



A Credit to Health:

The Health Effects of the Earned Income Tax Credit

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The opportunity to live a healthy life begins long before a person shows up at the doctor's office or hospital; health begins where people live, learn, work, and play.

Our health is not the volume of health care services we consume. It is outcomes, such as how long we live, or how likely we are to develop infectious diseases or chronic conditions like diabetes or heart problems. Improving health outcomes in Massachusetts results in large part from the kinds of services, supports, and institutions that enable individuals to lead healthy lives, not just in health care services and coverage.¹

Economic hardship can be an obstacle to family health. A major study in the *Journal of the American Medical Association* finds the difference in life expectancy between the highest-income individuals and those with the lowest incomes is 15 years for men and 10 years for women, a gap that has widened over time.² There is growing recognition that greater attention to the social determinants of health – things like having stable housing, safe, walkable neighborhoods with accessible transportation, grocery stores with affordable, nutritious options, schools that are equipped to provide high-quality education, and incomes that enable families to make ends meet – is critical to making meaningful improvements to health.³ This paper briefly examines the health impact of one program that provides economic support for low-income working families: the Earned Income Tax Credit (EITC).

About the EITC

The Earned Income Tax Credit (EITC) is a refundable tax credit that helps lower-income working families make ends meet. It goes to families and individuals with income from paid work, and provides benefits primarily to workers with children. Over 400,000 tax filers in Massachusetts claim the EITC each year.⁴

The Massachusetts EITC operates under the same eligibility rules as the federal EITC. A tax filer's federal EITC eligibility and credit value depend on marital status, the amount of income the filer earned during the tax year, and the number of dependent children. The Massachusetts EITC partially matches the federal EITC, adding a credit from the Commonwealth worth 23 percent of the federal amount.⁵ Simply piggybacking on the federal credit keeps administrative costs and complexity to a minimum, while rewarding and encouraging work.

The budgets proposed by the Governor and House for Fiscal Year 2019 would increase Massachusetts' state match rate to 30 percent. For 2018, that rate would have meant a maximum state credit of about \$1,038 instead of \$796 for a married family with one child.⁶ With a 30 percent match, the Commonwealth would be on par with New York's match, below some states such as Vermont and New Jersey, and more generous than several other states, such as Maine or Rhode Island.⁷

Health effects for infants and children

Research has found that the EITC has an effect on children's health, as observed in prenatal care, infant health, the effects of schooling, and avoidance of illnesses and unhealthy behaviors.

Prenatal and infant health

When families don't have enough money to make ends meet and provide for the basics, it can lead to negative health outcomes among infants and children, from low birthweights to stress at home.⁸ There is evidence that the EITC can mitigate some of these outcomes. Researchers suggest that EITC payments create these positive effects because they enable parents to gain better access to prenatal health care, which is associated with healthier habits and better infant health.⁹ The alleviation of a family's financial stress may also contribute to these benefits for infant health.¹⁰

While there are multiple indicators for infant health, much research on the EITC's effect on infant health focuses on the problem of low birthweight (defined by the World Health Organization as less than 5 pounds 8 ounces) because it is easy to measure and has been shown to predict longer-term health and economic outcomes.¹¹ Infants with low birthweights more often have longer neonatal hospital stays and are at greater risk for infant mortality, future negative health outcomes, and developmental delays.¹² Scholars disagree about how much the EITC reduces instances of low birthweight¹³ – some have found the EITC has no effect on low birthweight in certain populations¹⁴ – but many agree that increases in EITC payments have some role in reducing occurrences of low birthweight.

