Long-Acting Reversible Contraception (LARC): State-Level and Regional Research on Reducing Barriers to Access

Recent large-scale initiatives to reduce barriers to LARC methods for women in specific metropolitan areas and states demonstrate that when LARC methods become more accessible, large percentages of women seeking contraception choose them – and the result is falling rates of unintended pregnancy.

IOWA INITIATIVE TO REDUCE UNINTENDED PREGNANCIES

In 2007, the privately funded Iowa Initiative to Reduce Unintended Pregnancies launched with the goals of reducing unintended pregnancies among Iowa women ages 18 to 30 and increasing support for publicly funded family planning. Funding allowed 17 Title X family planning agencies, which provided services at 81 clinical sites, to expand hours and locations; train clinic staff on client education and counseling; and purchase IUDs and implants, which they had previously been unable to afford to stock (Office of Population Affairs, 2012; Philliber Research Associates, 2012). After receiving Initiative funds, all Iowa Title X agencies offered the implant and both hormonal and copper IUDs (Philliber Research Associates, 2012).

The Iowa Initiative also involved a public marketing component. The Center for Social and Behavioral Research at the University of Northern Iowa conducted research and testing and, in 2010, launched the "Until You're Ready, Avoid the Stork" campaign, which was rolled out statewide after performing well in northwestern Iowa. Most of the Title X providers conducted marketing efforts, including making IUDs and contraceptive implants free for a limited time; when these promotions were not in effect, the usual Title X sliding-scale fees applied (Office of Population Affairs, 2012; Philliber Research Associates, 2012).

To evaluate the Initiative's performance, researchers from Philliber Research Associates and the Bixby Center for Global Reproductive Health at University of California San Francisco analyzed data from participating clinics and statewide statistics (Office of Population Affairs, 2012). From 2005 to 2012, the percentage of Iowa Title X reproductive-age clients using LARC methods increased from less than 1% to 15% (Biggs, Harper, & Brindis, 2015). During that time period, abortion access expanded in the state, with medication abortion via telemedicine becoming available in 2008; as a result, the number of abortion facilities in the state rose from nine in 2008 to 19 in 2009. Nonetheless, the number of abortions for Iowa residents dropped from 8.7 per 1,000 reproductive-age women in 2005 to 6.7 in 2012 (Biggs et al., 2015).

The Iowa Initiative also occurred in the context of the state's expansion of Medicaid coverage of family planning services for lower-income residents. In 2006, Iowa began providing Medicaid coverage for family planning services for women with household incomes of up to 200% of the federal poverty level, as well as those who would otherwise lose Medicaid coverage following delivery of a baby (Sonfield, Alrich, & Gold, 2008). An evaluation of this program reported that an average of 22,000 women enrolled each month between 2006 and 2010; the authors calculated that the program averted more than 4,000 births, and as a result produced more than \$50 million in savings to Medicaid (Momany & Carter, 2011).

The Iowa Initiative's partner organizations advocated to expand this program, and in September 2010, the state made several changes. The state Medicaid program expanded access to family planning for both women and men up to age 54 with household incomes of up to 300% of the federal poverty level (Office of Population Affairs, 2012). Women with Medicaid coverage may not be charged co-payments for family planning services, so out-ofpocket charges cease to be a barrier (although other costs, such as childcare and transportation, may remain challenging). Funding from the Initiative allowed Title X providers to stock LARC devices and take other steps to expand access to these highly effective forms of contraception. While the Iowa Initiative concluded as scheduled in 2012 (Office of Population Affairs, 2012), the expanded coverage and infrastructure remain.

CONTRACEPTIVE CHOICE PROJECT (ST. LOUIS, MISSOURI)

Also in 2007, researchers launched the Contraceptive CHOICE Project to study the contraception women choose when cost, education, and access barriers to LARC methods are reduced. The multi-year, privately funded study, based at Washington University in St. Louis and involving several community providers, enrolled over 9,000 St. Louis metro-area women ages 14-45. Participants had been sexually active in the last six months or anticipated being sexually active in the next six months, wanted to avoid pregnancy for at least a year, and were interested in starting a new form of reversible contraception (Birgisson, Zhao, Secura, Madden, & Peipert, 2015; Secura, Allsworth, Madden, Mullersman, & Peipert, 2010).

