



Bixby Center
for Global
Reproductive
Health



University of California San Francisco

Contraceptive Dispensing Within 18 Months of Delivery for Women in the 2012 HEDIS Postpartum Care Cohort

**Submitted to the
California Department of Health Care Services
Office of Family Planning**

**Heike Thiel de Bocanegra, PhD, MPH
Alexa Calfee, BS
Monica Barr, MPH**

May 2015

Suggested citation

Thiel de Bocanegra H, Calfee A, Barr M. *Contraceptive Dispensing Within 18 Months of Delivery for Women in the 2012 HEDIS Postpartum Care Cohort*. Sacramento, CA: Bixby Center for Global Reproductive Health, University of California, San Francisco, 2015.

This report was prepared by the Bixby Center for Global Reproductive Health, University of California, San Francisco (UCSF) and was support by funds from the State of California, Department of Health Care Services, Office of Family Planning. All analyses, interpretations, or conclusions reached are those of UCSF, not the State of California.

Email: FamPACT@dhcs.ca.gov

Contract #12-89338A2

© Copyright 2015

INTRODUCTION

Postpartum contraception, especially highly effective contraception such as intrauterine contraceptives (IUCs) and contraceptive implants, play an important role in helping couples achieve optimal interpregnancy intervals.^{1,2}

Previous analysis of 2008 California births found that 60 percent of women received a highly or moderately effective method within 18 months; however, this analysis was limited to women with two or more births.³ A more recent analysis by the University of California, San Francisco (UCSF) Family Planning, Access, Care, and Treatment (Family PACT) evaluation team examined the postpartum contraception rate within 99 days of delivery for all women (including primiparous women) with Medi-Cal funded deliveries between November 2011 and November 2012, but did not examine the entire 18 months postpartum.⁴

This report examines postpartum contraception (and highly effective postpartum contraception) for women with Medi-Cal funded deliveries between November 2011 and November 2012, expanding beyond the 99-day window to look at contraceptives dispensed by 6 months, 12 months, and 18 months postpartum. Changes in rates of use across the 18-month period are discussed. Rates are stratified by age at delivery, maternal race/ethnicity, primary language, cesarean vs. vaginal delivery, and region during month of delivery (urban vs. rural/frontier).

METHODOLOGY

This analysis uses deliveries identified for the 2012 Health Employer Data Information Set (HEDIS) Postpartum Care Rate, part of the Office of Family Planning/UCSF's collaboration with the Department of Health Care Services' on the Centers for Medicare and Medicaid Services Adult Medicaid Quality grant. The Medi-Cal client identification numbers (CINs) of delivering women were probabilistically linked to Family PACT Health Access Program identification numbers (HAP IDs). This analysis is limited to women ages 15-44 and includes all women who had a live birth during the study period, regardless of how long they were enrolled in Medi-Cal

Contraceptive methods were identified in paid Medi-Cal claims, paid Family PACT claims, and Medi-Cal Managed Care encounter data current as of August 2014. Receipt of any contraceptive method from Medi-Cal or Family PACT was assessed at 99 days, 6 months, 12 months, and 18 months postpartum. Receipt of highly effective forms of contraception (intrauterine device [IUD], implant, or female sterilization) was also assessed at each of these points. Postpartum contraception rates at each time point were examined by maternal age at delivery, race/ethnicity, and primary language.

Maternal age, race/ethnicity, and primary language¹ were drawn from Medi-Cal and Family PACT enrollment data. If both Medi-Cal and Family PACT enrollment data were found, Medi-Cal enrollment data was given priority.

Data on region (urban vs. rural/frontier) were based on the 2010 medical service study area (MSSA) assigned to a client's Medi-Cal enrollment address. The California Office of Statewide Health Planning and Development designates each MSSA as urban, rural or frontier based on population density.

Deliveries that had claims with procedure or diagnosis codes for cesarean delivery within seven days of their delivery date were considered cesarean. Deliveries with at least one vaginal delivery procedure or diagnosis code were considered vaginal. If no codes indicated delivery type, the delivery type was considered missing.

RESULTS

Receipt of Contraception Postpartum

Overall, 62 percent of 245,623 women with Medi-Cal funded deliveries had contraception 18 months postpartum. Almost a quarter of women had highly effective forms of contraception (IUD, implant, sterilization) within 18 months of delivery. See Table 1.

