Implementing an Immediate Postpartum LARC Program Before the State Medicaid Policy Change: A Texas Hospital's Experience

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Abstract

In 2016, Texas became the 17th state to allow Medicaid to reimburse for immediate postpartum (IPP) insertion of long-acting reversible contraception (LARC). But years before the state rule change, a safety net public hospital in Houston began using county funds to implement its own program. We use data from a prospective cohort of postpartum women to evaluate the impact of this county policy change on provision of IPP LARC. We found that half of women were offered IPP LARC, with Spanish-speaking women the least likely to have been offered LARC. 73% of those who were offered IPP LARC received it. Satisfaction was high but dropped between three and six months postpartum, mainly due to negative side effects. Continuation was high 24 months postpartum with no differences between IUD and implant. These results demonstrate that motivated health systems can enact local policy changes that have a positive impact on their patients.

Introduction

High costs and barriers to care, during both the postpartum period and outside of it, often prevent use of long acting reversible contraception (LARC) despite the fact that LARC is associated with lower failure rates compared to other contraceptive methods. No or limited use of contraception in the postpartum period can lead to unintended pregnancy and short interpregnancy intervals. In addition to the poor outcomes associated with unintended pregnancy, interpregnancy intervals of less than 18 months are associated with higher risk of preterm birth and associated complications (Conde-Agudelo et al., 2006). Reducing unintended pregnancy and rapid repeat pregnancy are public health priorities in the U.S (U.S. Department of Health and Human Services and Office of Disease Prevention and Health Promotion, 2016).

Use of highly effective contraceptive methods reduces postpartum women's risk of having an unintended pregnancy and short interpregnancy interval (Thiel de Bocanegra et al., 2014; White et al., 2015). However, despite motivation to receive contraception in the postpartum period, few women adopt these methods following delivery. Among publicly insured women in California, more than half did not have a contraceptive claim within 90 days postpartum (Thiel de Bocanegra et al., 2013). In a cohort of women in the NSFG who gave birth within three years of the survey date, 28% were not using any method at three months following delivery, 25% relied on less effective methods (e.g., condoms, withdrawal), 28% used hormonal methods, 6% used LARC, and 13% of women used permanent contraception; the distribution of contraceptive use was similar in subsequent months (White et al., 2015).

Barriers to expensive up-front methods, like IUDs and implants, make it even more difficult for women to obtain these highly effective methods in the postpartum period. In a retrospective cohort only 36.5% of women that desired LARC had it placed by six months postpartum and 11.4% of the women that failed to obtain the desired LARC had a subsequent short interval pregnancy

(Harney et al., 2017). Similarly, in a prospective cohort at 6 months postpartum 34% of patients expressed a preference for IUD or implant but only 13% were using these methods. Furthermore, it was the uninsured and low-income groups that were more likely to not have their preferred method placed (Potter et al., 2016).

Many women struggle to make it to their postpartum visit. Most women who are not breastfeeding will resume ovulation within four weeks postpartum and over half of women will have resumed sexual intercourse before six weeks postpartum (Connolly et al., 2005). Immediate postpartum (IPP) LARC, placed prior to hospital discharge, is safe and effective at reducing rates of unintended and short interpregnancy intervals. But in order to defray the costs of IPP LARC, policy changes need to be implemented. These can be in the form of county safety net funds determining that that paying for the devices and physician fees is warranted or by obtaining grant funds to do so. Another policy mechanism is for Medicaid to allow add-on or enhanced payment for bundled labor and delivery charges, which by 2015 was in 15 states (Moniz et al., 2015).

On January 1, 2016, Texas became the 17th state to allow Medicaid to reimburse for immediate postpartum insertion of LARC. But over a year and a half before the state rule change, Lyndon Baines Johnson General Hospital (LBJ), a safety net public hospital operated by Harris Health System, began using county funds to implement its own program to cover IPP LARC. As the largest public primary health care system in Texas, the obstetrical service performs about 2700 deliveries a year and it is home to a level III nursery. LBJ's obstetric patient population is primarily Hispanic and the majority of the patients are low income and considered indigent and postpartum follow rates are low.