While determining potential participants' eligibility for the study, trained staff members read women a script describing LARC methods. Women who enrolled received contraceptive

counseling that covered the range of available methods, as well as being screened for STIs. Once a clinician gave approval for each participant's selected method, she received it at no cost (Secura et al., 2010). Participants received their selected methods free for two to three years, and could change methods at any point during the study (Birgisson et al., 2015).

The Contraceptive CHOICE Project developed a structured, comprehensive contraceptive counseling program that aimed to "provide accurate, unbiased information about all contraceptive methods to help the woman assess her needs and make an informed decision" (Madden et al., 2013). The counseling framework was modeled after the GATHER counseling process, "a client-centered process focused on the woman, her expressed needs, situation, problems, issues and concerns" (Madden et al., 2013).

Participants enrolled in the Contraceptive CHOICE Project from August 2007 through September 2011. They completed questionnaires upon enrollment, phone interviews three and six months later, and phone interviews every six months after that. Researchers analyzed these responses as well as local and state statistics. In 2015, they reported that 75% of participants chose a LARC method (46% hormonal IUD, 12% copper IUD, 17% implant), and that LARC methods were 20 times more effective than non-LARC hormonal methods (pill, patch, and ring) (Birgisson et al., 2015).

The rate of teen pregnancy for women in the study was more than four times lower than the national rate: 34.0 pregnancies per 1000 teens in the CHOICE study, compared to 158.5 per 1000 sexually experienced US teens. The rates of teen births and abortions were correspondingly lower – 19.4 vs. 94.0 births per 1000 teens, and 9.7 vs. 41.5 abortions per 1000 teens (Secura, Madden, et al., 2014). To investigate the potentially larger impacts in the St. Louis region, researchers examined the repeat abortion rates (i.e., out of women receiving abortions, what proportion had received an abortion previously) for women ages 15-44 in St. Louis city and county and in Kansas City, which is demographically similar. They found a significant decrease in the percent of repeat abortions in the St. Louis area from 2006 to 2010, while the percent of repeat abortions in Kansas City increased significantly over the same time period (Birgisson et al., 2015; Peipert, Madden, Allsworth, & Secura, 2012).

An analysis of responses from participants who completed surveys at baseline, six months, and 12 months found the median number of acts of intercourse reported for the past 30 days increased significantly. However, rates of chlamydia and gonorrhea infections were not significantly higher among the women whose surveys indicated an increase in acts of intercourse when compared to the women who reported the same or fewer acts (Secura, Adams, Buckel, Zhao, & Peipert, 2014).

COLORADO FAMILY PLANNING INITIATIVE

In 2009, the Colorado Department of Public Health and the Environment used foundation funds to launch the Colorado Family Planning Initiative (CFPI) to increase LARC method access for women at high risk of unintended pregnancy. For five years, CFPI provided funding to 28 Title X-funded agencies in the 37 Colorado counties where 95% of the state's population lived (Ricketts, Klingler, & Schwalberg, 2014). Before this initiative began, Colorado faced particularly high unintended pregnancy rates; in 2005, 61% of births to women 15-24 were reported to be unintended at the time of conception.

Like many of their fellow Title X providers, the Colorado clinics had provided a broad range of contraceptive options but had struggled to afford IUDs and implants. CFPI funding covered the costs of IUDs and implants, as well as contraceptive rings, and the Title X agencies then offered these options to all clients at no cost (Ricketts et al., 2014). (Under Title X guidelines, clients with incomes below the federal poverty level would pay nothing for any method, while others would have been charged on a sliding-fee scale.)