- Although younger women (20-29 years) and adolescents (15-19 years) had the highest rates of any contraception at 18 months postpartum (63-67 percent), they had the lowest rates of highly effective methods (22-23 percent).
- Women between the ages of 40-44, on the other hand, had the lowest rates of contraception (54 percent) at 18 months postpartum, but the highest rates of highly effective methods (29 percent).
- Two-thirds of Latinas had contraception within 18 months of delivery, compared to 48 percent of Asian/Pacific Islanders (API). Latinas also had the highest rates of highly effective forms of contraception (26 percent), while API women had the lowest rates (16 percent).
- Women who spoke primary languages other than Spanish or English had the lowest rates of both highly effective forms of contraception (15 percent) and any contraception (44 percent).

¹ Medi-Cal applications ask clients, "What language do you speak best?" and "What language do you write best?" Both questions allow clients to write in a response; only spoken language is available in Medi-Cal eligibility data. Family PACT client eligibility certification allows clients to select their "primary language" from a list of 10 languages, including "other." All non-English and non-Spanish languages are included in "other/unknown."

Table 1. Women Ages 15-44 Receiving Contraceptive Methods from Medi-Cal or Family PACT within 18 months postpartum

Measure	Any Contraceptive Method Received from Medi-Cal or Family PACT		
	Total Deliveries	Any Method 0 to 18 Months Postpartum	Highly Effective Method 0 to 18 Months Postpartum
Overall	245,623	62%	24%
Age			
15-19	29,139	67%	22%
20 to 29	140,720	63%	23%
30 to 39	69,484	59%	27%
40-44	6,280	54%	29%
Maternal Race/Ethnicity			
Latina	163,066	66%	26%
White	39,716	56%	23%
Black	19,107	58%	18%
Asian/Pacific Islander	16,422	48%	16%
Other	6,384	50%	20%
Unknown	928	20%	7%
Language			
English	123,459	58%	22%
Spanish	112,006	68%	27%
Other	9,614	44%	15%
Unknown	544	13%	3%
Delivery Type			
Vaginal	158,263	63%	23%
Cesarean	81,456	62%	26%
Unknown	5,904	52%	17%
Region During Delivery			
Urban	205,863	62%	24%
Rural/Frontier	37,595	63%	26%
Unknown	2,165	51%	17%

Receipt of Contraception Over Time

There was a 19 percentage point increase in contraception rates between 99 days and 18 months postpartum. The rate increased seven percentage points between 99 days and six months, seven points between six months and one year, and four points between one year and 18 months.

Additional results regarding increases in contraceptive use between 99 days and 18 months include:

- Black women saw the largest increase in postpartum contraception between 99 days and 18 months postpartum (+23 percentage points). However, because they had a low rate at 99 days (35 percent), their rate at 18 months was still below average (58%). See Figure 1.
- Women speaking languages other than Spanish and English also started with a low postpartum contraception rate at 99 days. However, the percentage point increase

between 99 days and 18 months was the lowest of all groups (+12 percentage points). (Data not shown).

- Women over age 30 had the smallest increases in contraceptive use between 99 days and 18 months postpartum (+10-14 percentage points), due in part to a higher rate at 99 days postpartum. See Figure 2.
- Postpartum contraception at 18 months was highest among adolescents. See Figure 2. However, the timing of postpartum contraception varied for adolescents by race/ethnicity. In particular, Black and Latina adolescents had lower rates of contraception at 99 days than older Black and Latina women. In contrast, White, API, and other race/ethnicity adolescents had higher rates than their older peers at 99 days. (Data not shown).

Figure 1: Women with any contraception at 99 days, 6 months, 12 months, and 18 months, by maternal race/ethnicity

