



The Economic Impacts of Breastfeeding: A Focus on USDA's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

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What Is the Issue?

Breastfeeding rates in the United States—in particular for duration and exclusivity—fall short of those recommended by the American Academy of Pediatrics (AAP) and other U.S. health organizations. Breastfeeding rates among participants in USDA's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) are particularly low. In March 2018, Congress directed USDA's Economic Research Service (ERS) to conduct a study on the economic benefits of breastfeeding, including its potential cost savings for WIC and Medicaid. This report addresses the congressional directive by estimating the effects that increased breastfeeding rates (up to levels recommended by AAP) in WIC would have on: (1) the number of participants in WIC; (2) costs to WIC; (3) costs to Medicaid; and (4) health-related costs that accrue to WIC households or their health insurance providers; reductions in such costs represent a benefit or cost saving. To quantify these effects, costs based on estimated breastfeeding rates in 2016 were compared to projected costs if breastfeeding rates in WIC hypothetically reached “medically recommended” levels, defined in this study as 90 percent of infants are exclusively breastfed for their first 6 months, followed by continued breastfeeding with the addition of complementary foods—but no infant formula—for the next 6 months.

What Did the Study Find?

Results from this study indicate that if breastfeeding rates in WIC in 2016 rose to recommended levels:

- The number of mothers who participated in WIC would have increased by an average 645,811 per month in 2016, an 8-percent increase in total WIC participants.
- Costs to WIC would have increased by \$252.4 million, or 4.2 percent of WIC's total cost in 2016. Although total food package costs would have decreased by \$33.8 million, costs for Nutrition Services and Administration (NSA)—which include breastfeeding promotion and support activities—would have increased by \$286.2 million.
- Reductions in the incidence of various diseases due to increased breastfeeding among WIC participants would have reduced health-related costs to WIC households or their private and Government health insurance providers. For example, increased breastfeeding rates would have decreased the Federal portion of Medicaid costs by at least \$111.6

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

million. As a result, Federal program costs to WIC and Medicaid combined would have increased by an estimated \$140.9 million.

- Total health-related costs would have been reduced by \$9.1 billion (including savings to Medicaid). Over three-quarters (\$6.9 billion) of the health-related cost savings would have resulted from reductions in early deaths. The rest would be due to savings in medical costs (\$1.5 billion) and nonmedical costs (\$635 million).
- Excluding the \$111.6 million in savings that accrue to the Federal portion of Medicaid, the health-related cost savings to WIC households or their health insurance providers would have totaled \$9.0 billion.

Holding other factors constant, if the hypothetical increase in breastfeeding rates was sustained for future years, these estimated values for 2016 would represent recurring costs each year.

To address uncertainty around the estimates of programmatic and health-related costs, the study also estimates effects under several different scenarios whereby hypothesized breastfeeding rates increased but by less than recommended levels. The results indicate that WIC participation, WIC program costs, and Federal program costs to WIC and Medicaid combined would increase, while health-related costs to WIC households or their insurers would decrease, but by less than if breastfeeding rates increased to medically recommended levels. The magnitude of these effects varies depending on the degree to which the breastfeeding rates increase and the ratio of fully breastfeeding to partial breastfeeding participants.

A unique feature of this study is that it examines the economic impacts of increased breastfeeding rates in WIC from the perspectives of different parties—the WIC program, the Medicaid program, and WIC households or their health insurance providers. However, the study did not estimate the repercussions of increased breastfeeding on several markets that would be directly affected. For example, if breastfeeding rates reached medically recommended levels, infant formula usage would decrease with potential negative implications for infant formula manufacturers, which could in turn affect the size of the infant formula rebates that manufacturers provide to WIC and, therefore, affect costs to WIC. The study also did not consider the additional financial investments that would be needed to achieve medically recommended breastfeeding levels. Breastfeeding promotion and support efforts—by entities such as WIC, other Government agencies, health care providers, private insurers, employers, and other organizations—would likely have to be scaled up considerably to reach medically recommended breastfeeding levels in WIC.

How Was the Study Conducted?

The analysis of the effect of increased breastfeeding rates on WIC participation and program costs used WIC administrative data from USDA's Food and Nutrition Service (FNS) supplemented with data obtained from research reports by FNS and the National Academies of Sciences, Engineering, and Medicine. The analysis of the effect of increased breastfeeding rates on health-related savings used the Breastfeeding Savings Calculator developed by the U.S. Breastfeeding Committee—an independent nonprofit organization. Data on breastfeeding rates came from the Centers for Disease Control and Prevention's (CDC) National Immunization Survey (NIS).