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Long-term Individual and Population Consequences of Early-life Access to Health Insurance

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Multiple channels exist through which health insurance may affect an individual's health and economic status. For example, health insurance may increase use of preventive care, leading to better disease prevention and better health. Individuals with disease may rely on health insurance to obtain and finance critically needed curative care, thereby improving their health. Further, being healthy may lead to increased educational attainment, and ultimately, to higher rates of employment and higher wages. In addition, health insurance may raise economic status directly by decreasing the cost of health care. Health insurance may affect individuals in myriad ways and having access to health insurance early in life may improve the likelihood of its having long-term beneficial effects.

In a recent literature review, we documented the large body of work studying the effects of health insurance on health and economic outcomes (Gaudette, Pauley, and Zissimopoulos, 2016). We describe the evidence on the impact of access to childhood health insurance on outcomes. Of particular note is evidence from Medicaid expansions. Several studies revealed childhood health insurance expansions had a positive impact on health outcomes and educational gains. If gains in childhood health insurance improve childhood outcomes, they may also have long-term positive impacts on adult health, productivity, and economic well-being.

In this research we ask, what are the long-term individual and population consequences of early-life access to health insurance? We answer the question by employing dynamic microsimulation and comparing adult health and economic well-being for individuals who age without childhood health insurance with those who gain access in childhood to health insurance. We use empirical estimates on the gains in health and educational attainment from prior literature in our projections of long-term adult health and economic outcomes. We use the findings in Cohodes et al. (2016) on the impact of childhood health insurance on high school graduation rates and college completion, and the results from Boudreaux et al. (2016) on the likelihood of having high blood pressure. We forecast outcomes assuming that gaining childhood health insurance improves educational attainment, decreases the likelihood of chronic conditions through declines in the likelihood of high blood pressure, and finally, assuming childhood health insurance improves both educational attainment and health.

We analyze the life-cycle impacts of having health insurance as a child on adult health and economic outcomes using

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the Future Americans Model (FAM), an economic-demographic microsimulation model that follows Americans age 25 and older and projects their lifetime health and economic outcomes. The FAM employs panel data and multivariate regression to predict the evolution of individual-level health trajectories and economic outcomes, rather than the average or aggregate characteristics of a cohort. This methodological approach allows estimation of health insurance's impact on competing risk factors of disease, as well as economic outcomes. We quantify the effects of childhood health insurance on medical spending, health outcomes, labor market outcomes, and government program participation.

We found that there would be substantial changes to both health and economic outcomes if every individual who did not have health insurance as a child gained health insurance in these early years of life. We found reductions of incidence of stroke, cardiovascular disease, and diabetes at age 65. Over their lifetimes, these gains translated into 11 additional months of life expectancy and an expected 16 additional months lived free of disability. We found that both the educational attainment gain and decline in chronic conditions were important contributors of these long-term benefits. Our simulations showed that there would be no change in total medical spending: The increase in additional spending due to increased longevity was offset by reductions in health spending due to avoided chronic conditions. However, both Medicare and Medicaid spending declined while private consumption of health care increased. In addition, there was an 8 percent increase in lifetime earnings. The percent of uninsured children is small relative to the population, about 14 percent for the time period of interest, thus the impact of the intervention was modest for the nationally representative cohort as a whole.

Although our analysis considers what could have happened in the past, it also speaks to policies moving forward. Interventions made in childhood may be particularly important for lifetime health and well-being. Since the Medicaid expansions of the 1980s, the uninsured rate of children has gradually fallen. More recently, it has continued to fall due, in part, to the Affordable Care Act. However, there are still gains to be made in many areas. For example, the uninsured rate varies across states and was as high as 13 percent in Arizona in 2015. Further, there are large disparities in health insurance by race and ethnicity. As of 2014, the uninsured rate for Hispanic children remained nearly double that of white, non-Hispanic children (9.6 percent versus 4.9 percent). Insuring all children may be one way to close the racial and ethnic gap in health and economic outcomes.

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