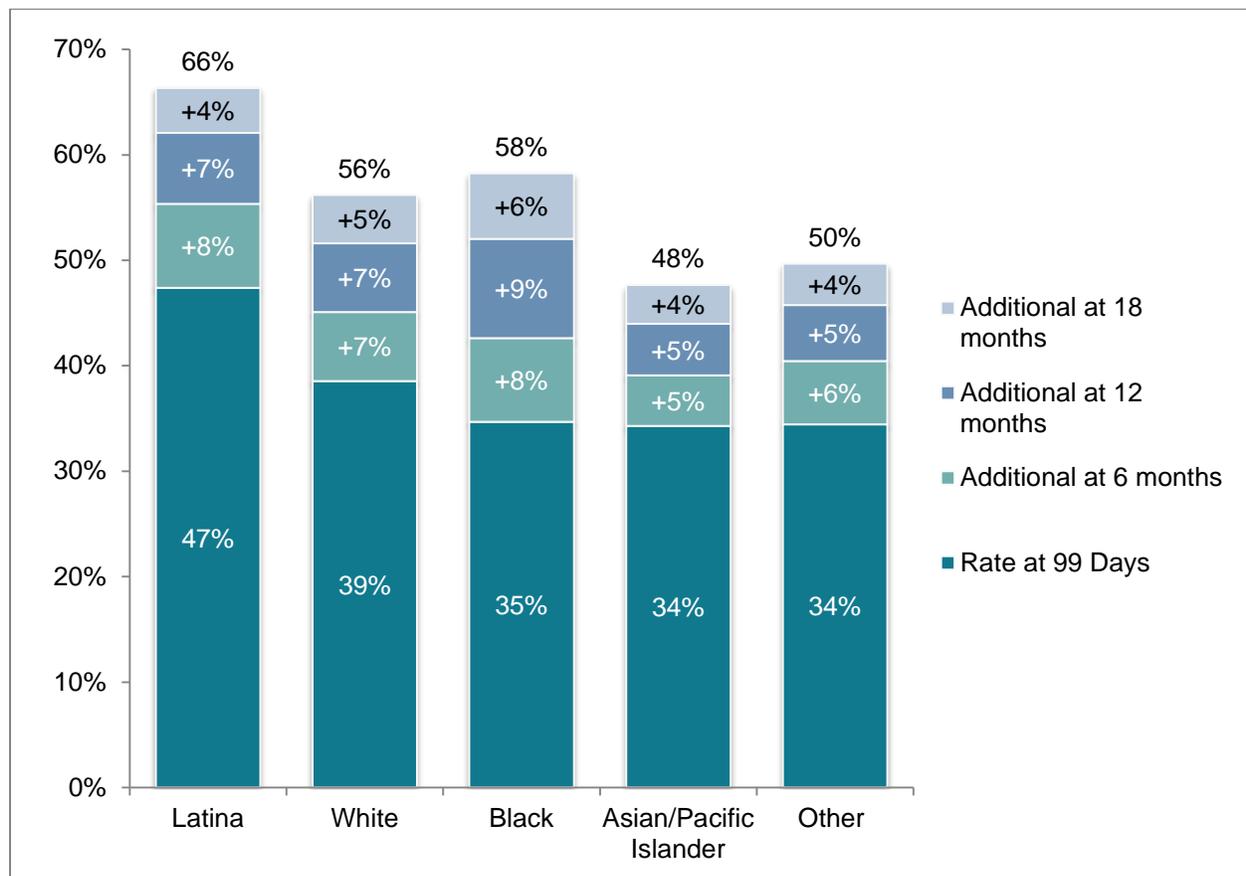
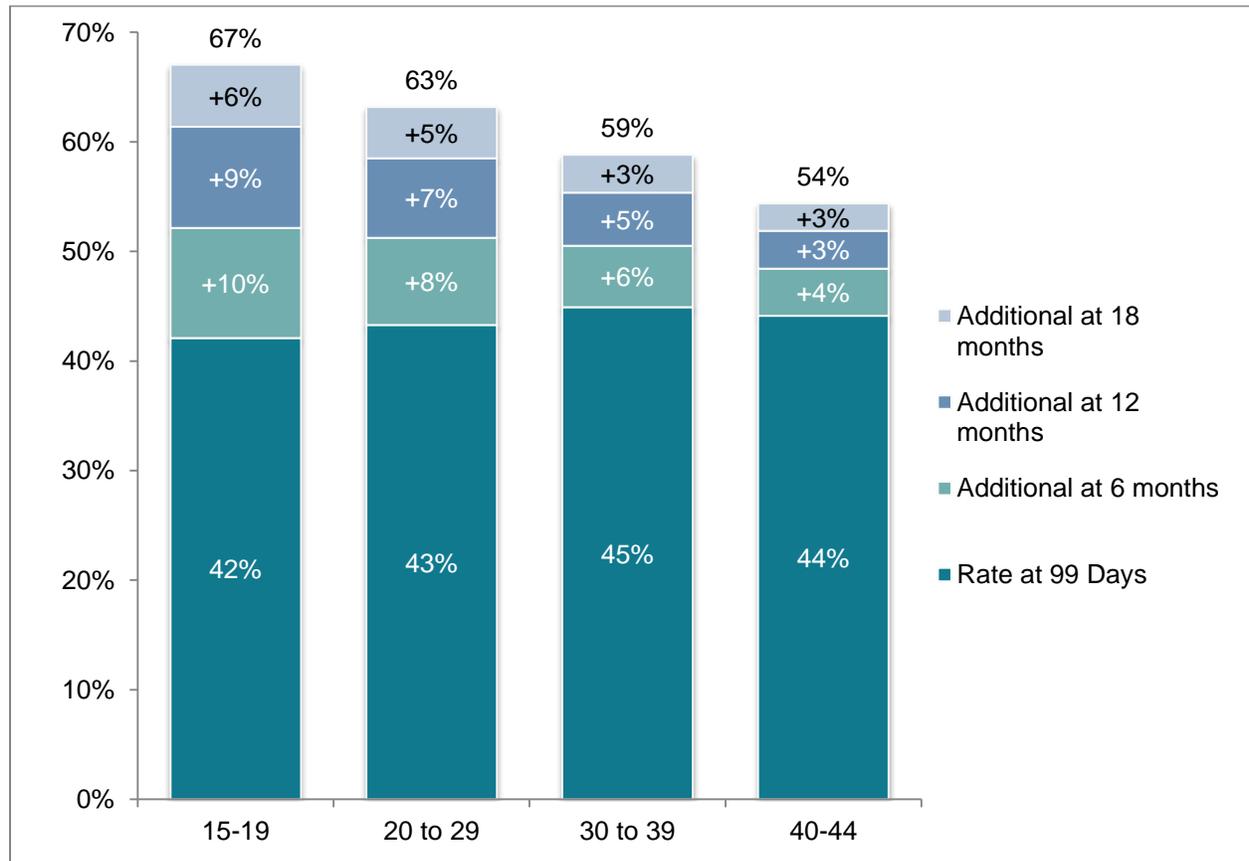


