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Long-Acting Reversible Contraception: A Proven Strategy for Reducing Unintended Pregnancy and Abortion in Baltimore

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Introduction: Unintended Pregnancy and the First-Line Solution

There are no silver bullets when it comes to solving public health problems—but sometimes a medical innovation can support great strides toward a solution. Long-acting reversible contraception, a form of birth control, is one of these innovations, and it has the potential to dramatically reduce both unintended pregnancies and abortions. Ensuring equity of access to long acting reversible contraception is essential, so that all women, regardless of their socio-economic status, can make informed choices about their preferred method of birth control.

Widely recognized as the most effective birth control available, long-acting reversible contraception, also known as LARC, has failure rates of less than one percent. [1] LARCs consist of two general types of birth control devices: a hormonal implant inserted under the skin and intrauterine devices, or IUDs. They are FDA-approved, and, in recent years, have earned the strong endorsement of the nation's leading physicians. In 2013 the American College of Obstetricians and Gynecologists described LARCs as "first-line" options with "top-tier effectiveness," [2] and in 2014 the American Academy of Pediatrics endorsed the use of LARCs by teens as safe and effective. [3] In 2015 the Centers for Disease Control and Prevention endorsed LARCs as the "most effective birth control for teens." [4]

LARC use is increasing, but the overall usage rates are still very low. In the last decade, use of LARC methods increased nearly five-fold among women aged 15-44, jumping from 1.5 percent to 7.2 percent. [5] But seven percent leaves a lot of room for increased usage. This is especially important when considering the costs that unintended pregnancy carries for mothers, their children, and society as a whole. When those mothers are, themselves, teenagers, the costs are even higher.

This report explores why LARCs are so effective in preventing unintended pregnancy, the current landscape of LARC use in Baltimore, and the strategies that organizations and states have deployed to promote LARC access. It concludes with a series of recommendations for how Baltimore could expand knowledge of and access to LARC methods and, by doing so, help reduce the unintended pregnancies that continue to challenge our citizens and our city.

The Challenges of Unintended Pregnancy

According to the National Survey of Family Growth, there are 1.7 million births from unintended pregnancy every year in the U.S. [6] Among girls aged 15-19, there are nearly 750,000 pregnancies, 82 percent of them unplanned. [7] The national rate of teen pregnancy is dropping, but in 2013, there were

According to Baltimore City health officials, pregnancy is a top reason girls do not finish high school, contributing to long-term poverty and unemployment.

still 26.5 pregnancies per 1,000 teen girls in the U.S. [8]—one of the highest rates among affluent, democratic countries. [9]

In Baltimore, the teen pregnancy rate is much higher than the national rate: in 2013 the rate for Baltimore was 43.4 pregnancies per 1,000 female teens. Although Baltimore's teen pregnancy rate has dropped significantly over the last three years, Baltimore City Health Commissioner Dr. Leana Wen recently said, "One of our top priorities in public health in the city is teen pregnancy." [10]

Unintended pregnancies are more common among poor women than affluent women. [11] Indeed, poor, single women aged 15-44 in the U.S. have five times more unintended births than affluent women. This disparity is not due to a "sex gap," as rates of sexual activity were almost identical across income groups. Instead, there is a "contraception gap;" poor women are less likely to use contraception and less likely to have an abortion than affluent women. [12] Researchers suspect that this "contraception gap" is due to a combination of limited accessibility and limited knowledge of effective contraceptive methods among poor women as compared to their more affluent peers. [13] Without a doubt, the contraceptive gap along class lines correlates to higher rates of unintended pregnancy for lower-income women.

Unintended pregnancies exact a high toll on both mothers and the children conceived unintentionally. Mothers who conceive unintentionally, in addition to commonly bearing the burden of single-parenting, face decreased educational and employment opportunities throughout their lives. For teens, the burden of unintended pregnancy is especially poignant: according to Baltimore City health officials, pregnancy is a top reason girls do not finish high school, contributing to long-term poverty and unemployment. [10] As Stephanie Rawlings-Blake, the Mayor of Baltimore, said, "We know our young women are significantly hampered from reaching their full potential when they become teen mothers." [10]

The children conceived through these unintended pregnancies can face higher rates of poverty and less family stability. [13] According to the U.S. Department of Health and Human Services (HHS), these children are more likely to have poor educational, behavioral, and health outcomes throughout their lives. [14]

The public pays a price as well. Because poor women have much higher rates of unintended pregnancy than higher-income women, the majority of births resulting from unintended pregnancy are paid for by public insurance programs such as Medicaid, the Indian Health Service, and the Children's Health Insurance Program. [11] The cost in medical coverage for these unintended births is staggering: in 2008 U.S. taxpayers footed a $12.8 billion bill for expenditures for births from unintended pregnancy, including almost $235 million in public expenditures in Maryland. [6]

In addition to the costs of medical coverage,

What are LARCs?

Device name	Type of LARC	Effective time	FDA approval
Mirena	Hormonal IUD	5 years	2000
Skyla	Hormonal IUD	3 years	2013
Liletta*	Hormonal IUD	3 years	2015
ParaGard	Copper IUD	10 years	1984
Nexplanon	Under-skin implant	3 years	2011

**Liletta is a new LARC created by the non-profit pharmaceutical company Medicines360. It costs about the same as Skyla (approximately $650) but Title X-funded clinics will only have to pay $50 per device for uninsured patients. Also, after a review period of about seven years, the FDA may reclassify it as effective for five years instead of three.*

unintended pregnancy, especially among teens, is associated with costs related to public assistance payments, lost tax revenue, and greater expenditures for public health care, foster care, and criminal justice costs incurred by the children of teen parents. The U.S. Department of Health and Human Services estimates these broader costs of teen pregnancy to be between $9.4 and $28 billion every year. [15]

What are the benefits of LARCs?

1. LARCs are the most effective form of contraception

LARCs have failure rates of less than one percent, making them the most effective reversible contraception available. Anne Burke, Director of the Family Planning Division at Johns Hopkins Bayview Medical Center, said, "There's a lot of enthusiasm about LARCs among providers because they're super-effective." Because LARCs are so effective and simple to use, they benefit women by reducing both unintended pregnancies and abortions. Research by the Guttmacher Institute links an increase in the use of LARCs in recent years with a 13 percent decline in the rate of abortions in the United States [16], while studies of LARC access projects in St. Louis and Colorado – discussed in more detail below – showed that increased LARC use led to large decreases in teen and unintended pregnancies.

