Women's Health Issues xxx-xx (2018) 1–5

ELSEVIER

WOMEN'S HEALTH ISSUES

www.whijournal.com

Original article

Long-Acting Reversible Contraceptive Uptake before and after the Affordable Care Act Contraceptive Mandate in Women Undergoing First Trimester Surgical Abortion

Kimberly N. Bell, MD [a], Leslie A. Meyn, PhD [a], Beatrice A. Chen, MD, MPH [a,b,*]

[a] *Department of Obstetrics, Gynecology and Reproductive Sciences, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania*
[b] *Magee-Womens Research Institute, Pittsburgh, Pennsylvania*

Article history: Received 27 December 2017; Received in revised form 27 March 2018; Accepted 20 April 2018

A B S T R A C T

Objective: To compare long-acting reversible contraceptive (LARC) uptake before and after the Affordable Care Act (ACA) contraceptive mandate among women undergoing a first trimester surgical abortion.
Study Design: We conducted a retrospective chart review of 867 women undergoing a first trimester surgical abortion at an academic gynecology practice between December 2010 and December 2014 (excluding August to December 2012) to evaluate intrauterine device and contraceptive implant uptake before and after the ACA contraceptive mandate.
Results: Before the ACA contraceptive mandate, 79% of privately insured women (213 of 271) had full LARC coverage (no out-of-pocket costs) compared with 92% (298 of 324) after the mandate ($p < .001$). We found no difference in postabortal LARC uptake before and after the ACA in women with private insurance, Medicaid, or overall. Among all women, 46% chose a postabortal LARC method before the mandate as compared with 48% after the mandate ($p = .63$). Among privately insured women, 45% used a postabortal LARC method before the mandate as compared with 50% after the mandate ($p = .25$). One-half of privately insured women (268 of 534) with full or partial LARC coverage used a postabortal LARC method compared with 32% of privately insured women (18 of 56) with no LARC coverage after implementation of the ACA contraceptive mandate ($p = .01$).
Conclusions: Despite the significant increase in full coverage of LARC among privately insured women, there was no change in postabortal LARC use after the ACA. However, privately insured women with full or partial LARC coverage were more likely to use a postabortal LARC method compared with privately insured women with no LARC coverage after the implementation of the ACA contraceptive mandate.

In the United States, approximately 45% of all pregnancies are unintended. Of those unintended pregnancies, 42% ended in abortion (Finer & Zolna, 2016). In 2014, 44.9% of U.S. women underwent an abortion had one or more abortions in the past (Jatlaoui et al., 2017). Providing immediate postabortal contraception is important in preventing future unintended pregnancies. Postabortal long-acting reversible contraception (LARC) insertion is safe and effective, and has been shown to decrease repeat abortion rates (American College of Obstetricians and Gynecologists [ACOG], 2017; Rose, Garrett, & Stanley, 2015; Steenland, Tepper, Curtis, & Kapp, 2011). The ACOG states that providing LARC immediately after abortion can be ideal, because women are frequently highly motivated to avoid pregnancy insertion, and should be offered routinely (ACOG, 2015, 2017). Despite being highly effective, only 11.6% of contraceptive users are using a LARC method (intrauterine device [IUD] or contraceptive implant) as compared with 28.5% who are using birth control pills, the patch, or the ring combined (Daniels, Daugherty, Jones, & Mosher, 2015).

Cost may play a role for women deciding on which contraceptive method they will use (Pace, Dusetzina, Fendrick, Keating, & Dalton, 2013). Financial barriers and state policies on contraceptive coverage are known to be barriers to postabortal LARC

Conflict of interest: Dr. Chen receives research funding from Medicines360, Bayer Healthcare, and Merck, all managed through Magee-Womens Research Institute, and serves on a Merck advisory board. Dr. Bell and Dr. Meyn do not have any conflicts of interest.

* Correspondence to: Beatrice A. Chen, MD, MPH, Department of Obstetrics, Gynecology and Reproductive Sciences, University of Pittsburgh School of Medicine, 300 Halket Street, Pittsburgh, PA 15213. Phone: 412-641-1403; Fax 412-641-1133.

E-mail address: chenba@upmc.edu (B.A. Chen).

1049-3867/$ - see front matter © 2018 Jacobs Institute of Women's Health. Published by Elsevier Inc.
https://doi.org/10.1016/j.whi.2018.04.007

placement (Rocca, Thompson, Goodman, Westhoff, & Harper, 2016; Thompson, Speidel, Saporta, Waxman, & Harper, 2011). Before the Affordable Care Act (ACA) contraceptive mandate, privately insured women could pay hundreds of dollars out-of-pocket for the initiation of a LARC method (Dusetzina et al., 2013; Gariepy, Simon, Patel, Creinin, & Schwarz, 2011). To decrease cost as a barrier to access to contraception, the ACA mandates that all contraceptive methods approved by the U.S. Food and Drug Administration be covered without cost sharing, to include copays and deductibles, by private health plans beginning August 1, 2012 (Fox & Barfield, 2016). However, some private insurance plans did not make the changes to eliminate cost sharing until January 2013 (Patient Protection and Affordable Care Act of 2010; Sonfield, Tapales, Jones, & Finer, 2015). In contrast, cost sharing for contraceptive methods has been eliminated for Medicaid health plans since the 1970s (Social Security Amendments of 1972).

