GYNECOLOGY

Statewide quality improvement initiative to implement immediate postpartum long-acting reversible contraception

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BACKGROUND: Women face barriers to obtaining contraception and postpartum care. In a review of Tennessee birth data from 2014, 56% of pregnancies were unintended, 22.7% were short-interval pregnancies, and 57.9% of women who were not intending to get pregnant were not using contraception. Offering long-acting reversible contraceptive methods in the immediate postpartum period allows women who desire these effective methods of contraception to obtain unobstructed access and lower unintended and short-interval pregnancy rates.

OBJECTIVE: We report the experience of Tennessee's perinatal quality collaborative that aimed to address unintended and short-interval pregnancy by increasing access to immediate postpartum long-acting reversible contraception through woman-centered counseling and ensuring reimbursement for devices. This followed a policy change in November 2017 that allowed women who were insured under Tennessee Medicaid programs (TennCare) to achieve access to immediate postpartum long-acting reversible contraception.

STUDY DESIGN: From March 2018 to March 2019, 6 hospital sites participated in this statewide quality improvement project that was based on the Institute of Health Improvement Breakout Collaborative model. An evidence-based toolkit was created to provide guidance to the sites. During the year of implementation, monthly huddles occurred, and each facility took a differing amount of time to implement immediate postpartum long-acting reversible contraception. Various statewide and hospital-specific barriers occurred and were overcome throughout the year.

RESULTS: In total, 2012 long-acting reversible contraception devices were provided to eligible and desiring women. All but 1 institution was able to offer immediate postpartum long-acting reversible contraception by March 2019. Reimbursement was the biggest statewide barrier because rates were low initially but improved through intensive intervention by dedicated team members at each site and the state level. Even with dedicated team members, false assurances were given repeatedly by billing and claims staff.

CONCLUSION: A statewide quality improvement project can increase access to immediate postpartum long-acting reversible contraception. Implementation and reimbursement require a dedicated team and coordination with all stakeholders. Verification of reimbursement with leaders at TennCare was essential for project sustainment and facilitated improved reimbursement rates. The impact on unintended and short-interval pregnancies requires long-term future investigation.

Key words: immediate postpartum, IPP, LARC, long-acting reversible contraception, policy change, quality improvement, reimbursement

In the United States, 45% of pregnancies are unintended.[1] In Tennessee, 56% of pregnancies were unintended in 2014; 22.7% were short interval pregnancies, defined as pregnancies <24 months apart, and 57.9% of women who were not intending to get pregnant were not using contraception.[2–4] Women face barriers to accessing contraceptive options and obtaining postpartum care, with approximately 40% of women not attending their postpartum appointment.[5] These barriers include, but are not limited to, transportation issues, inflexible employment, unstable housing, language barriers, lack of childcare, perception of the usefulness for the appointment, and long appointment wait times.[5] Without postpartum follow up, many women are unable to access contraception. In addition, one-half of all women who are insured by Medicaid lose coverage by 6–8 weeks after delivery.[5]

Offering long-acting reversible contraceptive (LARC) methods in the immediate postpartum (IPP) period for appropriate women potentially could improve access to effective contraception and lower unintended pregnancy rates. Even if a woman attends the postpartum visit, 40–57% report unprotected sex within 6 weeks of birth, and one-half of women who do not breastfeed will ovulate before the sixth week and before a routine postpartum appointment.[6,7] In the IPP period, women are highly motivated to obtain contraception and are not pregnant, and this is a convenient time for placement. Despite higher IPP intrauterine device (IUD) expulsion rates, evidence shows that, at 6 months after delivery, women with an IPP IUD placed were more likely to have continued their contraception method.[8]

The Tennessee Initiative for Perinatal Quality Care (TIPQC) is the state's perinatal quality collaborative that seeks to improve health outcomes for mothers and infants in Tennessee by engaging key stakeholders, identifying opportunities to optimize maternal and infant outcomes, and implementing data-driven provider- and community-based performance improvement

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AJOG at a Glance

Why was this study conducted?

Women in Tennessee face barriers to reproductive healthcare services that cause unintended and short-interval pregnancies to be a major public health issue. Increasing access to effective, long-acting reversible contraception at a time when women have access to health care and providers may help close the gap in access. Data in this project were collected to assist other institutions and states to implement similar programs.