For an illustration of LARCs' effectiveness, we can compare them to a few other popular forms of contraception. Condoms, when used regularly as the only form of contraception over a period of ten years, will result in 10 pregnancies for every 100 women, *if used perfectly*; when used *typically*, however, that number jumps to 86. For birth control pills and the Nuvaring, perfect use results in three pregnancies out of 100 over 10 years, but it jumps to 61 pregnancies when used *typically*. For Depo-Provera, perfect use results in two pregnancies out of 100 women over 10 years; again, it's important to compare *perfect* use to *typical use*; with typical use the number jumps from two to 46 pregnancies over 10 years. [17]

The comparison between typical and perfect use is a moot point when talking about LARCs. Because they are implanted in the body, there is no possibility of user error. Sometimes referred to as the "set and forget" option, LARCs are especially effective for teens, who are more likely to use contraceptives imperfectly—adolescents are more than twice as likely to forget to take a birth control pill than women 30 and older. [18]

While LARCs offer the most effective form of contraception, they do not protect against sexually transmitted infections (STIs). Condoms should always be used to prevent STIs.

2. LARCs are cost-effective

For women with insurance, LARC devices are not expensive – provided their insurer complies with the Affordable Care Act. Medicaid

GET IT & FORGET IT

Effective ways to prevent unintended pregnancy

Long-acting reversible contraception (LARC), a form of birth control, has the potential to dramatically reduce the problem of unintended pregnancy.

FACTS

Low Failure Rate

<1%

They're Safe

It's safe for teens and women, regardless of whether they've given birth.

Cost Effective

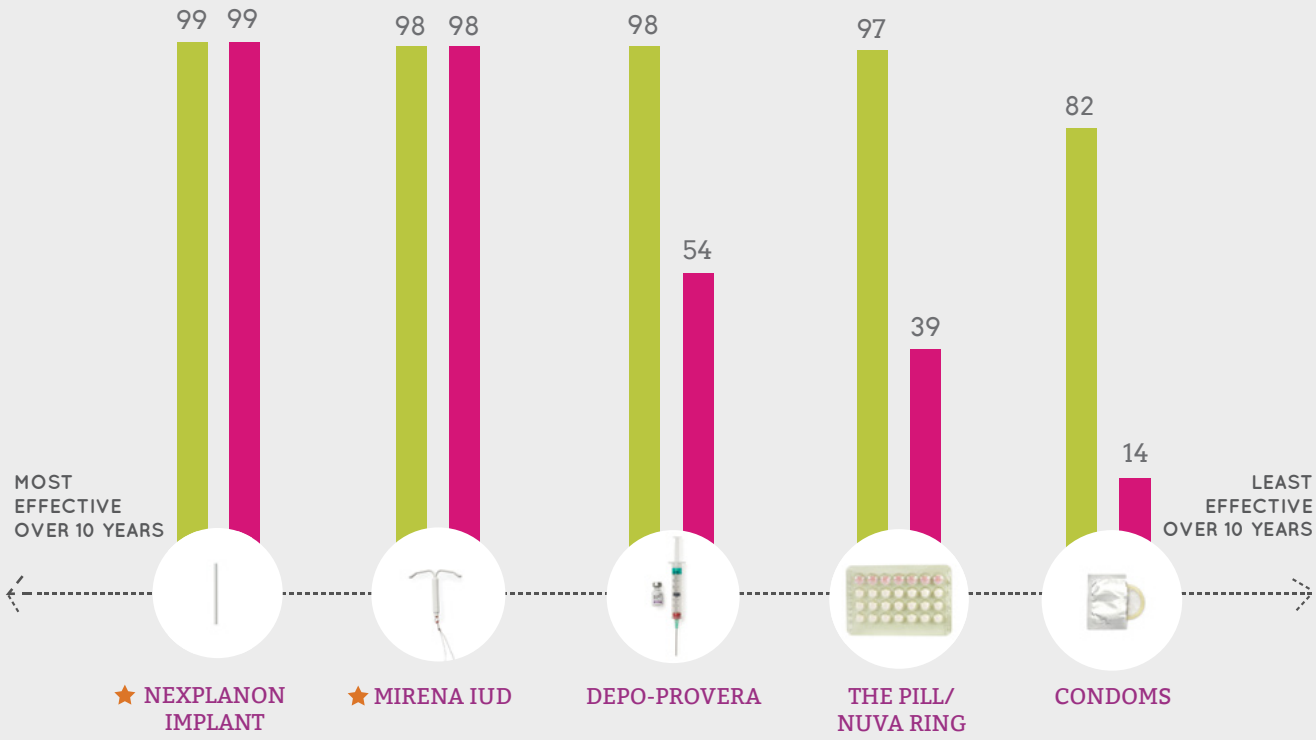
fewer doctor visits = cheaper for everyone

EFFECTIVENESS

KEY

- Perfect Use
- Typical Use
- ★ LARC (long lasting reversable contraception)

For every 100 women, this is the percent of success in preventing pregnancy over **10 years** with typical and perfect use. The first two options, Nexplanon (hormonal implant) and Mirena (hormonal IUD), are commonly used LARCs.



Note: Neither IUDs nor implants protect against sexually transmitted infections. While condoms are not the best form of birth control, they offer the best protection against STIs.

Sources available at:
http://www.nytimes.com/interactive/2014/09/14/sunday-review/unplanned-pregnancies.html?_r=0
Photos of implant, IUD and Depo-Provera: Bedsider.org

WHERE TO FIND THEM

\+ Find the closest location to get LARCs at: www.knowwhatuwant.org

One recent study calculated the net cost savings from public funding for family planning services at $13.6 billion in 2010, or $7.09 for every public dollar spent.

and Title X—federally-funded family planning services—allow providers to offer the devices at low or no cost to low-income women, and all private health insurers are required to cover the cost of LARC devices for all of their insured. Moreover, in Maryland, since 2013, the state Department of Health and Mental Hygiene has offered reimbursement for LARCs for patients of Federally Qualified Health Centers (FQHCs) regardless of their insurance status.