Looking at multiple years of EITC expansion, researchers found that a \$1,000 increase in the maximum EITC reduced instances of low birthweight by 5.6 percent overall. The effect was greater among African-Americans, who saw a 7.2 percent reduction in the rate of low birthweight births for every \$1,000 increase of EITC income.¹⁵ One study estimates that the state EITC matches across the nation reduce the instances of low birthweight by anywhere from 4,300 to 11,850 babies each year.¹⁶ This study found that infant health (specifically birthweights, instances of low birthweight, and weeks of gestation) improved in states that provided an additional state match to the federal EITC. Improvements were most significant in states with larger state EITC rates.¹⁷

Similar to reducing the incidence of low birthweights, infant health is also improved when more infants spend a full 39 to 40 weeks in the womb before birth. Infants born before 37 weeks are considered preterm and are at higher risk for illnesses.¹⁸ Increasing gestation time reduces the risk of illnesses and reduces instances of long hospital stays. Increasing state EITC matches are associated with average increases in gestation time by more than a day. Although this change is small, it is noteworthy because scholars find few factors that can significantly increase pregnancy duration.¹⁹

School achievement

The EITC can also have positive, lasting effects on school-aged children. A large body of research has shown that the EITC is associated with improved educational achievement. For instance, the EITC has been linked to improved test scores as well as higher high school graduation rates and college enrollment.²⁰ Educational attainment is also linked to better health outcomes, in large part because of its impact on incomes.²¹ It is possible, therefore, that education achievement may be one mechanism for long-term health improvements associated with the EITC.

One study found a \$1,000 increase (in 2008 dollars) of the maximum EITC credit in a given year significantly boosted mathematic achievement among students. This increase was also associated with a 2.1 percentage-point increase in the likelihood that students would graduate or receive a General

Education Diploma (GED) by age 19. It also increased the probability, by 1.4 percentage-points, that students would complete one or more years of higher education by age 19.²²

A credit worth about \$3,000 (in 2005 dollars) during a child's early years could boost his or her achievement at the same rate as two extra months of schooling.²³

Researchers found that the timing of the tax credit also is important – tax refunds in the spring of the high school senior year, particularly when students are finalizing higher education decisions, can increase college enrollment slightly.²⁴

Physical and behavioral health

Increases in EITC amounts have been associated with healthier child behavior in the short term. Researchers used an index that measured behaviors such as peer conflict and anxiousness or depression and found that, over a two-year period, children in families with larger EITC payments saw improvements in their behavioral index scores.²⁵ Further, the EITC may also alleviate stress-related behavior that hurts children by helping parents afford better childcare arrangements.²⁶

Scholars find that adult onset of diseases, such as heart disease, are often linked to hardships suffered as a child.²⁷ Research suggests that, over the long term, children whose families receive more income from refundable tax credits are more likely to avoid early onset of disabilities and other illnesses associated with low family income.²⁸

Effects on adult health and neighborhoods

In addition to improving children's health, the EITC has been shown to improve the health of adult family members, especially parents. In 1993, the EITC for the first time provided larger benefits to families with two children than those with one child. Studies subsequently found greater increases of self-reported health of EITC-eligible mothers with two children relative to those with one. The expansion of EITC benefits was also associated with mothers' improved blood pressure, heart rate, cholesterol, and inflammation levels.²⁹

Mothers who were eligible for EITC increases in the 1990s, were better able to pursue healthy activities, and more likely to receive prenatal care.³⁰ Similarly, EITC-eligible households are found to spend relatively more on healthy foods like fruits and vegetables during the months when most EITC benefits are paid.³¹

The EITC also benefits health across entire neighborhoods in places with a high concentration of households receiving the credit. By increasing economic activity in these neighborhoods, research finds a higher state and local EITC rate was associated with fewer babies born with low birthweight even for residents who do not receive the credit. Researchers believe these neighborhood-wide benefits where many parents receive the EITC may be the result of reduced stress, less crime, and other benefits that spill over across the neighborhood when many low-income working families are better able to make ends meet.³²

Health outcomes are shaped not just by health care received, but by the conditions in which people live, which can be shaped by family incomes. The evidence suggests that increasing incomes of low-income working families through the EITC can not only help families make ends meet, but can also have long-term effects on community health.

Jennifer Sullivan at the Center on Budget and Policy Priorities contributed to this report. The authors also gratefully acknowledge input on an earlier draft from Allison Bovell-Ammon at Children's Health Watch, and

Samantha Waxman and Erica Williams at the Center on Budget and Policy Priorities. Any mistakes are the authors own.

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¹⁵ Low birthweight is defined as an infant weighing less than 2,500 grams or about 5 pounds 8 ounces.

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