Figure 2: Women with any contraception at 99 days, 6 months, 12 months, and 18 months, by age category at delivery



Receipt of Contraception Postpartum by Delivery Type

Results by delivery type follow the overall trend of approximately two-thirds of women using any form of contraception and a quarter of women using a highly effective form of contraception. Rates of any contraception at 18 months postpartum for women after a vaginal delivery is 63 percent versus cesarean sections which is 62 percent. Highly effective forms of contraception have slightly higher rates in cesarean section deliveries (26 percent) than with vaginal deliveries (23 percent).

Receipt of Contraception Postpartum by Region

Women living in rural areas have slightly higher rates of contraception at 18 months postpartum (63 percent) than women in urban areas (62 percent). Women in rural regions also have higher rates of highly effective permanent and reversible forms of contraception postpartum (9 percent and 17 percent, respectively) than women living in urban areas (8 percent and 16 percent, respectively).

DISCUSSION

Among women with a Medi-Cal funded delivery in 2012, 62 percent received contraception within 18 months of delivery and 24 percent received highly effective methods such as IUDs, implants or sterilization.

Similar to other studies,³ Latinas had higher rates of contraceptive use in the postpartum period than other race/ethnicities in every age group and at all follow-up points, while API women had consistently low rates.

Women who spoke primary languages other than English or Spanish had the lowest rate of postpartum contraceptive use, and the smallest changes at each follow-up point. Further research is needed to examine women speaking “other” primary languages, and what factors may contribute to their low rates of postpartum contraception.

Despite high rates of postpartum contraception at 18 months for all adolescents, Black and Latina adolescents were less likely than older Black and Latina women to have contraception in the first 99 days postpartum. Their rates do eventually increase and surpass rates of older Black and Latina women. However, it is unclear whether these increases reflect positive factors (such as client initiative, provider counseling or case management programs), or whether they reflect pregnancy testing in the absence of contraception, and subsequent uptake of contraception. If women present to clinics for pregnancy testing in the postpartum period, clients and providers may be motivated to discuss contraception options. Further analysis of pregnancy claims and pregnancy testing claims in the postpartum period may help to explain these findings, or shed light on the need to improve early postpartum contraception rates for adolescents.