Key findings

Through a woman-centered model, uptake of long-acting reversible contraception immediately postpartum was strong. Reimbursement improved over time.

What does this add to what is known?

This project addressed barriers specific to the implementation of long-acting reversible contraception in the immediate postpartum period and presents strategies specific to reimbursement.

initiatives (website: https://tipqc.org/immediate-postpartum-long-acting-reversible-contraception/). The IPP LARC project was implemented to improve access to comprehensive postpartum contraceptive options that include IPP LARC and served as 1 of 6 TIPQC projects during the year. TIPQC is funded by a grant from the Tennessee Department of Health, which supports a full-time executive director, a part-time data analyst, and 8 hours per week from both a nursing Quality Improvement Specialist and physician Medical Director. All of these team members are working on multiple projects simultaneously, the amount of time dedicated to any 1 project varies by the project needs. The TIPQC individual project operational team consists of medical providers and individuals who specialize in quality improvement and program management who helped to engage state partners, to develop the project toolkit and quality measures, and to host learning sessions, coaching calls, and monthly webinars. The toolkit, teaching, and information shared by the operational team were developed after a review of the literature and other state quality improvement programs, resources from the American College of Obstetricians and Gynecologists (ACOG) LARC program, and the Postpartum Contraceptive Access Initiative (PCAI).[9–11] One of the TIPQC team members (N.B.Z.) is a member of the ACOG LARC Workgroup and the ACOG Postpartum Contraceptive Access Initiative team. The work done by the TIPQC team provided the statewide infrastructure and support needed for hospitals to be prepared for the project launch in March of 2018.

Before project implementation, reimbursement was a critical factor, as it has been in other states, by limiting access to IPP LARC. In 2015, to attempt to decrease unintended pregnancy in Tennessee, the TIPQC Maternal Medical Director (N.B.Z.) met with state Medicaid (TennCare) executives to discuss several strategies. IPP LARC was 1 of the suggested strategies; from experience with other states, we were aware that reimbursement for LARC devices and insertion fees had to be assured for hospitals and providers before they would consider implementation of a program and participation in this project. Through the coordinated efforts of Tennessee's Medicaid programs (TennCare and Coverkids), Tennessee Department of Health, Tennessee Hospital Association, and TIPQC, a policy change allowed fees for LARC devices and the insertions to be unbundled from the global delivery reimbursement, which made IPP LARC an option for Medicaid recipients who desired IPP contraception. One of the most important factors of this policy change was the inclusion of uniform billing guidance that had been agreed on by the 3 managed care organizations that offer TennCare coverage. A document on the letterhead of TennCare and the managed care organizations (Blue Cross Blue Shield, United Health Care, and Amerigroup) was sent to all hospitals and providers to announce the policy change and share the billing guidance. Pilot sites A, B, and C tested the billing process and felt assured that the strategies that had been implemented could be disseminated through the statewide Quality Improvement project. The message of successful reimbursement was also distributed to all women's health providers through an open letter to Tennessee ACOG and Tennessee Department of Health.

Reported in this article is the experience of this Quality Improvement project to allow other teams to learn from the successes and barriers that will be faced to make IPP LARC available at participating hospitals to all women who desire IPP contraception.

Materials and Methods

An interprofessional team composed of clinicians, public health educators, data analyst, and quality improvement specialists developed the project with the use of the Institute of Health Improvement Breakthrough Collaborative model.[12] The global project aim was to improve the health of infants and eligible women who desired IPP contraception in Tennessee by increasing access to contraception through systematically promoting and supporting IPP LARC in Tennessee, thus reducing unplanned pregnancies, improving pregnancy spacing, and potentially reducing neonatal abstinence syndrome. The global aim had 2 sequential aims for implementation purposes: (1) to increase access of IPP LARC to 50% of participating institutions by March 2019, and (2) once an institution's supporting structure was complete, to increase placement in eligible women desiring IPP LARC to 70% by March 2019.

To develop the IPP LARC Toolkit, a comprehensive review of the literature, evidence-based practices, and other state IPP LARC Quality Improvement toolkits was completed.[13] Six potentially better

practices (PBPs) were outlined in the toolkit and included rationale, implementation strategies, and potential challenges. Although the PBPs served as a "menu" of potential changes for participating institutions to consider, it should be noted that the list of PBPs was not exhaustive, exclusive, or all-inclusive. Some implementing hospitals were required to complete other steps for implementation such as the development and approval of an IPP LARC specific patient consent form.