For the state and for private insurers, however, the cost of LARC devices may seem steep at first blush: prices range from about $600 to $850 per device. But LARCs offer the most value for the dollar. As Rebecca Dineen, Assistant Commissioner for Maternal and Child Health at the Baltimore City Health Department said, "LARCs present a high up-front cost, but they are the most effective birth control, and they are definitely the most cost-effective over time." There's more good news about LARCs' cost-effectiveness: a generic IUD is due on the market in 2015 from nonprofit Medicines360, and it should be available for $50 to all Title-X funded clinics that provide the device to uninsured women. The generic IUD, known as Liletta, won't be the right fit for all women seeking LARCs but it will offer a considerable cost savings to the state for many patients.

Even at the brand-name, higher prices, though, there is a significant cost savings associated with LARCs, because the devices require less oversight by clinicians. Less clinical time is more convenient to patients, because it means fewer appointments and, potentially, time off of work. It also translates, of course, to fewer billable hours by clinicians, which means savings to Medicaid and, therefore, the public. By contrast, patients who use Depo-Provera need to return to the clinic every three months for shots. But with LARCs, only one visit is required per year, which is easier on the patient and on the clinic staff. Cathy Watson, the Program Director of Adolescent and Reproductive Health at the Baltimore City Health Department, says, "We bill more for Depo because the patient comes in four times a year for her shot. With a LARC she only needs to come in once a year for a check-up."

The cost effectiveness of LARCs is magnified when considered under the umbrella of publicly-funded family planning services more broadly. One recent study calculated the net cost savings from public funding for family planning services at $13.6 billion in 2010, or $7.09 for every public dollar spent. [19] In addition to reducing costs associated with unintended pregnancy by funding contraception services, publicly-funded family planning programs also help reduce the costs associated with cervical cancer, HIV and other STIs, pelvic inflammatory disease, and infertility.

3. LARCs are safe

LARCs are safe for both teens and women, and can be used with patients who have given birth and patients who have never given birth (referred to as nulliparous women). There are very few adverse effects. This is a reversible method, so women who wish to become pregnant can change their mind at any time;

one trip to a provider to have the device removed restores fertility.

In addition, their use reduces the risk of miscarriages and ectopic pregnancy. And women who use LARCs for effective family planning are less likely to have abortions. [20]

Broader adoption of LARCs by all women would radically reduce unintended pregnancy—and with that we would begin to see a reduction in public health challenges associated with unintended pregnancies such as low birthweight, preterm birth, infant mortality, and low Apgar scores, making pregnancy and childbirth safer for mother and child. [21]

Risks And Side Effects Associated with LARCs

For some women, side effects of LARC use may include heavy bleeding, spotting, or abdominal pain—although these problems are not common. Some side effects are associated with specific LARCs, such as menstrual pain and increased bleeding with the copper IUD (ParaGard), or spotting and irregular bleeding with the hormonal IUDs (Mirena and Skyla) and Nexplanon. Commonly, however, these side effects subside within six months to a year. Providers might try switching methods if side effects continue, but physicians interviewed for this report believe that patients who "stick it out" with a LARC device find that the side effects disappear within a few months.

In a 2013 study of satisfaction and side effects of LARCs, researchers found that most LARC users were satisfied with their contraceptive choice, and only one in four had the LARC removed early. [22] This is significantly better than continuation rates with other contraceptive methods: another recent study found that LARC users continued to use LARCs at a rate of more than 80 percent, while continuation rates for Depo-Provera and oral contraceptives were 57 and 55 percent, respectively. [23] The 2013 study also concluded that improved counseling regarding pain and changes in menstrual bleeding patterns could have a positive impact on continued use of LARCs.

There is a lot of misinformation about risks and side effects of LARCs, such as pelvic inflammatory disease, weight gain, and infertility. There are no studies connecting LARCs to any of those outcomes. [24] Perforation of the uterus during insertion of an IUD is the most potentially serious health risk associated with LARCs, but it is extremely rare, occurring in only one out of 1,000 women. [25]

Women who have not borne children have slightly higher rates of expulsion of the IUD compared to women who have given birth. Even in these women, however, the rate of expulsion is low. IUD expulsion rates range from only three to five percent for all IUD users. [26] It is worth noting that expulsion poses no health risk for the woman aside from losing the IUD's protection against unintended pregnancy.

The LARC Landscape in Baltimore

Teen Pregnancy Prevention Initiative.

Launched in 2011, Baltimore's Teen Pregnancy Prevention Initiative (TPPI) has led a multi-year effort to increase access to LARCs as part of a broader strategy to reduce teen births in the city. Among other things, TPPI has conducted outreach to youth and providers to assess knowledge of and attitudes about LARCs and holds an annual LARC roundtable for health care providers that focuses on reviewing data and model practices to expand access to LARCs. In addition, TPPI has facilitated LARC training for Title X and FQHC providers and has advocated for policies to reduce barriers to LARCs. Going forward, TPPI will focus on continuing to educate both providers and patients about the importance of LARCs and

on providing the necessary training and support to providers to ensure that they are able to offer a full range of contraceptive methods in youth-friendly settings.

Where can women get LARCs?

Women and girls can seek LARC services from several types of health care providers. Depending on the provider, the services—which include counseling, insertion, and removal—can vary greatly. Not surprisingly, the efficiency and breadth of these services depends on how the provider is funded and reimbursed for LARC services. (See Funding sources overview.)

1. **Planned Parenthood of Maryland.** Planned Parenthood of Maryland (PPM) has a proactive and progressive model for counseling patients about LARCs and providing LARC services to its patients (see Case Studies), including training of staff at all levels and increased use of educational materials. With support from the Abell Foundation, PPM was able to dramatically increase use of LARCs by its patients—a four-fold increase in two years.

