

Benefits and barriers to same-day long-acting reversible contraception insertion: evidence and its implications from US settings

Andrew Kennedy¹, Simone Crespi², Gursimer Jeet¹, Greta Lozano-Ortega¹
 1 Broadstreet HEOR, Vancouver, B.C., Canada; 2 Organon & Co, Jersey City, New Jersey

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Background & Objective

An important barrier to long-acting reversible contraceptive (LARC) access in the US is the practice of requiring two visits; one to receive contraceptive counseling and a separate visit for insertion. Improving timely same-day access to LARCs for everyone who is medically eligible and desires to do so has the potential to improve convenience and access for a wider population of women and expand use of reproductive healthcare overall. This study aimed to synthesize the literature investigating the impact of same-day LARC insertion as well as barriers and facilitators to same-day LARC access in the United States (US).

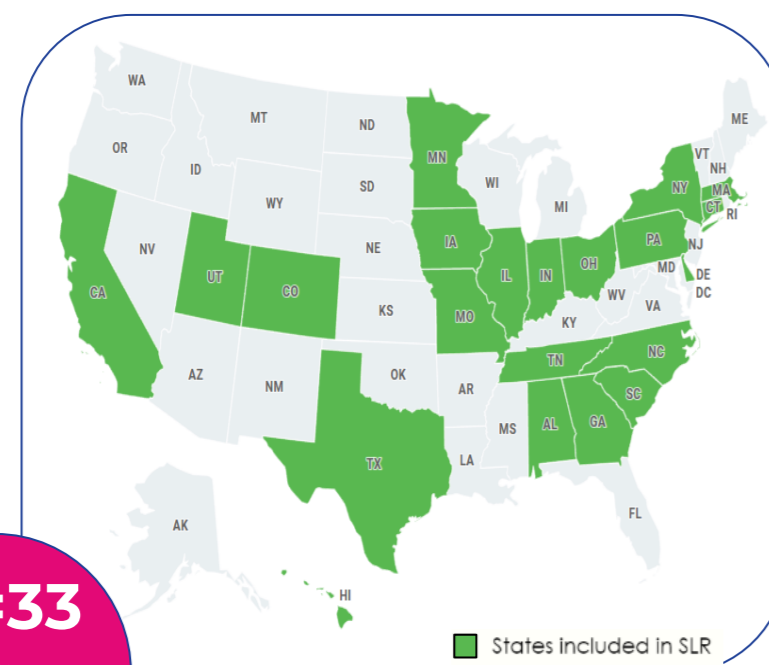
Study Design & Methods

- A systematic literature review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement and implementation was guided by the Population, Exposure, Comparator, Outcomes, Study Design (PECOS) framework.
- Medline, EMBASE, CINAHL, and ScienceDirect databases were systematically searched on January 2023. Studies were screened by two independent reviewers and all published, non-review studies evaluating LARC use or access among women and adolescent girls of reproductive age, providers, policy makers, and health systems in the US were included.
- Outcomes of interest were extracted in duplicate and included health and economic benefits of, and factors affecting access to same-day LARC insertion.

Results

Study design

- N=19 studies investigated **16 different initiatives** aimed at increasing same-day LARC uptake
- Same-day LARC insertion was investigated in **21 states** (see map)
- N=30 were multicentric
- N=17 were in both urban and rural settings



N=33
studies included

User characteristics (N=12 studies)

- All were women of reproductive age
- Insurance type was reported in 8 studies
- Women with public insurance ranged from 3.6% to 100% of study populations

Provider characteristics (N=21)

- N=1,472 clinics
- N=9,040 practitioners
- Proportion of clinics offering on-site LARC insertion varied
- Implant: 18% to 100%
- IUD: 29% to 100%
- Most common clinic type: Obstetrics and Gynecology

Results, continued

Five categories of program features aimed to increase same-day access to LARCs were most frequently highlighted: cost support, provider training / education, patient-centered counseling, implementation of evidence-based best practices, and increased LARC availability (Table 1). Only 8 studies reported data both pre- and post-intervention.