The following LARC PBPs were outlined: (1) Establish a policy and/or procedure for IPP LARC placement. (2) Have IUDs in stock and readily available for IPP placement in labor and delivery or obstetric operative suites after vaginal or cesarean birth, and/or after abortion for all desiring women. (3) Have implants in stock and readily available for IPP placement after vaginal or cesarean birth and/or after abortion for all women who desire IPP. (4) Provide education and training that includes the benefits and risks of LARC and LARC placement for providers, nursing staff, operative staff, and lactation consultants. (5) Provide woman-centered education and counseling regarding contraception options, including LARC methods. Standard components of LARC education included (but was not limited to) risks, signs of IUD expulsion, anticipated changes to menstrual bleeding, and theoretic issues related to breast milk production and successful breastfeeding. (6) Establish coding, billing, and reimbursement procedures for LARC devices in addition to labor and birth charges. This included provider reimbursement for the insertion procedure, identification mechanisms to reconcile reimbursements with patient accounts, and a system to monitor and resolve denials.

After the development of the toolkit, Institutional Review Board approval was obtained through Tennessee Department of Health processes and received quality improvement exemption status before project launch. Resources for implementation were produced by an interdisciplinary team, were made available for team utilization, and included a generic policy, procedure, guidelines, Key Driver diagram, patient counseling, and post-insertion teaching materials for each type of LARC. Any success realized from this toolkit were, in part, due to the generous collaboration of the participating institutions and toolkits from other states. In addition, materials from the ACOG Postpartum Contraceptive Access Initiative program were instrumental in provider education.[10]

During the year of implementation, March 2018 to March 2019, 1 in-person learning session and monthly webinar huddles occurred that provided general education on Quality Improvement fundamentals, IPP LARC specific education, and team progress. In addition, intermittent coaching calls and email messages were used to assist teams with implementation issues, as indicated.

The target population was defined as "all women who are eligible and desire postpartum LARC after giving birth and/or terminating a pregnancy in Tennessee institutions." Eligibility and contraindications for IPP LARC placement were defined and based on ACOG recommendations that were highlighted in the TIPQC toolkit and based on insurance status.[12]

Participation in the project, as with all statewide Quality Improvement projects, included the identification of a team of champions at each institution. The champions at each institution were able to record patient education in various formats (paper documentation during prenatal care, documenting patient stated experiences of prenatal contraceptive counseling on admission to labor units, and electronic medical record [EMR] changes). Each institution designated a person to input all data related to the project into RedCap software.

Steps to guard against coercion while ensuring proper counseling, woman's choice, and access were stressed when implementing IPP LARC as a contraceptive option. Providers and nurses initially were educated on the ethical considerations, benefits, and risks of IPP placement of LARC devices to provide patient-centered comprehensive contraception counseling and to identify appropriate candidates, contraindications, and placement techniques that may differ in the postpartum woman. Nursing and operating room team members were educated regarding the rationale for the project and recognition of LARC candidates to ensure that all women who met criteria and desired LARC, received it. Patients were empowered through comprehensive contraception; health literate education that included materials specific to LARC placement in the IPP period were created and translated into Spanish. In addition, leadership from SisterReach (https://sisterreach.org), a reproductive justice group in Memphis, TN, reviewed the TIPQC tool kit before provision for team use. SisterReach continued to act as a resource throughout the course of the project. In addition, an open letter was distributed to women's health providers through Tennessee ACOG and Tennessee Department of Health in an attempt to educate about the project and allow an avenue to report any suspected coercion or concerns to project leaders. Providers who care for women without insurance or who are on TennCare were reminded that removal should be completed if a woman expressed a desire. TennCare covered both removal and insertion of a different device, if desired. If women did not have TennCare or were in danger of losing coverage shortly after delivery, they were made aware of community locations for removal at no cost.

To evaluate the Quality Improvement project impact, the Donabedian model of outcome, process, and balancing measures was used.[14] The IPP LARC project was structure/process-oriented, with PBPs and interventions prescribed in a specific sequence to ease progression. Unique institutional policy and groundwork were required. Outcome, process, and balancing measures were outlined in the toolkit and tracked each month by the teams.