2. **FQHCs.** Baltimore has six Federally Qualified Health Centers (FQHCs), community-based clinics that serve a large segment of Baltimore City's Medicaid and low-income population. Three years ago, none of the FQHCs offered LARCs. In 2015, three of those FQHCs now offer LARCs to their clients (Baltimore Medical System, Chase Brexton, and Park West Health System). Two other clinics are working toward that goal by applying for Title X funding (Family Health Centers of Baltimore) or finalizing policies for offering the LARC implant Nexplanon (Healthcare for the Homeless).

   In June 2013, the Maryland Department of Health and Mental Hygiene (DHMH) issued "FQHC Transmittal No. 1" from the Maryland Medical Assistance (Medicaid) Program to all FQHCs announcing that DHMH would cover their LARC costs by reimbursing for the office visit as well as the cost of purchasing the IUDs and implants. Given the high upfront costs of LARCs, the acquisition costs had been a barrier for FQHCs. In December 2014, DHMH took LARC provision a step further by asking each FQHC to create or provide a plan by which any client would have access to LARCs.

   Dr. Stephanie Regenold, Senior Medical Adviser of B'more for Healthy Babies at the Baltimore City Health Department (BCHD), is currently reviewing data to find out how many FQHCs complied with the transmittal, and to determine how many LARCs are being provided by FQHCs. According to Dr. Regenold, the Health Department would benefit greatly from support in the area of data collection.

   In late 2014, Shelly Choo, a preventive medicine resident at the Johns Hopkins Bloomberg School of Public Health, surveyed Baltimore FQHCs to get insight into how these clinics could reduce operational barriers to providing LARC services. All 6 FQHCs said that they would like to learn from Planned Parenthood. Planned Parenthood of Maryland has provided tours for those interested, but no formal training has been arranged.

3. **Health Department clinics.** The Baltimore City Health Department (BCHD) supports three clinics, one in East Baltimore and two in West Baltimore, that specifically cater to the reproductive health needs of its clients. Services include family planning, STI and HIV screening, and a commitment to offering same-day insertion of LARCs for all clients who want them. Supported in this last effort by a grant from the Abell Foundation, these clinics were able to provide 200 LARC devices without having to dip into Title X funding, which could then be used to bolster family planning counseling. In 2014, the BCHD hosted a LARC training for its own clinical staff, along with FQHCs and private physicians. Sponsored by the Bixby Center for Global Reproductive Health, this low-cost

training was designed to educate clinicians as well as front-line staff and administrators about how to improve access to LARCs.

BCHD's East Side clinic mainly serves a Latina population, and Dr. Cynthia Mobley, Director of the department's Adolescent and Reproductive Health Clinics, reports that a high percentage of those clients—35 percent—use LARCs. The other two BCHD clinics are in West Baltimore, one specifically for young women and one for women of all ages. LARC use at the West Baltimore clinics is lower, about 15 percent—but this is still high compared to the national rate of seven percent. The clinics have full time counselors who are specially trained to provide information on the full range of contraceptive methods and their effectiveness, and clinics can provide LARCs on the same day as the counseling appointment.

4. School Based Health Centers. The Baltimore City Health Department also offers reproductive services, including LARC insertion, in the School-Based Health Centers (SBHCs) that BCHD operates. During the 2014-2015 school year, 45 students were provided LARC services. While a limited number of students take advantage of this service, the BCHD continues to look for ways to expand services and education for LARCs.

5. Hospitals. For women who want LARCs, postpartum, or post-placental, insertion of a LARC device is ideal because the patient is already in the care of an obstetrician. Several studies have shown that postpartum insertion decreases rapid repeat pregnancy in adolescents. One of the more recent studies showed that adolescent mothers who initiate a LARC method within eight weeks of delivery are more likely to have a healthy birth interval and less likely to have a repeat pregnancy within two years than those who use other methods. [27] Preliminary reports from the BCHD show that postpartum LARC insertion in Baltimore City hospitals has increased greatly in the last five years, but data collection on this subject is limited.

In Baltimore City, four of the seven labor-and-delivery hospitals offer LARC insertion: Johns Hopkins Bayview, Johns Hopkins Hospital, Sinai Hospital, and University of Maryland. The three other hospitals—St. Agnes, Mercy Hospital, and Harbor Hospital—report that the major barriers to offering LARCs postpartum are hospital or religious protocols and policies.

In September 2014, DHMH issued a letter to Maryland hospitals describing its reimbursement plan for hospitals that provide LARCs. The letter confirmed that postpartum LARC provision would become more feasible and sustainable for hospitals. At the same time, the DHMH also requested a plan for putting LARC provision into place if it was not already in place; the deadline for that plan was December 2014.

Ilise Marrazzo, Director of the Maternal and Child Health Bureau at DHMH, is working with a team to put together a toolkit to address the barriers to implementation (mainly protocols and policies) that hospitals have reported with regard to complying with the deadline.

6. Primary care physicians. The Affordable Care Act of 2010 made it possible for primary care physicians (PCPs) to provide reproductive health care services, thereby offering "one-stop shopping" for patients. However, many PCPs did not receive education or training for LARC insertion. Others consider themselves competent about LARCs and may have some training, but there is a gap between competence and confidence; many are simply not comfortable doing IUD insertion, even though they are aware of LARCs' effectiveness. Few PCPs keep LARC devices in stock.

Types of funding sources for LARC services

Source	Description
Medicaid	Jointly funded by the federal government and the state, this program insures adults below 133% of the federal poverty level. The Affordable Care Act of 2010 has increased access to Medicaid, and in some states, like Maryland, Medicaid reimburses providers for the cost of LARC devices and LARC services.
Title X	A federal program designed to ensure access to family planning services for women who are not eligible for Medicaid, such as undocumented immigrants or women and girls who do not want their husbands or parents to receive paperwork from their insurance company (often referred to as "self-pay."). Title X funds cover LARC devices, services, and counseling.
Private insurance	Private insurance is provided by employers, partners' employers, or purchased directly by the patient. The Affordable Care Act mandates that all FDA-approved contraceptive methods, including LARCs, are to be covered by private insurers with no out-of-pocket costs. (Unfortunately, some insurance companies are still charging women out-of-pocket costs for contraception in ways that do not comply with the ACA*. [28] Also, due to court cases such as *Burwell v Hobby Lobby* (2014), some religious employers may be exempted from providing coverage for LARC costs.)
Philanthropic donations and research grants	Some reproductive health care projects are underwritten or partially underwritten by philanthropic grants or research grants. Funds might be earmarked for specific components of LARC services, such as the device itself, for women who are uninsured or whose insurance does not cover birth control.**