Physicians at LBJ recognized the need to improve patient access to LARC. Its sister hospital in Harris Health System, Ben Taub hospital, was already placing immediate postpartum LARC in their patients thanks to a training program grant. In June 2014, physicians at LBJ approached the

pharmacy and administration and emphasized the need to improve patient access to immediate postpartum LARC like Ben Taub. Administration approved of the immediate postpartum LARC program and the pharmacy subsequently began to stock LARC on our units in July 2014. As a result, LBJ's patients were much more likely to be using a highly effective method of contraception at six months postpartum than women recruited from seven other Texas hospitals (Potter et al., 2017)

In this study, we evaluate the impact of this hospital policy change supported by the county, ahead of state-level changes, on the provision of immediate postpartum LARC for LBJ's low income patient population. We describe the characteristics of women who were offered vs. not offered this option as well as of those who obtained IPP LARC. We also assess satisfaction with the LARC methods at three and six months postpartum and continuation 24 months after delivery.

Methods

Data are drawn from a prospective cohort of 1700 postpartum women aged 18 to 44 recruited from eight hospitals in six cities in Texas enrolled in a study focused on postpartum contraceptive preferences and use (Potter et al., 2017). Women were eligible for the study if their delivery was paid by public insurance (e.g., Medicaid, CHIP Perinate) or had no insurance and reported they wished to delay childbearing for at least two years. We interviewed women face-to-face in either English or Spanish while still in the hospital (baseline) and again by phone at three, six, nine, 12, and 18 and 24 months postpartum. In the baseline interview, we collected sociodemographic information such as age, income, race or ethnicity, education, and where education was completed. We assessed contraceptive use at baseline and all subsequent follow-up interviews. We also asked women about their satisfaction with their IPP LARC method at three and six months postpartum. For women who changed their preference between the two rounds of interviews, we asked them why and their responses were noted. Data for this paper are restricted to those from LBJ Hospital (N=199); recruitment took place between October and December 2015.

We explore the characteristics of women who were offered IPP LARC during either prenatal care or before discharge from the hospital. Finally, we analyzed satisfaction of their LARC methods postpartum and continuation of the IUD or implant using Kaplan-Meier survival curves.

Results

We have follow-up information on 184 of the 199 (92.5%) women enrolled in the study from LBJ Hospital; of these, 47 of the 50 (94.0%) women who received an immediate postpartum implant did at least one follow-up interview, 20/24 (83.3%) IPP IUD recipients were retained and 117/125 (93.6%) non-IPP LARC users were retained.

Just slightly over half (101/199) of women in the sample recalled being offered IPP LARC during prenatal care, in the hospital, or both (Table 1). On average, 73% of women who were offered IPP LARC obtained it before discharge. Among those who were offered IPP LARC, there was no variation in who obtained it with the exception of women who got a postpartum sterilization.

Some variation exists in the characteristics of the patients who were offered IPP LARC during prenatal care and/or while in the hospital. Compared to younger women and those with lower parity, fewer older women and those with high parity were offered IPP LARC. Foreign-born Hispanic women were offered this option less often than US-born Hispanics, black, white and women with other ethnicities as were fewer women who did their interview in Spanish, compared to those who completed their interview in English. Women with completed high school were offered IPP LARC less often than those with less and more of a high school degree. Finally, most women who obtained a tubal ligation were not offered IPP LARC. There were no differences in who was offered IUDs or implants by relationship status, prenatal care provider, or delivery type.

In further analyses not shown here, we found that differences by race/ethnicity and nativity are a function of language; among women whose interview was in English, 63% to 70% of all

groups were offered IPP LARC, but only 39% of foreign-born Hispanic women whose interview was in Spanish were offered long-acting methods. Differences by parity and education are a function of sterilization. That is, there were no differences in who was offered IPP LARC by parity or education among those who got a postpartum tubal ligation as well as among those who did not get one. However, having obtained a sterilization while in the hospital did not explain the differences by age in who was offered IPP LARC; even among women who did not obtain a postpartum sterilization, fewer of the older women were offered the option of getting a long-acting method before discharge.

The majority of women who we interviewed at three and six months postpartum said they were either very satisfied or somewhat satisfied with their IUD or implant. However, 11 of 38 (29%) of women who were very satisfied at three months postpartum downgraded their satisfaction to somewhat satisfied while 3 of 38 (8%) downgraded to unsatisfied. The majority of women whose satisfaction dropped recounted unsatisfactory menstrual changes, pain, or weight gain as the reasons for lower satisfaction with the method.

In the two years following delivery, continuation rates for both the IUD and implant are high (Figure 1). While the hazard models show that continuation of the implant is higher than the IUD, the difference is not statistically significant.