The primary outcome measure was to determine whether the participating institution was providing the option of IPP LARC, which was defined as the

TABLE 1
Hospital site characteristics

Hospital	Academic institution	Regional population (county), n[a]	Population covered by Medicaid, %	Total deliveries during project, n	Centers for Disease Control and Prevention Levels of Care Assessment tool level of care[b]	Years with Tennessee Initiative for Perinatal Care, n
Site A	Yes	432,269	50	3712	IV	5
Site B	Yes	626,560	34	4700	IV	5
Site C	Yes	927,644	90	3300	IV	5
Site D	Yes	336,486	38	5483	IV	5
Site E	Yes	123,058	62	1400	IV	5
Site F	No	72,843	45	1691	I	1st Project

[a] Census Bureau 2010, available at: https://www.census.gov/quickfacts/fact/table/US/PST045218 (accessed August 14, 2019); [b] Levels of Maternal Care, Obstetric Care Consensus No. 9. American College of Obstetricians and Gynecologists. Obstet Gynecol 2019;134:e41–55. Accessed August 2, 2019.

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ability to have placement during the delivery hospitalization. Once an institution was providing the option of IPP LARC, the secondary outcome measure was the percent of desiring and eligible women who obtained a LARC device. However, most participating teams found it very difficult to measure the number of desiring women. In turn, the secondary outcome was modified to the number of LARC devices actually placed for each type of device the institution was providing (hormonal IUDs, copper IUDs, and implants). Even with this change, the focus of the project never became to increase the number of LARCs overall. We continued to emphasize patient-centered counseling and insertions in eligible, desiring women. We attempted to estimate the number of eligible women as those that had deliveries covered by TennCare, approximately one-half of all deliveries in the state, but that did not account for any medical contraindications. Pilot site A was able to modify their EMR to include the patient's contraceptive plan on admission and therefore was able to determine that they were providing LARC to >70% of eligible desiring women.

Structure/process measures related to policy/procedure/guideline development and implementation, availability of IPP LARC devices in all areas (labor and delivery, obstetric operating suites, and after delivery), EMR revision completion, and provider, nursing, lactation consultant education were related to the completion of these tasks. Participating hospitals were instructed to answer these data questions as "no" until fully implemented. A patient education measure focused on the timing of counseling: before birth admission, before delivery discharge, or both.

Balancing measures addressed hospital expenses, IUDs that were expelled, and women who returned to obstetric triage and/or the Emergency Department with complications after LARC placement. Hospital reimbursement of expenses was tracked extensively by all teams. However, the other 2 balancing measures were the most difficult to track. Teams provided feedback on these challenges, which included the inability to obtain expulsion data and to gather data from outpatient clinics and women who required transport for a high-risk birth (for example, a woman who gave birth at a tertiary care center but received postpartum care in their home community). In addition, some teams were unable to track the number of women who returned with complications because of limitations in current EMR structure.

To facilitate quantitative, data-driven improvement, the LARC project used a web-based data entry system through REDCap software. REDCap data entry assisted each participating institution to organize data entry so that only essential data were collected and, in turn, provide easily generated, on-demand run and control charts from project data. Additionally, because all teams participated, automated on-demand comparison with the most current as possible project-wide aggregate data to facilitate rapid Plan-Do-Study-Act cycles as the teams worked to improve their system. Balancing cost vs value of data collection in a Quality Improvement effort is challenging; the TIPQC data team member was available for consultation to teams.

Results

Six hospital teams entered the Quality Improvement project after introduction, education, and kick-off at the annual TIPQC conference in March 2018. Even though the majority of project hospitals were regional teaching institutions, 1 community-based hospital participated. Other characteristics of participating hospitals and their communities are outlined in Table 1.

Three of 6 teams had been working as pilot teams towards providing LARC before the statewide kickoff of the project and were able to begin providing LARCs in March 2018. Two additional teams were able to begin in January 2019. The sixth team began providing LARC placement just after the end of the project in April 2019. It should be noted that by the end of

TABLE 2
Site start and total immediate postpartum long-acting reversible contraception device placement

Hospital	Mo/y started to provide long-acting reversible contraception device (mos into project, n)	Long-acting reversible contraception devices placed during project, n			Total of all long-acting reversible contraception devices
		Intrauterine devices		Implants	
		Hormonal	Copper		
Site A	3/18 (0)	215	31	294	540
Site B	3/18 (0)	66	15	233	314
Site C	3/18 (0)	372	70	685	1127
Site D	3/19 (13)	4	0	5	9
Site E	4/19 (14)	0	0	0	0
Site F	9/18 (7)	3	Not available	19	22
Total	—	660	116	1236	2012