CFPI did not just cover device costs, though. It also funded provider and staff training on counseling and insertion techniques, expansion of clinic hours and sites, and technical assistance on coding, billing, and management. The number of women served in Colorado's Title X-funded clinics increased 23% from 2008 to 2011. Clients' demographic characteristics changed little in that time; in both years, the majority were white, under age 25, and had incomes below the federal poverty level (Ricketts et al., 2014).

Among the targeted age group (15-24), LARC method use quadrupled from fewer than 5% in 2008 to 19% in 2011. IUD use nearly tripled, and implant use was ten times greater in 2011 than in 2008. This increase was nearly matched by a decrease in the percentage of clients using birth-control pills for contraception (Ricketts et al., 2014). Helping women switch from less-effective methods to more-effective methods can reduce unintended pregnancies, but the effect would likely be even more pronounced in women not using contraception at all but not desiring pregnancy who adopted highly effective methods (Lindo & Packham, 2015).

The decline in teen pregnancies following CFPI's launch was quick and striking. From 2009 to 2011, the birth rate for Colorado teens ages 15-19 declined 26% (Ricketts et al., 2014). Over a longer period, from 2008 to 2014, the Colorado teen birth and abortion rates both dropped by 48% (Wolk, 2015). Teen birth rates have declined nationwide in recent years, but Colorado saw the greatest percentage change in teen births from 2008 to 2013 (Cohen, 2015). In addition, researchers comparing data from 2008 and 2012 found a 12% drop in the odds of preterm birth, and the odds were significantly lower for women living in counties served by CFPI-funded Title X providers (Goldthwaite, Duca, Johnson, Ostendorf, & Sheeder, 2015).

A study of rapid repeat pregnancies in adolescents enrolled in a prenatal-postnatal program (and who expressed a desire to avoid pregnancy for at least a year after giving birth) found that 65% of those who chose to use immediate postpartum implants continued to use them for two years (Han, Teal, Sheeder, & Tocce, 2014). Two years after giving birth, only 31% of participants in the immediate postpartum implant group, including those who had their implants removed, became pregnant again within two years, compared with 41% of the comparison group, which included those who selected implants four or more weeks after delivery, chose other forms of contraception, or used no contraception (Han et al., 2014). Based on these findings, researchers calculated that a program that provided 1,000 women with immediate postpartum implants would result in savings that not only cover the costs of the devices and insertions, but avoid \$2.5 million in prenatal care, delivery costs, and management of miscarriage and ectopic pregnancies (Han et al., 2014). The estimate does not include social and economic costs for adolescent mothers who experience rapid repeat pregnancies, though these can also be substantial.

Colorado's experience also provides cost and savings estimates that can help other states that may consider similar programs. The CFPI cost \$27 million over seven years, while in its first three years alone it saved an estimated \$79 million (Wolk, 2015). With private funding expiring, public health advocates have urged Colorado's legislature to fund the initiative's continuation. Lawmakers narrowly rejected the 2015 funding request, but approved \$2.5 million in 2016 (LARC4CO, 2016).

DELAWARE CONTRACEPTIVE ACCESS NOW (CAN)

A new public-private partnership called Delaware Contraceptive Access Now (CAN) aims to change the high rate of unplanned pregnancies (57%) in the state (Rini, 2016). With philanthropic support and reallocated funds from the state's Division of Public Health budget, Delaware is working with Upstream USA, a nonprofit that helps health centers improve reproductive healthcare (Markell, 2016). At 60 Delaware clinics, Upstream will equip providers and staff to offer same-day LARC insertion. This includes: training providers in IUD placement with a simulator; role-playing with staff who will ask women about their pregnancy plans and counsel them about contraceptive options; helping clinics join group purchasing arrangements for device discounts; and assisting with insurance billing procedures (Kliff, 2016). In a *New York Times* op-ed, Governor Jack Markell wrote "By the end of 2017, we will ensure that the nearly 200,000 women of reproductive age in our state have access to the full range of methods" (Markell, 2016).

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