**On May 11, 2015, President Obama and Health and Human Services Secretary Sylvia Burwell clarified the ACA mandate, ordering all insurers to provide IUDs and other birth control free of out-of-pocket costs for all women.*

***In Baltimore, the Abell Foundation has supported the purchase of LARC devices for City Health Department clinics and Planned Parenthood.*

7. Other venues. Baltimore City is currently exploring other venues for offering LARC education and services. Two such explorations include women's correctional facilities and substance abuse programs. These programs serve women who have historically had limited access to reproductive health care, and increasing access to LARCs is just one component of broader efforts to address the reproductive health needs of these populations. They are in various stages of development such as feasibility studies and pilot programs. There are also clinics operated through academic medical institutions, such as the Johns Hopkins Harriet Lane Pediatric Clinic, which offer LARCs and have on-site clinicians trained in LARC provision.

Four Case Studies of Efforts to Increase LARC Use

1. CHOICE-St. Louis, Missouri.

In 2006 an anonymous foundation contacted the family planning group at Washington University with a simple—but profound—request: to provide and promote the most effective contraception to St. Louis women. With that funding, the Contraceptive CHOICE Project was born, epidemiologist Gina Secura was hired as the director, and it was decided that LARCs would be the best method for tackling unintended pregnancy in St. Louis.

From its inception, the CHOICE Project's goal was to prevent unintended pregnancy by making birth control options available for all women, with excellent and universal counseling, emphasizing LARCs as the most effective. All personnel associated with the project, more than 100 men and women, were aware of this primary mission and were educated about LARCs effectiveness.

A cornerstone of the project was contraceptive counseling that followed a robust script and focused on patient needs. "It was a patient-centered approach," said Dr. Secura. Patients were counseled about all the contraceptive options available and were provided whichever birth control method they chose, but, in keeping with the project's mission, the counselors emphasized LARCs as the most effective methods. Scripted counseling began with the first phone call to the project; over the phone women were read a brief script stating that LARCs are the most effective birth control, and describing each type of LARC, along with its advantages and disadvantages.

One of the more interesting facets of the CHOICE project is that the counseling was done by non-clinicians. The majority of the contraceptive counselors had no health care training, but 96 percent had an undergraduate degree. They were trained and evaluated extensively before being hired by CHOICE. They were observed and deemed competent through both evaluation of observed counseling and by knowledge-based testing; those who "passed" participated in direct-observation patient counseling. They also did practice contraceptive counseling sessions with physicians. "Because of the really thorough script, clinicians didn't need to do the counseling," said Dr. Secura. Through this innovation, clinicians could use more of their time to do insertions.

The project enrolled 9,256 women aged 14-45 and covered all costs associated with the contraceptive method chosen, insertion, counseling, and access. [29]

The project also created a website that uses plain language to explain birth control options, listing advantages and disadvantages for each method. For example, Nexplanon is described as a "teeny-tiny rod," and one of its listed advantages is "forgettable." The website also links to Bedsider.org, a robust website that provides "real stories," "quick facts," search engines for finding health centers and more. "Bedsider is very hip, very sexy," said Dr. Secura. "It's got videos of young women talking about their own experiences, good and bad. That's valuable peer-to-peer counseling."

By the end of the project, failure rates for LARC users were less than one percent for a three-year period. Compared to their LARC-using counterparts, non-LARC participants were 22 times more likely to become unintentionally pregnant. [29]

Among the teen cohort, 72 percent chose a LARC method, while 28 percent chose another method. In the New England Journal of Medicine, Dr. Secura and co-authors reported that of 560 young women considered high-risk for pregnancy who were given free access to Nexplanon and copper IUDs (ParaGard), not a single one became pregnant during the years they were tracked. Teens using the other two LARCs—Mirena and Skyla, the hormonal IUDs—had nearly perfect rates of pregnancy prevention. [30]

"What we learned from the CHOICE project," said Dr. Mobley of the BCHD, "is that being able to provide reproductive health counseling is critical. It takes time to explain all the methods, but having the time is key. You see different acceptance rates depending on how much time you're able to spend counseling."

When the CHOICE Project ended, the administrators continued to maintain the website, provide resources, and recruit for sub-studies.

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2. The Colorado Family Planning Initiative.

In 2009, the Colorado Department of Public Health and Environment developed a statewide family planning initiative that provided LARCs through Title X-funded family planning clinics in the state. The Colorado Family Planning Initiative (CFPI) was supported by a $23 million donation from the Susan Thompson Buffett Foundation and provided more than 30,000 IUDs or implants—at low cost or no cost—to women at Colorado's 68 family planning clinics.

Its mission was similar to the CHOICE Project's mission: to provide birth control choices to women, while emphasizing LARCs as the most effective. This mission was made clear to all personnel from the genesis of the initiative.

The philanthropic donation to CFPI paid for LARC devices, but it paid for much more than that. It supported the training of more than 150 clinic staff members to do insertions and counseling, the hiring of new staff members at 20 sites, increased outreach efforts, the opening of seven new clinics, and the expansion of clinic hours at 13 sites. Sixteen clinics were able to offer LARCs for the first time, and 20 more were able to add either Mirena or ParaGard to their offerings. By 2011, caseloads at the state's 68 clinics increased by 23 percent.

Social marketing campaigns aimed at teens and young women were also part of the initiative. The Beforeplay website (beforeplay.com) greets visitors with an image of a young man and a quote from him: "I need her to know we should be careful. Birth control. Find out what's right for you." It features videos of women and men talking openly about sex and birth control; zip code-based finders for health centers and emergency contraception; a birth control method selection tool; and candid blogposts such as "But What If I Don't Want to Use Birth Control?"

The CFPI ran from 2009 to 2011, and by 2011 the clinics had served more than 54,000 women. LARC use among Colorado women aged 15-24 had increased from five percent to 19 percent. The program is credited with a 40 percent drop in the state's teen pregnancy rate and a 42 percent decline in teen abortions.