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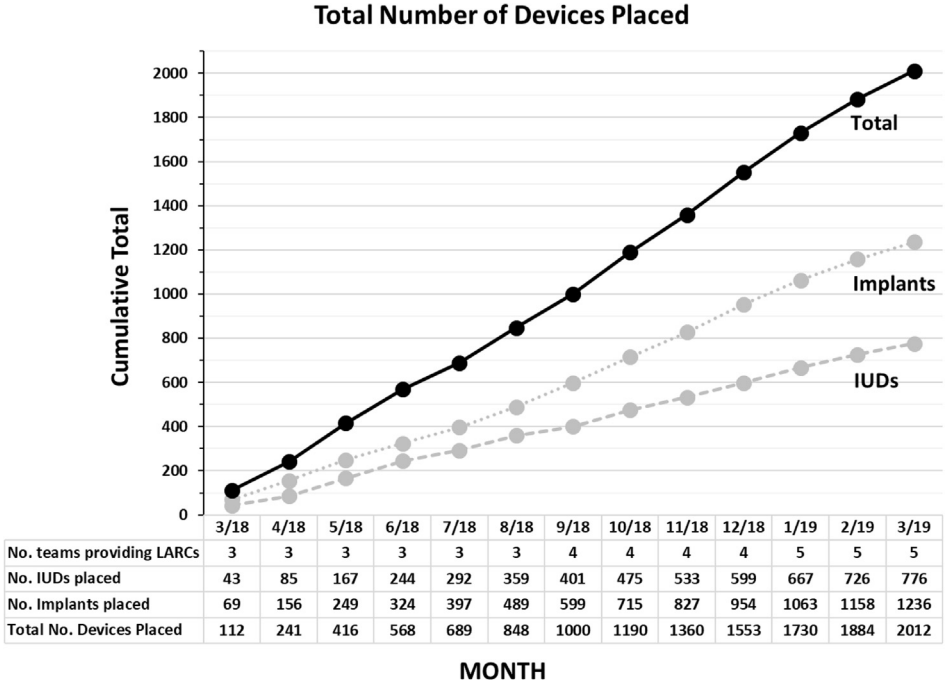
April 2019, all teams had completed all PBPs. In addition, all teams had been reimbursed for LARC devices and provider insertion fees. The number of LARC devices placed by 5 teams between March 2018 and 2019 is provided in Table 2. The Figure displays the aggregate number of LARCs placed across the project time period.

As illustrated, there was great variation in the amount of time to implement the IPP LARC project completely (defined as successful placement and reimbursement). Some delays in full implementation were related to hospital approval processes for patient consent forms specific to LARC, policy/procedure/guideline approval, and obtaining consistent reimbursement. The various barriers to implementation in each

FIGURE
Total number of devices placed across the state



	3/18	4/18	5/18	6/18	7/18	8/18	9/18	10/18	11/18	12/18	1/19	2/19	3/19
No. teams providing LARCs	3	3	3	3	3	3	4	4	4	4	5	5	5
No. IUDs placed	43	85	167	244	292	359	401	475	533	599	667	726	776
No. Implants placed	69	156	249	324	397	489	599	715	827	954	1063	1158	1236
Total No. Devices Placed	112	241	416	568	689	848	1000	1190	1360	1553	1730	1884	2012

The data displays the aggregate number of long-acting reversible contraception devices placed across the project time period.

IUD, intrauterine device; *LARC*, long-acting reversible contraception.

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TABLE 3
Immediate postpartum long-acting reversible contraception device reimbursement

Hospital	2018, 4th quarter			2019, 1st quarter		
	Devices placed, n	Claims paid by TennCare, n[a]	Reimbursed, %	Devices placed, n	Claims paid by TennCare, n[a]	Reimbursed, %
Site A	147	68	46	127	66	52
Site B	101	3	3	75	26	35
Site C	296	4	1	237	28	12
Site D	0	N/A	N/A	9	8	89
Site E	0	N/A	N/A	0	N/A	N/A
Site F	9	6	67	11	3	27
Total	553	81	15	459	131	29

N/A, not applicable.