The influence of case management programs on contraception rates postpartum merits further exploration. Current programs, such as the Adolescent Family Life Program (AFLP), the California Black Infant Health program, and the California Home Visiting Program, offer additional services and support postpartum for high-risk populations. These services may help account for the increased rates of change in adolescent and Black women, despite their low rates in the first 99 days postpartum.

Despite similar rates of any contraception use at 18 months postpartum for delivery type, women who deliver by cesarean are more likely to have a highly effective method. This could be due to rates of sterilization at type of delivery or the use of contraceptive methods to prevent repeat pregnancies during the surgical recovery period.

The impact of geographical region of delivery on postpartum contraception rates appears minimal. Rural women were found to have higher rates of any contraception use at 18 months postpartum as well as higher rates of highly effective permanent and reversible methods. Previous studies⁵ suggest that rural women are more likely to

undergo sterilization than their urban counterparts. The same trend was seen in this analysis.

There are several limitations to this analysis. First, only contraceptives dispensed by Family PACT or Medi-Cal are captured. If women have private insurance for contraception, pay for contraception out of pocket or rely on their partners' vasectomy they would not be included. It is also important to note that even if there was a claim for contraceptives during the 18-month postpartum period, this does not estimate how long a woman used the method or if the method was used consistently.

Secondly, the study does not exclude women who were pregnant at any point during 0-18 months postpartum. In previous studies, approximately 30 percent of women have a repeat pregnancy during the first 18 months postpartum.³

Finally, results are limited by the completeness and accuracy of encounter and paid claims data. Data incorrectly coded may have resulted in false identification of contraceptive method, and incomplete data would result in an underestimation of contraceptive methods in the postpartum period.

CONCLUSION

This report examines postpartum contraception for women with Medi-Cal funded deliveries in 2012. Previously, studies only examined the first 99 days postpartum but this analysis was expanded to 18 months. Overall rates and rates of changes were examined, stratified by age at delivery, maternal race/ethnicity, and primary language.

The majority of women receiving contraception postpartum did so during the first 99 days, regardless of age, race/ethnicity, primary language, delivery type, or geographical location of delivery. However, there were several groups, including young women (under 30) and Black women, who had larger than average rates of change in contraception use after 99 days. For women not receiving contraception in the first 99 days, the follow-up appointments are important, and often missed, opportunities for clinicians to discuss options regarding contraception and interpregnancy intervals.

RECOMMENDATIONS

- The impact of case management should be further evaluated with best practices documented.
- More directed targeting of women by providers or agencies for discussions surrounding postpartum contraception, with the aim to increase contraception use in the first 99 days. As seen from this study, this early time period is when most women who receive contraception postpartum do so.
- Providers and agencies should consider establishing mechanisms to follow women's contraceptive needs and use during the entire 18 month postpartum period.

References

¹ Tang JH, Dominik R, Re S, Brody S, Stuart GS. Characteristics associated with interest in long-acting reversible contraception in a postpartum population. *Contraception*. 2013 Jul; 88(1):52-7. doi: 10.1016/j.contraception.2012.10.014. Epub 2012 Nov 15.

² Baldwin MK, Edelman AB. The effect of long acting reversible contraception on rapid repeat pregnancy in adolescents: a review. *J Adolesc Health*. 2013 Apr; 52(4 Suppl):S47-53. doi: 10.1016/j.jadohealth.2012.10.278.

³ Thiel de Bocanegra H, Chang R, Howell M, et al. Interpregnancy intervals: impact of postpartum contraceptive effectiveness and coverage. *Am J Obstet Gynecol*. 2014 Apr; 210(4):311.e1-8. doi: 10.1016/j.ajog.2013.12.020. Epub 2013 Dec 13.

⁴ UCSF Family PACT Evaluation. Report on postpartum visits and postpartum contraceptive provision to women with a Medi-Cal funded live birth, 2012. Internal report. February 2015.

⁵ Lunde B, Rankin K, Harwood B, Chavez N. Sterilization of Rural and Urban Women in the United States. *Obstet Gynecol*. 2013 Aug; 122(2 Pt 1):304-11. doi: 10.1097/AOG.0b013e31829b5a11.