The Colorado Department of Public Health and Environment's website boasts that, "When contraception, particularly the long-acting methods, became more readily available in Colorado between 2009 and 2013, the abortion rate fell 42 percent among all women ages 15 to 19 and 18 percent among women ages 20 to 24." It also states that, "More than 27,000 unintended pregnancies are prevented each year in Colorado as a direct result of state and federally funded family planning services."

In a 2014 study of the initiative, the authors conclude that the CFPI "produced a radical game change in the state: The LARC methods it promoted and paid for appeared to contribute to a large decline in fertility among the young, low-income patient population and to a decline in the overall fertility rate among women younger than 25." [31]

In an October 2014 analysis, RH Reality Check wrote: "Colorado's experience in particular has shown that increasing access to LARCs is an effective and cost-effective move for states. It has been suggested that the CFPI program saved Colorado $42.5 million in large part by helping to reduce the teen pregnancy rate." [32]

When the private funding for the CFPI ran out recently, there was a long political battle about whether the state should replenish it. Democrats wanted to replenish it, but among groups such as Colorado Right to Life and Personhood USA there was fierce opposition to the idea of offering birth control to teenagers. In April 2015, a GOP-controlled state senate committee voted down a bill that would have appropriated $5 million toward the program.

3. Reproductive Health Access Project.

In 2013 the New York City Health Department, in conjunction with Public Health Solutions, formed an IUD Task Force with the goal of increasing LARC use. One of the critical needs the task force identified was provider training. The Reproductive Health Access Project (RHAP), which supports clinicians by introducing them to the spectrum of reproductive health services, specifically contraception, early miscarriage, and early abortion, served a key role on that task force.

RHAP found that the biggest gap in IUD insertion is hands-on training for providers who are already finished with formal training (e.g., residency or fellowship) and are "out in the world" practicing. Toward the goal of closing this gap, RHAP trained practicing clinicians in implant insertion and IUD insertion.

The organization's model for training was to have each workshop sponsored and funded privately by other organizations or agencies. From 2013 through 2014, the organization trained more than 150 practicing clinicians through six workshops. Workshop attendees included physicians' assistants, nurse practitioners, family physicians, and pediatricians (but not gynecologists or obstetricians, as these doctors are already quite competent in insertion).

The provider training offered by RHAP includes about 12 hours of instruction in which clinicians get to practice 10 to 15 insertions. "The doctors come out of that training competent, but not necessarily confident," said Lisa Maldonado, Executive Director of the Reproductive Health Access Project in New York. As of mid-2015, about half of their trainees—clinicians who had not been doing insertions before the training—are inserting on-site. Currently RHAP is evaluating the training to determine what makes the difference between "competent" and "confident." They've found that, of the half of trained clinicians who do on-site insertions as a result of training, one half of those have a seasoned mentor on site, someone they can turn to for help or guidance with insertions.

It's also important to note that of the other half of trainees who are *not* inserting on-site, all of them face the same barrier: infection control. They are stationed at school-based clinics, where there is inadequate sterilization equipment such as autoclaves on-site.

Even the trained clinicians who do not offer insertion on-site report that they recommend LARCs more frequently to their patients as a result of the training and refer them to clinics where they can acquire the devices.

4. Planned Parenthood of Maryland.

When Dr. Raegan McDonald-Mosley, Medical Director of Planned Parenthood of Maryland (PPM), decided that increasing LARC use was one of her goals for the clinic, she knew that the initiative hinged on a well-trained and well-educated staff. In order to make PPM a "LARC-friendly clinic," she set about to make sure that every member of the staff was trained to

> "Being able to offer LARC devices to all women is truly a game-changer."
>
> —Raegan McDonald-Mosley, Medical Director of Planned Parenthood of Maryland

be able to speak about LARC effectiveness and answer questions. She wanted everyone who worked there to be on the same page in terms of understanding that Planned Parenthood recommended LARCs.

Training was provided not only to clinicians but also to call-center employees and front desk employees. "Before a client even comes into the clinic, when she first makes a phone call to explore options," said Dr. McDonald-Mosley, "whoever answers the call in the call center can plant the seed, counsel on costs, and explain the best evidence-based methods."

In part because of its size (PPM is larger than most health department- or school-based clinics) and in part because of philanthropic funding, PPM was able to make this investment in training. While the donation for all-staff training was moderate, the overall price tag for all-staff training can be high, especially for smaller clinics; all-staff training in small clinics often requires shutting down the clinic for at least half a day, which means a loss of billable hours. In the case of PPM, Dr. McDonald-Mosley continues to educate her staff with "lunch and learns" and similar activities. Because there is always staff turnover, and because, as Dr. McDonald-Mosley says, "backsliding is human nature," LARC training has become incorporated into the hiring process.

Dr. McDonald-Mosley is the only physician on staff at PPM; the clinicians who provide routine reproductive health care services are midwives and nurse practitioners. The staff clinicians work at the top of their license. In other words, clinicians stick to LARC insertions and removals, while other staff members such as health care associates conduct contraceptive counseling and work with patients on reproductive life plans. (Reproductive life planning is a client-based assessment of personal life goals that helps the patient to decide if and when childbearing fits in with education, family, career, and more.)

Other facets of the initiative spearheaded by Dr. McDonald-Mosley include making changes to the Planned Parenthood Thursday night teen walk-in clinic and providing educational materials, such as those offered by U-Choose, which emphasize LARC effectiveness. In addition, PPM now offers a medical director consult service for patients who have issues too complex to be managed by staff clinicians; most of these visits are for difficult IUD removals.

Since these and other changes were undertaken in 2012, PPM has increased its number of LARC insertion nearly four-fold: in two years, the number of devices inserted jumped from 412 to 1,642. In this same two-year period, the percentage of patients seeking birth control who chose a LARC device jumped from 14.7 percent to 30 percent.

Terrinieka Williams, an assistant professor affiliated with the Center for Adolescent Health at the Johns Hopkins Bloomberg School of Public Health, who is involved in community-based research about

contraception, said, "For many women it's hard to build a personal relationship with a reproductive health care provider. Clinics are very busy, with high staff turnover. But Planned Parenthood has an excellent model."