Table 1. Categories of features implemented across LARC access programs

Program Features	No. of programs	Names of programs		
Cost support*	11	Buy and Bill ¹ Complete CHOICE ⁵ HTW/FPP ⁷ IMPACCT ¹⁰	California Family PACT ^{2,3} DelCAN ⁶ IA/CO Statewide Initiatives ⁹ PMLC ¹¹	CHOICE Project ⁴ FPE CAP ⁹ Z-CAN ^{12,13}
Provider training / education	6	CME accredited course ¹⁴ IMPACCT ¹⁰	DelCAN ⁶ National TTA ^{15,16}	FPE CAP ⁹ Z-CAN ^{12,13}
Implemented best practices†	5	PMLC ¹¹ QIP (DeBoer) ¹⁸	PREG Checklist ¹⁷ QIP (Landgraf) ¹⁹	National TTA ^{15,16}
Patient-centered counseling	5	CHOICE Project ⁴ PMLC ¹¹	Complete CHOICE ⁵ Z-CAN ^{12,13}	IMPACCT ¹⁰
Increased on-site availability	3	DelCAN ⁶	PMLC ¹¹	Z-CAN ^{12,13}

Abbreviations: CME: Continuing Medical Education; CO: Colorado; DelCAN: Delaware Contraceptive Access Now; FPE CAP: Family Planning Elevated Contraceptive Access Program; FPP: Family Planning Program; HTW: Healthy Texas Women; IA: Iowa; IMPACCT: Innovative Model of Patient-Centered Contraception; PACT: Planning, Access, Care, and Treatment; PMLC: Performance Measure Learning Collaborative; PREG: Pregnancy Reasonably Excluded Guide; QIP: Quality Improvement Project; TTA: Technical Assistance and Training; Z-CAN: Zika Contraceptive Access Network.
 Note: Total numbers do not add up to 19 due to some programs utilizing multiple features to improve LARC access. *Cost support includes cash grants to stock devices up front, provider reimbursement for contraceptive methods, no-cost methods for users, and others. †Implemented best practices include the Pregnancy Reasonably Excluded Guide (PREG), quick-starting contraception, removing STI testing and result requirements, and others.

Strengthening the health system and improving health care programs

Barriers and facilitators to same-day LARC access were identified throughout the literature with recommendations for improving the health system and increasing the effectiveness of health care programs across the US.

BARRIERS

- Non-availability of on-site LARC devices
- Lack of Continued Medical Education (CME) for providers
- Lack of integrated approaches
- Mixed adherence to practice guidelines recommendations
- Administrative and financial barriers
- Communities with disproportionately high teen birth rates saw inconsistent implementation of services
- Accessibility and quality concerns

