

Making the Economic Case for Long-Acting Reversible Contraception

Increasing access to long-acting reversible contraception (LARC) not only reduces the health repercussions [associated](#) with unintended or mistimed pregnancies, but can also lower the economic costs to both individuals and governments. A 2013 *Women's Health Issues* study [estimated](#) that every dollar spent on LARC devices saved \$5 in public expenditures. The same year, a study in *Contraception* [found](#) that unintended pregnancy caused \$4.6 billion in U.S. medical costs each year, but that total costs would decrease by \$288 million annually if just 10 percent of women aged 20-29 years switched from oral contraceptives to LARCs, which are more reliable.

As states have enacted policies to make LARC more accessible and affordable, they are seeing significant drops in their unintended and teen pregnancy rates, and associated savings in their state spending. These decreases in public expenditures show that increasing LARC access isn't just good for patients' health, but also an economically responsible decision.

This factsheet describes key economic concepts for measuring the economic benefits of increasing LARC use, how cost avoidance data helped Colorado secure special funding for its LARC program, and how state and territorial health departments can use CDC's LARC Return on Investment Tool to evaluate the cost effectiveness of LARC programs in their jurisdictions.

Economic Definitions in the Context of LARC

There are two concepts that public health professionals can use to measure the economic impact of LARC projects. The first is return on investment, or ROI. "ROI measures the gain or loss generated on an investment relative to the amount of money invested," says CDC Senior Economist Rui Li. "In this case, ROI is the ratio of the net savings from increasing LARC use to the cost of increased LARC use."

The second concept is cost avoidance, which refers to costs that are prevented upfront or eliminated. "In this case, cost avoidance refers to the medical costs avoided from unintended pregnancies that would be prevented by increased use of LARC, compared with the medical costs associated with unintended pregnancies with the current level of LARC use," says Li.

Colorado's Cost Avoidance Data Helps Secure New Funding

In 2009, the Colorado Department of Public Health and Environment (CDPHE) [launched](#) the [Colorado Family Planning Initiative](#) (CFPI) to provide low- or no-cost LARCs to low-income women throughout the state. Over the program's first five years, Colorado's teen pregnancy rate [dropped](#) by 48 percent, the teen abortion rate fell by 47.5 percent, and the unintended pregnancy rate dropped by 40 percent.

Following CFPI's remarkable success, CDPHE requested \$5 million from the Colorado General Fund for 2015-2016 to keep the program running. Despite support from the governor, many legislators, and CDPHE Executive Director and Chief Medical Officer Larry Wolk, the state senate rejected a [bill](#) to provide additional funding to CFPI.

After the legislative failure, CDPHE hired health economists to perform a cost avoidance analysis. The department released a request for proposals and awarded the contract to a team of doctoral students at the University of Colorado who were passionate about the project and eager to grow their body of publications. The total cost of the project to CDPHE was \$75,000, funded through 14 foundations.

The health economists analyzed seven Colorado entitlement programs to calculate cost savings due to CFPI, and [found](#) that the initiative had saved the state between \$66,063,664 and \$69,625,751 in public assistance costs. Using two cost avoidance methodologies to breakdown the savings, they found CFPI allowed Medicaid to avoid between \$52.3 and \$53.7 million, Temporary Assistance to Needy Families avoided between \$5.8 and \$7 million, the Colorado Food Assistance Program/Supplemental Nutrition Assistance Program avoided between \$5.2 and \$5.5 million, and WIC avoided \$2.7 to \$3.4 million.

With the cost avoidance data in hand, CDPHE again asked for funding from the general fund, [requesting](#) \$2.5 million for 2016-2017. Seeing that \$2.5 million had the potential to save the state tens of millions of dollars in birth-related costs, the legislature [passed](#) a bill allocating the funds and the governor [signed](#) it in May 2016.

“From one to the other, we got more concrete cost avoidance data, so the legislators couldn’t say no,” says CDPHE Family Planning Unit Section Manager Jody Camp.

Using CDC’s LARC ROI Tool

CDC collaborated with the HHS Office of Population Affairs to develop a LARC ROI tool that health agencies can use to analyze the budget impact of increased LARC uptake among Medicaid beneficiaries. The tool projects the estimated number of unintended pregnancies that a LARC program can avert and the related Medicaid spending over an implementation period compared to the status quo.

The tool [projects](#) how the expected number of unintended pregnancies and births would shift if a state or territory achieved a certain percentage of change in LARC use, as well as the impact on Medicaid’s annual budget for up to five years and whether the intervention would be budget neutral or break even. Users can customize the tool’s inputs to reflect their state’s demographics and contraceptive use profile, including programmatic costs, and modify reimbursement rates for LARC devices and related provider services, says Li.

As illustrated by Colorado’s story, this data can be used to make compelling arguments to policymakers that funding LARC is a sound economic decision in addition to its health benefits. Although health department staff must decide for themselves how best to use the tool for their jurisdiction, options include using the data to write policy briefs, factsheets, infographics, or one-pagers. In these documents, policymakers are often [interested](#) in LARCs’ effectiveness at preventing unintended pregnancies, the medical cost savings that may result from using LARC to prevent unintended pregnancies, and the cost of intervention, including LARC devices, related services, and programmatic costs.