[a] The number of devices placed among patients with Coverkids plans is unknown; therefore, the number of claims received by TennCare is expected to be lower than the number of long-acting reversible contraception devices placed.

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institution were discussed during each monthly huddle. Some barriers were institution specific, although others were statewide. One consistent barrier to reimbursement among all teams was correct coding for reimbursement. Tracking reimbursement was difficult because of delays in data transfer from managed care organizations to TennCare and institutional barriers among revenue stream teams. TIPQC project leaders and TennCare assisted teams in troubleshooting all barriers.

During the project year, there was individualized follow up and coaching on reimbursement. Before the fourth quarter of 2018 and first quarter of 2019, all sites that had placed IPP LARC devices were given absolute assurance from their individual billing departments that the mechanisms were in place to submit the bills correctly for the devices. Towards the end of the fourth quarter of 2018, project leaders started to question the validity of these claims because of receipt of conflicting data from TennCare executives. At the start of 2019, we determined an improved process would be to double check the number of claims received and reimbursed by TennCare to the number of devices placed, just to be certain. It was understood there would be a delay, given that TennCare was getting the data from the managed care organizations, but the revenue stream team at each individual hospital was unable to give us confirmation that collections were occurring. Given sustainability is based on actual reimbursement and not simply correct billing, we sought all avenues to confirm payment was dispersed. For this article, reimbursement for the fourth quarter of 2018 and the first quarter of 2019 is reported because those were periods of time that, if a discrepancy was noted, patient accounts could be corrected and a claim for reimbursement resubmitted. We were hopeful that improvement would be demonstrated as we continued to delineate the mystery of the revenue stream.

As stated previously, one-half of the deliveries in Tennessee are covered by Medicaid; during the course of the project, very few private patients actually obtained IPP LARC. The number of women who were insured by Coverkids (an insurance plan for children under 19 years old, pregnant women and infants who are <250% of the federal poverty level and not eligible for TennCare) is unknown; by our approximations, Coverkids covered less than one-quarter of births. Based on these data, we anticipated reimbursement rates from TennCare to be <100%. A total of 81 claims (15%) were received during the fourth quarter of 2018; the total number of devices placed across all institutions during the fourth quarter was 553 (Table 3). Four of the 6 sites were placing devices at this time. This information was shared with the billing departments at each site along with a reminder for billing guidance. In May of 2019, collaboration between project leaders and TennCare executives occurred again to analyze reimbursement rates for the first quarter of 2019. During the first quarter of 2019, a total of 459 devices were placed, and TennCare reimbursed a total of 147 claims (29%; Table 3).

As noted in Table 3, some sites had higher rates of reimbursement from TennCare than others (89% vs 12%). After troubleshooting reimbursement data with TennCare by making comparisons to see whether 1 particular managed care organization denied claims at a higher rate, no significance was found between carriers. TennCare agreed to analyze claims that had been denied to determine common trends. After the analysis of data, it was determined that incorrect billing within each clinical site was the cause of lower reimbursement. To bill correctly, adding revenue code 0636 in addition to the device's J-code was critical for payment. In addition, if the device was billed under the general pharmacy revenue code, the device would not be reimbursed. At Site A, newly contracted coders required education to recognize documentation of IPP LARC placement since this

procedure was unfamiliar to the most veteran coders. Looking for documentation of IPP LARC placement was an unfamiliar concept to even the most veteran coders. Connecting with the Coding Manager allowed Site A to resubmit missed claims for the first and second quarters of 2019. Technically, the TIPQC IPP LARC Project was scheduled to move into sustainment in March 2019 with hospitals committed to starting new projects. Given that dedicated teams were no longer able to collect data, we lost the ability to determine a rate of reimbursement after March 2019, but we remain in contact with TennCare and continue to track this at the state level. Site A is still monitoring their insertion numbers and confirming that they have resolved all issues.