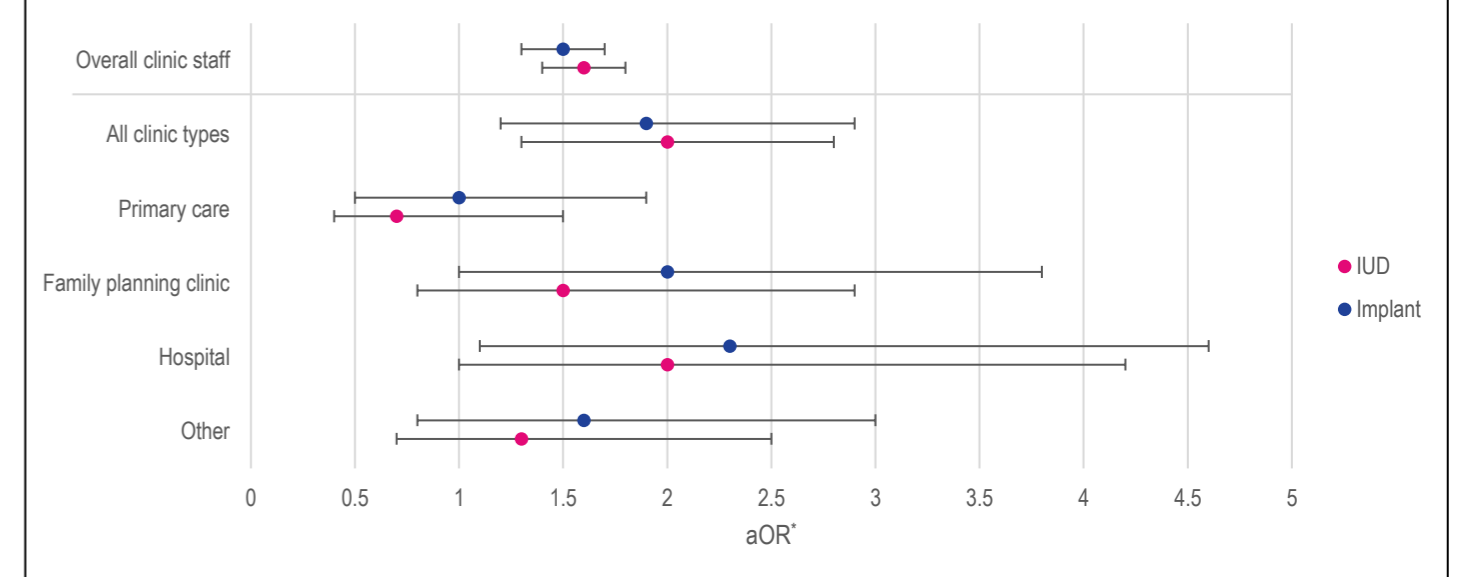
FACILITATORS

- Increasing appointment length
- Maintaining clinic inventory
- Building clinic capacity through staff-wide training and education
- Effective reimbursement
- Improving same-day insertion coverage in public health clinics for the under- and un-insured
- Transferring evidence between programs
- Expanding use of performance measures to help increase access
- Building robust provider networks
- Ensuring patient privacy and confidentiality
- Utilizing a buy-and-bill model to expand access

Program Results

Clinic staff were more likely to offer single-visit LARC after attending a CME course with on-site training implemented by Harper et al., with a 10% increase of staff requiring only a single visit to place implants.¹⁴ Training also influenced clinical practice change as the overall clinic ability to place the implant in one visit increased (Figure 1; adjusted odds ratio [aOR]: 1.9, 95% confidence interval: 1.2-2.9).¹⁴

Figure 1. Single visit requirement for LARC placement post-CME intervention¹⁴



Abbreviations: aOR: adjusted odds ratio; CME: Continuing Medical Education; IUD: intrauterine device
 Notes: Other practice settings include teen clinics, school-based clinics, and college health centers; *, Adjusted for provider type, training year, region; Planned Parenthood reference

Loyola Briceno et al. demonstrated the effect of the Performance Measure Learning Collaborative where one county site that ordered and maintained a larger stock of LARC devices reported a 14% increase in same-day insertions between November 2015 and May 2016.¹¹

Cost savings associated with same-day LARC insertion

- A decision model analyzing the economic impact of same-day LARC insertion in Indiana from Medicaid's perspective showed that same-day LARC placement was associated **with cost savings of \$2,117 USD** per adolescent per year, compared to requiring a second visit.²⁰
- The cost of placing a LARC device would have to increase from \$74 to \$4,692 USD on average to make the second visit less expensive.

Conclusions & Limitations

Programs aimed at increasing same-day LARC insertion were associated with increases in same-day LARC uptake and cost savings. Opportunities to ensure same-day LARC access include promoting user and provider awareness, extending funding, decreasing insurance-related administrative hurdles, and building trust in contraceptive care.

Some limitations to the present study included:

- Variation in the definition of "same-day" due to the lack of a procedure code for women who received same-day LARC, leading to possible over- or under-reporting of numbers
- Access to and utilization of LARCs was the primary outcome in most studies, with same-day LARC insertion reported as a secondary outcome

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