Barriers to Increased LARC Use

Given their benefits and demonstrated effectiveness, it is puzzling that LARCs are not more widely used. Individuals interviewed for this report cited several barriers to increased availability and use of LARCs.

Barrier 1: Lack of access to LARCs at some clinics and hospitals.

As discussed above, as a result of a concerted effort by the city and state health departments, most FQHCs and more than half of the birthing hospitals in Baltimore are now offering LARCs to patients, or are in the process of adopting policies that will enable them to do so. However, there remain hospitals and clinics that do not offer the methods. Patients at these clinics and hospitals will not have access to LARCs to prevent unintended pregnancy, nor are they likely to learn about LARCs from their healthcare provider. DHMH has advised hospitals and FQHCs that access to LARCs is a policy priority for the state, and has made clear that the state will reimburse for both the device and insertion.

Barrier 2: Difficulty managing clinic flow and inventory in clinics that offer LARCs.

Many clinics, but especially the small, underfunded ones, operate at breakneck speeds, and the clinic flow can be a delicate house of cards. Simply scheduling appointments can be tricky, and more so if the client doesn't know ahead of time which kind of birth control method she wants. For example, an IUD insertion requires a 45-minute appointment—at some clinics that can be the equivalent of three non-IUD appointments. A client who shows up for a regular visit and then decides that she wants an IUD can disrupt the entire schedule; walk-in clients pose further potential disruption; and canceled appointments or no-shows not only disrupt but may cost clinics money. While many providers strive to offer same-day insertion for clients who want it, they acknowledge that it presents challenges if they are not adept at managing clinic flow.

In addition, at clinics that offer same-day insertion, the clinic manager must be sure to have a range of devices in stock and staff must be knowledgeable about how to bill insurance for them so that the clinic doesn't run in the red.

For all of these reasons, some clinic managers may perceive increased LARC use to pose not only a disruption to clinic flow but also a financial risk to the clinic.

Barrier 3: Lack of knowledge about LARC among clinic staff and lack of training in LARC insertion among clinicians.

For clinics that aspire to provide LARCs, lack of staff training and knowledge of LARCs can undermine those efforts. When the CHOICE Project in St. Louis ended, Dr. Gina Secura and her team conducted workshops to help clinics overcome barriers to increasing LARC uptake. In the course of these workshops they discovered that many clinic employees didn't know about LARCs, or knew very little, or were even misinformed about LARCs. Staff on the ground routinely reported to Dr. Secura's team that they were unaware what the clinic's priorities were, and they expressed that closing the clinic for a day to get everyone on the same page would be the best first step.

Furthermore, many clinicians currently practicing have received little or no training in IUD insertion. (Clinicians, in this case, include primary care physicians, nurse practitioners,

and physicians' assistants.) Lisa Maldonado, executive director of the Reproductive Health Access Project in New York, which studied gaps in clinician training as part of an IUD Task Force, found that clinicians tend to be much more at ease with inserting implants (Nexplanon) than IUDs.

"The Nexplanon training wasn't that difficult," said Ms. Maldonado, "but with the IUD it's trickier. You have to do the speculum exam, and you have to sound the uterus to figure out where to place the IUD. A lot of the clinicians weren't comfortable with that."

Even after training, noted Ms. Maldonado, clinicians can suffer from lack of confidence when it comes to IUD insertion. They are "competent but not confident" in IUD insertion, and if they offer LARC services to their clients at all, primary care physicians will tend to steer the client toward Nexplanon.

High staff turnover is another complication with training clinic staff; training is not often passed on before employees move on.

Barrier 4: No time to adequately counsel clients or form client-clinician relationships.

For all clinics, it's important for clinicians to bill at their top rates as often as possible. Because counseling is billed at a much lower rate than clinical services, most clinics can't afford to have their clinicians provide counseling.

But contraception counseling is a proven method for increasing LARC use, and clients often express a desire to have a relationship with someone who can walk them through all of their options at a slower pace than a clinician might.

Lack of contraception counseling during prenatal care is another barrier to LARC use. The best time to reach and counsel patients about postpartum insertion of a LARC device is while they are pregnant and receiving regular prenatal care, but some pregnant clients are not counseled about contraceptive options during pregnancy. Those who are asked about contraception wishes during labor or immediately postpartum have had no time to consider their options and may choose not to have a LARC because they feel rushed.

Barrier 5: Misconceptions and fears about LARCs.

In conjunction with the Baltimore Health Department and the Teen Pregnancy Prevention Initiative, researchers Terrinieka Williams and Jen Choi from the Johns Hopkins Bloomberg School of Public Health conducted community-based research on attitudes about LARCs. [33] Their preliminary findings reveal that women of all age groups have significant misconceptions about LARCs. Some common misconceptions are that LARCs cause sterility; that they cause sex to be painful; that LARCs cause long-term bleeding; that LARC use causes weight gain.

Even after being shown fact cards provided by experts, stakeholders in focus groups refused to believe the facts, giving more weight to what their peers reported about LARC use experiences. Some focus group participants in older age ranges associated contemporary LARCs with Norplant, which was prescribed decades ago in Baltimore City public schools. Their perception is that Norplant was a campaign to prevent black children from being born. While the study involved only a small sample of women in two neighborhoods, it identified concerns that may undermine efforts to increase LARC use.

Dr. Krishna Upadhya of the Johns Hopkins Harriet Lane Pediatric Clinic has found that her patients, especially the younger ones, are uncomfortable with the idea of IUDs. "For them, the idea that I'll insert something into their vagina is not appealing," she said.

Barrier 6: Noncompliance with the Affordable Care Act of 2010.

The ACA requires most employer-supported health plans to cover certain preventive care measures such as vaccinations and HIV screening—without copayments, deductibles, or cost-sharing. This mandate includes all FDA-approved contraceptive methods including birth control pills, IUDs, implants, barrier methods, and emergency contraception (but not abortion). Nonetheless, some private insurers illegally charge their clients out-of-pocket costs for LARCs. And with the decision of *Burwell v Hobby Lobby* in 2014, some employers may claim religious exemptions for providing birth control coverage through their employer insurance plans.

