking family planning services, which might also result in higher LARC utilization. It should be noted that under the Affordable Care Act, Medicaid eligibility was extended to all individuals with incomes up to 138% of the federal poverty level beginning in 2014. The number of clients enrolled in FPO service dropped significantly from 2013 to 2015 as those receiving FPO services and whose income was at or below 138% FPL became eligible for full-scope Medicaid.

Despite high efficacy and satisfaction rates with LARC methods, adolescents at risk of unintended pregnancy were less likely to use an implant or IUD for contraception. The proportion of LARC use among adolescents was only half of that of women aged 20-34. Other research suggests that adolescents' choices of contraceptives are most often short-acting methods, such as condoms, withdrawal, or oral contraceptives (21). Since adolescent childbearing affects not only the adolescents but also their children and their communities, it is important for Medicaid health providers to emphasize LARCs as first-line options for women of all ages and to promote adolescents and their parents' understanding of LARC methods.

Our results confirmed implants, originally approved in 2006 in the United States, are becoming more popular in recent years (22). Among both postpartum women and all women at risk of unintended pregnancy, the proportion of women using copper IUD increased while the percentage of women using hormonal IUD decreased. The copper IUDs have existed around the world for over 30 years and can be effective for up to 10 years, at least twice as long as other LARCs. One additional advantage of copper IUD is that it may be used as emergency contraception if inserted within five days of unprotected intercourse.

Our findings suggest that Medicaid payment policy change can be an effective policy option to increase postpartum LARC initiation and highlight the need to improve access to LARC methods outside the postpartum period.

REFERENCES

- (1) Guttmacher Institute. Unintended pregnancy in the United States. January 2019. Available at <https://www.guttmacher.org/sites/default/files/factsheet/fb-unintended-pregnancy-us.pdf>.
- (2) Finer LB and Zolna MR, Declines in unintended pregnancy in the United States, 2008–2011, *New England Journal of Medicine*, 2016, 374(9):843–852.
- (3) Committee on Gynecologic Practice Long-Acting Reversible Contraception Working Group, American College of Obstetricians and Gynecologists (ACOG). Committee Opinion: Increasing access to contraceptive implants and intrauterine devices to reduce unintended pregnancy. Number 642, October 2015. Available at <https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Increasing-Access-to-Contraceptive-Implants-and-Intrauterine-Devices-to-Reduce-Unintended-Pregnancy>.
- (4) Hasstedt, K, Sonfield A and Gold RB. Public Funding for Family Planning and Abortion Services, FY 1980–2015, New York: Guttmacher Institute, 2017. Available at https://www.guttmacher.org/sites/default/files/report_pdf/public-funding-family-planning-abortion-services-fy-1980-2015.pdf.

- (5) Guttmacher Institute. Medicaid family planning eligibility expansions, state laws and policies (as of March 1, 2019). 2019. Available at <https://www.guttmacher.org/state-policy/explore/medicaid-family-planning-eligibility-expansions>.
- (6) Washington State Health Care Authority. TAKE CHARGE Family Planning Waiver – Section 1115 Demonstration Year Fifteen Annual Report July 1, 2015 through June 30, 2016. September 30, 2016.
- (7) Kavanaugh ML, Jerman J. Contraceptive method use in the United States: trends and characteristics between 2008, 2012 and 2014. *Contraception*. 2018;97(1):14-21.
- (8) Center for Medicaid and CHIP Services (CMCS). State Medicaid Payment Approaches to Improve Access to Long-Acting Reversible Contraception (CMCS Informational Bulletin). April 8, 2016. Available at <https://www.medicaid.gov/federal-policy-guidance/downloads/cib040816.pdf>.
- (9) Aiken AR, Creinin MD, Kaunitz AM, Nelson AL, Trussell J. Global fee prohibits postpartum provision of the most effective reversible contraceptives. *Contraception*. 2014 Nov;90(5):466-7.
- (10) Washington State Health Care Authority. Family planning fee schedule (2015-04-01). Available at https://www.hca.wa.gov/billers-providers-partners/forms-and-publications?combine=family+planning+fee+schedule+%&field_topic_tid=All&field_billers_document_type_value_1=All&sort=filename+DESC.
- (11) Washington State Health Care Authority. Family planning provider guide. October 1, 2015. Available at https://www.hca.wa.gov/assets/billers-and-providers/familyplanningprovider_bi_20151001.pdf.
- (12) Centers for Medicare & Medicaid Services. Core Set of Adult Health Care Quality Measures for Medicaid (Adult Core Set). Technical Specifications and Resource Manual for Federal Fiscal Year 2018 Reporting. May 2018.
- (13) Centers for Medicare & Medicaid Services. Core Set of Children’s Health Care Quality Measures for Medicaid and CHIP (Child Core Set). Technical Specifications and Resource Manual for Federal Fiscal Year 2018 Reporting. February 2018.
- (14) Rodriguez MI, Evans M, Espey E. Advocating for immediate postpartum LARC: increasing access, improving outcomes, and decreasing cost. *Contraception*. 2014; 90(5):468–71.
- (15) Steenland MW, Pace LE, Sinaiko AD, Cohen JL. Association Between South Carolina Medicaid’s Change in Payment for Immediate Postpartum Long-Acting Reversible Contraception and Birth Intervals. *JAMA*. 2019 Jun 3.
- (16) Huff CW, Holcombe S, Duret-Uzodinma J, Dillaway C, Hopkins K, Potter, EJ. Acceptance and Continuation of Immediate Postpartum LARC: Experiences From a Texas Hospital. *Obstetrics & Gynecology*. 2017; 129(5):12S.
- (17) Potter JE, Hubert C, White K. The Availability and Use of Postpartum LARC in Mexico and Among Hispanics in the United States. *Matern Child Health J*. 2017 Sep;21(9):1744-1752.
- (18) Damle LF, Gohari AC, McEvoy AK, Desale SY, Gomez-Lobo V. Early initiation of postpartum contraception: does it decrease rapid repeat pregnancy in adolescents? *J Pediatr Adolesc Gynecol* 2015;28:57–62.
- (19) Tocce KM, Sheeder JL, Teal SB. Rapid repeat pregnancy in adolescents: do immediate postpartum contraceptive implants make a difference? *Am J Obstet Gynecol* 2012;206: 481.e1–7.
- (20) Cohen R, Sheeder J, Arango N, Teal SB, Tocce K. Twelve-month contraceptive continuation and repeat pregnancy among young mothers choosing postdelivery contraceptive implants or postplacental intrauterine devices. *Contraception* 2016;93:178–83.
- (21) Abma JC, Martinez GM. Sexual activity and contraceptive use among teenagers in the United States, 2011-2015. *Natl Health Stat Report* 2017;(104):1–23.
- (22) Branum, A. M., & Jones, J. Trends in Long-acting Reversible Contraception Use Among US Women Aged 15–44. *NCHS Data Brief* 2015, (188), 1–8.
- (23) Ranji U, Bair Y, Salganicoff A. Medicaid and Family Planning: Background and Implications of the ACA. Kaiser Family Foundation. February 2016. Available at <http://files.kff.org/attachment/issue-brief-medicaid-and-family-planning-background-and-implications-of-the-aca>.