Ultimately, the revenue stream was onerous, making the process and data difficult to track. There are different teams for pharmacy, coding, billing, and collections. These teams often do not communicate. Therefore, even when a hospital believed they followed the TennCare guidance, they may not have known if payment occurred. At Site A, we had a dedicated LARC Champion who was able to follow the money from device to bill. Issues were identified: devices were not being assigned to a patient when pulled from the medication dispensing machine; devices were being pulled but not placed, and off-site coders were not looking in multiple documentation locations for device lot numbers. Through the project, the State Champion (M.M.L.) also assisted all teams by making them aware of feedback from TennCare and lessons learned at Site A. Site A was able to distinguish that when prenatal contraceptive counseling was present, a woman's ability to obtain her desired contraceptive method was significantly higher than when prenatal contraceptive counseling was not present (9% vs. 57.1%), including when IPP LARC was the desired plan (5.1% vs. 55.1%).[15] Although this outcome was suspected before the launch of the project, these data assisted providers to understand the need for counseling during the prenatal period and were used to support the reproductive justice view that women need comprehensive access and education. At Site A, the demand for IPP LARC increased over the implementation phase, especially as a backup plan when postpartum sterilization was unable to be performed. Through use of a regional EMR system, Site A was able to determine that, of the 540 IUDs that were placed at their institution, there were only 8 recognized expulsions (1.48%) at any institution in their region; all of these devices were placed after vaginal birth.

Comments

In this project, IPP LARC reimbursement challenges were overcome at both academic and community institutions. Although reimbursement was challenging, with buy-in at each institution, 6 centers were providing IPP LARC by 13 months after project implementation, which is a success that has not been possible in many other states. The experience in Tennessee can offer insight and support to other institutions or states that want to implement IPP LARC.

Increasing rates of successful reimbursement provided motivation to other facilities that are participating to start offering IPP LARC. With the persistence of team leaders, reimbursement rates increased dramatically over time. IPP LARC was implemented and offered at all participating sites when the project moved into sustainment in April 2019. Overall, we found a key to a successful IPP LARC program to be dedicated leadership team members, who committed consistent time, acting as a statewide resource to assist other teams through barriers. We have since learned that the program in South Carolina that is a partnership with ChooseWell and ACOG hires a LARC Champion for each institution. Obviously, this is an added expense to any IPP LARC program, but we agree that, to ensure success, this is likely necessary for a period of time. In addition, it is necessary to create partnerships with state Medicaid leadership and revenue stream personnel at each institution.

Although the desired long-term outcome of the IPP LARC Quality Improvement project to decrease rates of unintended and short-interval pregnancies, because of the limited timeframe of this project, long-term maternal and infant outcome data could not be measured or reported. In addition, a principal barrier to offering IPP LARC in more hospitals for desiring women in Tennessee is the largest delivering hospitals have religious affiliations that restrict contraception.

Because of the false assurances of billing teams and revenue stream personnel, reimbursement success was delayed; however, no teams were forced to discontinue LARC access during the project. A lesson learned in the project was early communication with the revenue stream team to facilitate reimbursement turn around.

Several factors may limit the generalizability of the work in this project to other states, including differences in policy and reimbursement strategies. Project and Medicaid leaders decided to use a system that allowed for billing outside the global reimbursement of delivery; this may not work in all locations. Tennessee has only 3 managed care organizations that are affiliated with TennCare; some states may have more challenges with universal guidance for billing if they engage more systems. Although the policy change brought the option of IPP LARC access to roughly 50% of the delivering population in Tennessee, we regret that only women who are covered by Medicaid plans, TennCare and CoverKids are able to receive IPP LARC. We will continue to advocate for all women to have this option and look forward to additional research and Quality Improvement projects that support this practice.

Our team understood the historic context and potential of coercion that is related to contraceptive services at the time of birth, especially with LARC. We engaged reproductive justice experts and used woman-centered counseling educational materials when we created our toolkit. The reimbursement issues created a scenario with only women in a vulnerable population (Medicaid) having access to IPP LARC in Tennessee. We continue to advocate for IPP LARC to be available to all women, regardless of their

insurance coverage, because women with private insurance remain without IPP LARC options at this time. In addition, the project emphasized that, after placement, women should be educated on where their device can be removed for little to no cost, even if they lose health insurance. Attempts at increasing community awareness about the project both as another protection against coercion and to ensure timely removal for anyone desiring occurred throughout the project.

In conclusion, a statewide Quality Improvement project can increase access to IPP LARC. Implementation and reimbursement require a dedicated team and coordination with all stakeholders but are possible, even at community hospitals. Verification of reimbursement with Medicaid was essential for project sustainment. The impact on unintended and short-interval pregnancies and neonatal outcomes requires future long-term investigation. ■

Acknowledgments

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