To evaluate the impact of the ACA contraceptive mandate on the uptake of LARC after a first trimester surgical abortion, we examined the uptake of postabortal LARC at the time of surgical abortion before and after the ACA contraceptive mandate in women with private insurance and Medicaid.

Methods

We conducted a retrospective chart review of women who underwent a surgical abortion at a faculty gynecology office staffed by fellowship-trained family planning physicians. This office provided first trimester surgical abortions for patients with private and Medicaid insurance as well as self-pay patients who either did not have insurance or did not want to use their insurance for the abortion. We identified patients using a list of women who presented for abortion between December 1, 2010, and December 31, 2014. We excluded the months of August 2012 through December 2012 to allow for implementation of the ACA mandate. We also excluded women who underwent a medical abortion because they would not be able to receive an immediate postabortal LARC. LARC methods available to women included the 52-mg levonorgestrel-IUD, the copper IUD, the 13.5-mg levonorgestrel-IUD, and the etonogestrel contraceptive implant. Also available to women were prescriptions for oral contraceptive pills, contraceptive patch, vaginal ring, and medroxyprogesterone acetate injection. We hypothesized that the proportion of LARC uptake after a surgical abortion would increase after the ACA mandate compared with before the mandate among privately insured patients. We also hypothesized that there would be a greater increase in the percentage of LARC uptake after a surgical abortion among privately insured women compared with Medicaid insured women after the ACA contraceptive mandate due to the change in cost sharing. We defined LARC uptake as the placement of a LARC method at the time the surgical abortion was performed. The site institutional review board approved the study.

A single author abstracted data on demographics, gynecologic history including prior contraceptive use, and postabortal LARC insertion from the electronic health records using a standardized data extraction form. Insurance information including type, abortion coverage and out-of-pocket cost, and contraceptive coverage and out-of-pocket cost was obtained from the standardized information collected at time of appointment scheduling. A single clinic employee was responsible for verifying insurance status, type, and LARC coverage. This information was collected before the patient's scheduled appointment and documented in her chart. We considered a patient to have full LARC coverage when 100% coverage without out-of-pocket costs was documented in the chart. We defined partial LARC coverage as having some insurance coverage, but the patient was responsible for some out-of-pocket costs. After completion of abstraction, we verified 10% of the records to ensure that data were accurately abstracted and transcribed.

For women with repeat abortions in this time period, only the first abortion was included in the primary analysis. Data were analyzed using Stata version 14.2 (College Station, TX). We compared the demographics of women who presented before and after the ACA mandate using Fisher's exact and Student t tests, where appropriate. We used Fisher's exact test to compare the percentage of LARC uptake before and after the ACA contraceptive mandate among all women and within insurance groups. We used logistic regression to identify correlates of LARC uptake using forward selection based on the likelihood ratio test statistic. Variables were retained in the model if the Wald χ^2 test statistic had a $p \leq .05$. A sample size of 500 per time period would have 83% power to detect at least a 30% increase in LARC uptake (from 30% to 39%) at the two-sided 0.05 significance level.

Results

We identified 1109 women who presented for a first trimester abortion during our study period. The study flow is described in Figure 1. After excluding medical and repeat abortions, 867 patients were included in the final data analysis.

Of the women who presented for a first trimester surgical abortion, 382 women presented before implementation of the ACA contraceptive mandate and 485 women presented after implementation of the ACA mandate. The demographics of women in this population are described in Table 1. Patients who presented for a surgical abortion before the ACA contraceptive mandate were demographically similar to those who presented after the ACA contraceptive mandate. However, women who presented for an abortion after the ACA contraceptive mandate were more likely to have ever used a LARC method. Seventeen women underwent terminations for anomalies such as trisomy 18, trisomy 21, and anencephaly, including 13 women before the ACA mandate and 4 women after the mandate. None chose a LARC method postabortion, although two chose to use combined

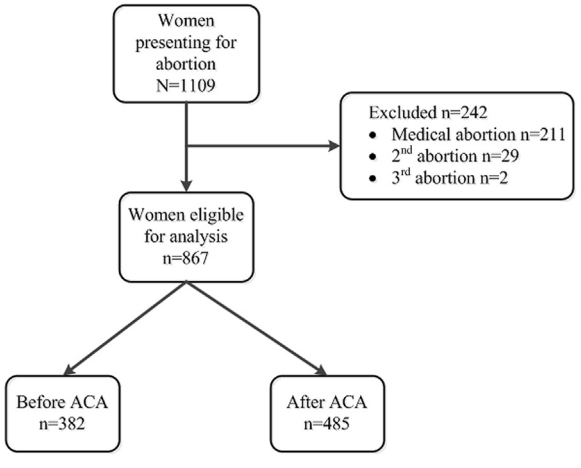

Figure 1. Flowchart of women for study inclusion. ACA, Affordable Care Act contraceptive mandate.