On May 11, 2015, President Obama and Health and Human Services Secretary Sylvia Burwell clarified the ACA's mandate about out-of-pocket costs. It is unclear how quickly or how closely private insurance companies will heed that mandate.

Opportunities for Increasing Access to LARCs in Baltimore

We suggest seven recommendations to address key barriers, increase LARC use, and reduce unintended pregnancy in Baltimore.

Recommendation 1: Hire a coordinator for LARC services in Baltimore.

To oversee efforts to improve LARC access in Baltimore, the BCHD should hire a dedicated coordinator of LARC services. The LARC coordinator would be responsible for conducting outreach, training and technical assistance to clinics to assist them in efforts to increase access to LARCs and for spearheading a citywide LARC education campaign. The LARC coordinator would also gather and organize data about LARC use from all Title X, FQHC and BCHD clinics, as well as from hospitals, with the goal of charting progress and identifying gaps. This could be a temporary position staffed by a Prevention Fellow from the Centers for Disease Control and Prevention. After an initial two-year period, BCHD should reevaluate the need for ongoing outreach, training, and technical assistance.

Recommendation 2: Provide access to LARCs at all FQHCs.

To ensure that women in Baltimore have widespread and equitable access to LARC devices, all FQHCs should offer LARC counseling and provide LARCs to patients who want them, or provide access via referral to a clinic that specializes in LARCs, i.e., the Healthy Teens and Young Adults clinic or Planned Parenthood of Maryland. In addition, BCHD, through its B'More for Healthy Babies and TPPI initiatives, should develop criteria for offering a special designation, or "seal of approval," to clinics that provide quality reproductive health care. The criteria should include the adoption of specific policies to ensure that patients are informed about and can easily access LARCs if they choose. BCHD should conduct "secret shopper" testing of clinics seeking the designation to ensure that they are implementing these policies, and ongoing monitoring after the designation is awarded.

Recommendation 3: Provide LARC training for all staff in Title X, FQHC, and BCHD clinics, including counselors, clinicians, and administrative staff.

a. BCHD should contract with a LARC training provider to train all staff at these clinics, with a goal of creating "LARC-friendly clinics." Training sessions should occur on a regular schedule to compensate for staff turnover, and continuing education should be a routine operation for all clinics, regardless of size.

b. In addition to general all-staff training on LARCs, BCHD should contract with a clinical training provider to offer training to clinicians

on LARC insertion, especially IUD insertion, which is more time consuming and more complicated than implant insertion. Mentoring is another key facet of better training for clinicians. To build skill and confidence among recently trained clinicians, they should insert their first 5 to 10 IUDs under the supervision of a mentor.

c. To assist clinics in providing greater access to LARCs, including same-day insertions for women who want LARCs, BCHD should contract with PPM or another successful LARC provider to offer training to clinic managers in best practices in clinic flow. Given the time demands associated with LARC counseling and insertion, training in how to manage the provision of LARCs could increase access to LARCs at clinics that have little experience with them.

Recommendation 4: Train and hire medical students, college students, and nurses to be contraception counselors at all clinics offering contraception and prenatal care.

The BCHD, Title X and FQHC clinics should train staff and/or student interns to serve as contraceptive counselors, using scripts, online training modules, evaluation methods, and quality assurance protocols provided by the CHOICE Project. The clinics could designate existing staff, or tap into Baltimore's extensive network of medical or public health students to provide contraceptive counseling, with appropriate training and supervision, thereby freeing up valuable clinician time to focus on providing patient care. With oversight and technical assistance from the LARC Coordinator, clinics could pilot different staffing models to identify the most feasible and sustainable model for providing this critical service. In addition to counseling patients about LARCs, these counselors could also educate patients about the importance of using condoms to prevent HIV and other sexually-transmitted infections.

Recommendation 5: Increase social marketing of LARCs and expand peer-to-peer counseling programs to correct misconceptions about contraception.

Because many people do not yet know about the benefits of LARCs, BCHD and Planned Parenthood should work together to design a social marketing campaign explaining the benefits and dispelling myths about LARCs, and providing information about where women can get LARCs.

Peer-to-peer counseling is another means of increasing knowledge of LARCs, especially among teens. Both the TPPI and Planned Parenthood have youth advisory councils that are intended to provide peer engagement, outreach and education. These youth advisory council members should serve as ambassadors to other youth organizations in the city, providing accurate information about LARCs as part of a reproductive health outreach effort.

Recommendation 6: Identify funding streams for LARC training, staffing needs, and LARC devices for uninsured women.

Because many of the above recommendations will require funding for implementation, BCHD should work in collaboration with DHMH, local hospitals and private foundations to create a funding mechanism to pay for training for clinic staff, to fund contraceptive counselors and peer leaders, the development and implementation of standards for reproductive health clinics, the creation and implementation of the LARC social marketing campaign, and to pay for LARCs for uninsured women. Possible sources of funding include Maryland's Medicaid program, hospital community benefit programs, and private philanthropic support. With the potential for significant public savings from reduced expenditures for unintended births, this should be a funding priority for the Medicaid program.

Recommendation 7: Encourage Nexplanon use by PCPs and clinics that are scaling up toward greater LARC use.

BCHD, through its B'More for Healthy Babies and TPPI initiatives, should conduct outreach to primary care providers to encourage Nexplanon as a first step towards increasing access to LARCs. Inserting a Nexplanon implant is an easier and less time-consuming procedure than IUD insertion. For PCPs and clinicians who want to introduce their clients to LARCs but are not confident about IUD insertion, offering Nexplanon can be a good bridge to both clients and clinicians becoming more comfortable with LARCs.

About the Author

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Long-Acting Reversible Contraception: A Proven Strategy for Reducing Unintended Pregnancy and Abortion in Baltimore

by Christine Grillo
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The Abell Foundation is dedicated to the enhancement of the quality of life in Maryland, with a particular focus on Baltimore. The Foundation places a strong emphasis on opening the doors of opportunity to the disenfranchised, believing that no community can thrive if those who live on the margins of it are not included.

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