Discussion

We found that, despite LBJ's program having been implemented over 12 months before the start of recruitment, only half of women in our study recalled being offered an immediate postpartum LARC method either during prenatal care or before discharge from the hospital. Women who obtained a postpartum tubal ligation explains some of this variation; however, Spanish-speaking women were less likely to have been offered this option than English-speaking women. While LBJ has some physicians on staff who are comfortable providing contraceptive counseling in

Spanish, many physicians must rely on translators (typically over the phone) to provide counseling to their predominantly Spanish-speaking patient population. This clearly demonstrates gaps in the promise of changing policies to improve the provision of postpartum contraception: if the medical staff is unable to communicate the existence of the program, it will be underutilized.

On the other hand, among women who were offered IPP LARC, there was high uptake and no differences by women's characteristics (except receipt of a tubal ligation), demonstrating both women's interest in using these methods and LBJ physicians' success in providing them to a wide range of their patients.

High continuation rates show that women are generally satisfied with these methods. Some changes in satisfaction from very satisfied to somewhat satisfied, however, show that the side effects of these methods are unpleasant for some users.

These findings show that individual health systems can enact policy changes that have positive impacts on their patient populations. Making these policy changes ahead of larger state Medicaid changes demonstrates the county's and hospital's commitment to providing innovative and comprehensive patient care that is often not found in safety net hospitals.

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Table 1. Characteristics of participants who were offered and not offered immediate postpartum long-acting contraception IPP LARC, and of those who obtained a LARC method among those who were offered the method