TECHNICAL NOTES

STATISTICAL ANALYSIS

Since the Medicaid reimbursement policy change was implemented on September 1st, 2015, 2015 was a mixed year. In order to accurately demonstrate the impact of the policy, we plotted trends in monthly postpartum LARC use before versus after the Medicaid LARC reimbursement policy change by fitting a trend line based on predicted values from two linear regression models (one before the policy change and one after the policy change).

Furthermore, we conducted interrupted time series regression model to evaluate the impact of LARC reimbursement policy change on postpartum LARC use. We used ordinary least squares regression model with independent variables including time since the start of the study, post-intervention period indicator, an interaction term between time and the post-intervention period indicator and adjusting for changes in the population over time. The coefficient of the interaction term indicates the slope change in the trend line following the intervention. Newey-West standard errors were used to adjust for autocorrelation.

FEMALE CONTRACEPTIVE METHODS

1. Most effective (>99%): sterilization, contraceptive implants, IUD
2. Moderately effective (88-94%): injectables, oral pills, patch, vaginal ring, diaphragm
3. Least effective (<82%): female condom, cervical cap, sponge, fertility awareness-based methods, spermicide)

FAMILY PLANNING ONLY SERVICES

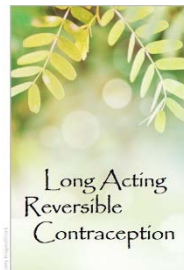
Washington State provides family planning only services through Family Planning Only Demonstration Waiver. Contraception is one of the primary services included as family planning (23). Family planning only services cover not only all FDA approved birth control methods but also additional benefits such as limited screening and treatment for sexually transmitted infections (STIs, STDs) and screening for cervical cancer and a well woman physical exam. Vaccinations, mammograms, and services unrelated to family planning such as pregnancy care are not covered by family planning only services. Family planning only services were identified by the RAC codes (1097, 1099, and 1100).

FULL-SCOPE MEDICAID

Full-scope Medicaid provides full health care coverage such as early and periodic screening, diagnostic, and treatment services, maternity and newborn care, and mental health services. States have been required to include family planning services in their Medicaid programs.

LONG-ACTING REVERSIBLE CONTRACEPTION (LARC) METHODS

	Available Since	Years Effective	Use
Copper IUD			
ParaGard	1988	10 years	It can be used whether or not women have had a child. ParaGuard can be used as emergency contraception if put within 5 days of unprotected sex.
Hormonal IUDs			
Mirena	2001	5 years	It can be used whether or not women have had a child.
Skyla	2013	3 years	It can be used whether or not women have had a child.
Liletta	2015	5 years	It can be used whether or not women have had a child.
Kyleena	2016	5 years	It can be used whether or not women have had a child.
Implants			
Implanon	2006	3 years	It can be used whether or not women have had a child. The Implanon implant should not be used in girls younger than 18 years old.
Nexplanon	2011	3 years	It can be used whether or not women have had a child. The Nexplanon implant should not be used in girls younger than 18 years old.



REPORT CONTACT: Alice Huber, PhD, 360.902.0707
VISIT US AT: <https://www.dshs.wa.gov/rda>

ACKNOWLEDGEMENT

We want to acknowledge the work of our colleagues throughout the research and data analysis division and our partner programs for all the work they do in serving Washington's vulnerable populations.