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10-2015

# Impact of Education on Medicaid Eligibility

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## Repository Citation

Bollinger, Christopher R., "Impact of Education on Medicaid Eligibility" (2015). *Issue Brief on Topics Affecting Kentucky's Economy*. 15.  
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## CENTER FOR BUSINESS AND ECONOMIC RESEARCH

# ISSUE BRIEF

on topics affecting Kentucky's economy

October 2015

### Impact of Education on Medicaid Eligibility

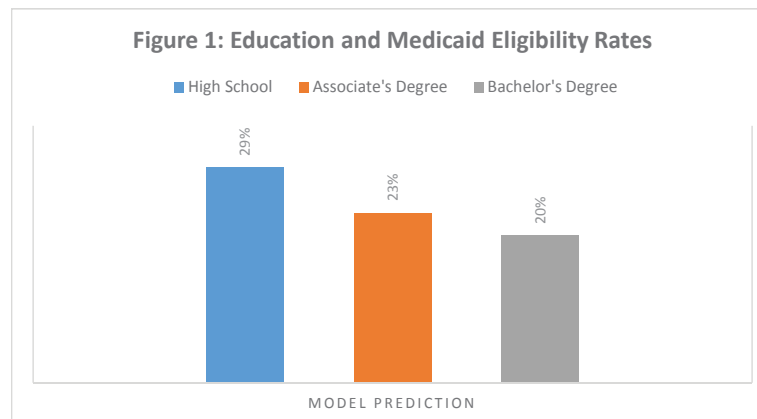
By Christopher R. Bollinger (crboll@uky.edu)\*

*Our results suggest that the state of Kentucky could reduce Medicaid costs by \$27 million if we were to increase our education levels modestly.*

The individual mandate of the Affordable Care Act (ACA) coupled with the Medicaid expansion in Kentucky makes reducing Medicaid eligibility rates of crucial importance. This brief examines the link between education and eligibility for Medicaid for the citizens of Kentucky. In general, the relationship is nearly mechanical in that higher education leads to higher incomes. Since income is the key determining factor of Medicaid eligibility, and because of the individual mandate eligibility is mostly equivalent to participation, our estimates show that higher education reduces the likelihood that an adult will be on Medicaid or have children and family members on Medicaid. Our results suggest that the state of Kentucky could reduce Medicaid costs by \$27 million if we were to increase our education levels modestly and as much as \$200 million if we can achieve education levels comparable to the U.S.

We use the American Community Survey (ACS) for the years 2009 through 2013 (the latest data available). Rather than measure actual Medicaid participation, however, we use eligibility under the new Medicaid expansion rules for Kentucky. Adults who live in households with incomes less than 138% of the poverty level are eligible for Medicaid coverage\*\*. For children and pregnant women, the eligibility threshold is 200% of the poverty level. We focus only on those individuals who are under the age of 65, since Medicare applies to those over 65.

Adults are eligible for (and because of the individual mandate, presumably will participate in) Medicaid if their family income is under 138% of the poverty line. We begin by examining how the rate of eligi-



bility in the Kentucky population is associated with education. Using statistical techniques, we isolate the effect of education on eligibility from other factors such as race, gender, age, and marital status. Figure 1 presents this relationship. Overall, 29.3% of adults with a high school diploma are eligible to participate in Medicaid. We predict that obtaining a college degree would reduce that rate by 9.3 percentage points to 20%. Similarly by obtaining an Associate's

degree, the eligibility rate would fall by 6.2 percentage points to 23.1%.

*Obtaining a college degree reduces the rate of Medicaid eligible adults to 20% from 29%.*

\*This research was funded by the Council on Postsecondary Education (CPE) to study the relationship between education and outcomes such as income, employment levels, health, public assistance use, and crime.

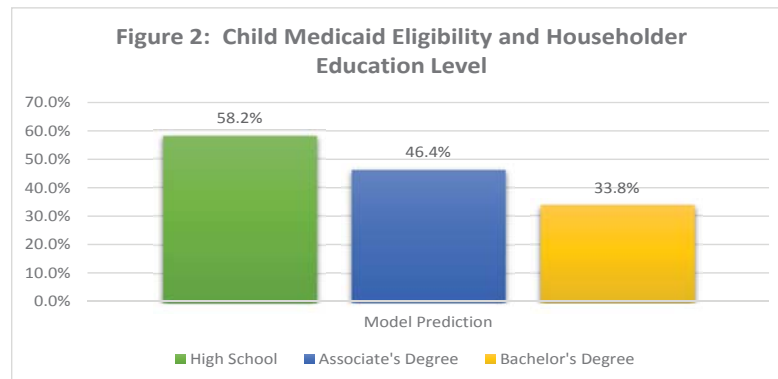
\*\*In 2013, for a household of four people, the poverty level was \$23,834, according to the U.S. Census Bureau.



*As the education level of head of household adults increases, the rate of eligibility for Medicaid of children in these households decreases.*

These predictions hold constant other aspects of individuals in Kentucky with a high school diploma, such as their gender, their family structure, and labor market conditions such as unemployment of where they live. In general, changes in education often lead to changes in some of these characteristics (for example family structure), and thus our results may be an understatement of what would happen were those individuals to obtain a college degree.

In Figure 2, we examine how child eligibility is impacted by the education level of the household in which the child lives. This focuses the discussion on education of adults. As with our adult model,



we isolate the impact of education from other factors such as the family size and the local labor market. Eligibility rates are, in general, higher for children since the income eligibility threshold is higher (at 200% of the poverty line). Our model predictions are quite similar though: higher education of the adults will lower the eligibility rate of their children. Overall, 58.2% of children living in households where the householder has a high school diploma

are eligible for participation in Medicaid. Our model predicts that if those heads of household were to obtain a college degree, the rate of participation would drop nearly in half by 24.4 percentage points to 17.1%. Similarly, if we move heads of household from high school graduates to Associate's degrees, the child Medicaid eligibility rate would fall by 11.8 percentage points to 46.4%.

Translating this into costs is difficult due to the changing cost structure from the expansion and the individual mandate. The Kaiser Foundation suggests that adult participants in the Medicaid program cost approximately \$5,000 per year, while child participants cost approximately \$2,900 per year. It is likely that these figures are an overstatement as we move from voluntary participation to the individual mandate. However, if we use these estimates and increase Associate's and Bachelor's degree levels by 1%, we speculate this would reduce total Medicaid expenditures in the state by \$27 million. If Kentucky were to achieve education rates comparable to the U.S., the savings could be as high as \$200 million.

*If Kentucky's education rates matched the U.S. average, the state could save up to \$200 million in annual Medicaid expenses.*

The relationship between household income and education, coupled with the new ACA individual mandate and the Medicaid expansion, means that improving educational attainment in Kentucky is crucially important to containing future Medicaid costs.