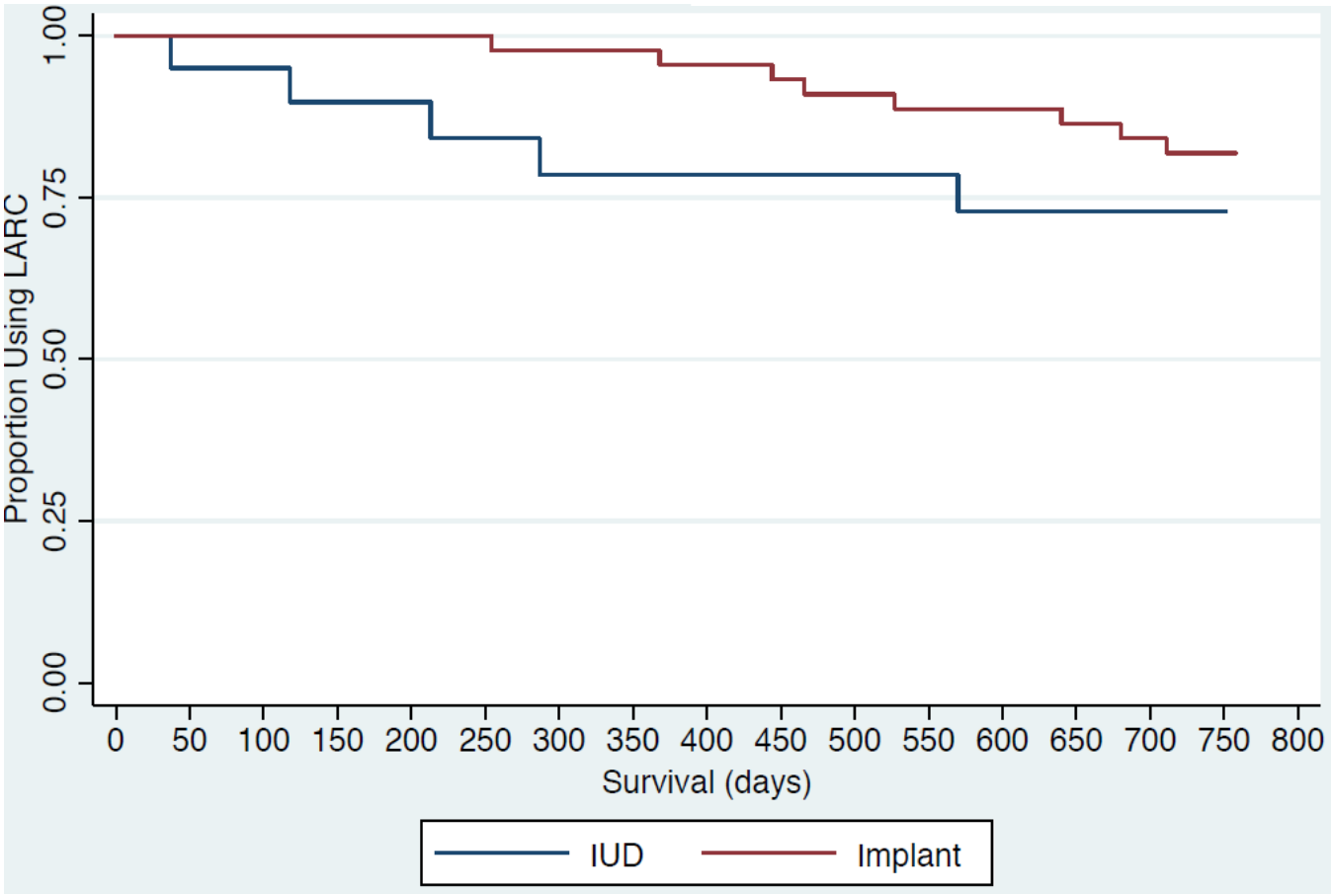
Respondent Characteristics	Not offered IPP LARC n=98	%[a]	Offered IPP LARC n=101	%[a]	Not offered vs. Offered p-value	Obtained IPP LARC if offered n=74	%[a]	Not obtained vs. Obtained p-value[c]
Age					**<0.001**			0.813
18-24	16	30.8	36	69.2		27	75.0	
25-29	20	36.4	35	63.6		25	71.4	
30-34	38	66.7	19	33.3		15	79.0	
35-44	24	68.6	11	31.4		7	63.6	
Parity					**0.036**			0.412
1	16	42.1	22	57.9		14	63.6	
2	20	36.4	35	63.6		29	82.9	
3	24	63.2	14	36.8		10	71.4	
≥4	38	55.9	30	44.1		21	70.0	
Race/ethnicity and nativity					**0.045**			0.329
Hispanic, US-Born	4	30.8	9	69.2		5	55.6	
Hispanic, Foreign-Born	82	55.0	67	45.0		50	76.6	
Black	9	31.0	20	69.0		14	70.0	
White and Other	3	37.5	5	62.5		5	100	
Language of Interview					**<0.001**			0.708
English	25	32.1	53	68.0		38	71.7	
Spanish	73	60.3	48	39.7		36	75.0	
Relationship Status					0.690			0.472
Married	34	53.1	30	46.9		22	73.3	
Single	22	50.0	22	50.0		14	63.6	
Cohabitating	42	46.2	49	53.9		38	77.6	
Education					**0.035**			0.792
Less than high school	58	56.9	44	43.1		31	70.5	
High school diploma	25	36.8	43	63.2		33	76.7	
More than high school	15	51.7	14	48.3		10	71.4	
Prenatal Care Provider					0.998			0.554
Public	91	49.2	94	50.8		69	73.4	
Private	5	50.0	5	50.0		3	60.0	
None	2	50.0	2	50.0		2	100	
Delivery Type					0.125			0.722
Vaginal	64	45.7	76	54.3		55	72.4	
C-section	34	57.6	25	42.4		19	76.0	
Obtained postpartum tubal ligation					**<0.001**			**0.018**
No	58	36.9	99	63.1		74	74.8	
Yes	40	95.2	2	4.8		0	0.0	

[a] Row percentages;

Table 2. Satisfaction with immediate postpartum LARC at 3 and 6 months postpartum

	Satisfaction at 6 months postpartum											
	Very satisfied		Somewhat satified		Somewhat unsatisfied		Very unsatisfied		Missing		Total	
Satisfaction at 3 months postpartum	n	*% of total*	*n*	*% of total*	*n*	*% of total*	*n*	*% of total*	*n*	*% of total*	*n*	*% of total*
Very satisfied	22	29.7%	11	14.9%	1	1.4%	2	2.7%	2	2.7%	38	51.4%
Somewhat satisfied	2	2.7%	9	12.2%	1	1.4%	1	1.4%	2	2.7%	15	20.3%
Somewhat unsatisfied	0	0.0%	1	1.4%	2	2.7%	1	1.4%	0	0.0%	4	5.4%
Very unsatisfied	0	0.0%	1	1.4%	1	1.4%	2	2.7%	0	0.0%	4	5.4%
Missing	1	1.4%	1	1.4%	0	0.0%	0	0.0%	11	14.9%	13	17.6%
Total	25	33.8%	23	31.1%	5	6.8%	6	8.1%	15	20.3%	74	100.0%

Figure 1. IUD and Implant Continuation Postpartum



Note: Kaplan-Meier curves for implants and IUDs; difference is not statistically significant.