BACKGROUND

Being uninsured can have a serious impact on people’s health. People who are uninsured are more likely to receive a poorer quality of healthcare, less preventative care, and have a greater probability of death. Over time, the consequences of being uninsured are compounded, putting the uninsured population at a higher risk for poor health status. Access to healthcare is defined as “the timely use of personal health services to achieve the best health outcomes.” Components of access to healthcare include gaining access into the healthcare system, ability to access locations where health services can be received, and finding providers who can meet the needs of the patient.

There is strong scientific evidence that being uninsured leads to poor health outcomes for uninsured adults across a wide range of chronic and acute conditions. Several studies have found an association between being uninsured and a lower status of self-reported general health. Additionally, studies have found mental health benefits associated with becoming insured.

Ohio’s 2014 expansion of Medicaid under the Affordable Care Act was aimed at improving access to healthcare across the state by increasing access into the healthcare system. This study seeks to identify the counties that have seen the greatest declines in the rate of people who are uninsured and changes in self-reported physical and mental health status from before and after Medicaid expansion, 2013 – 2015.

METHODS

Insurance maps:

Health insurance coverage data for the state of Ohio was obtained from the Small Area Health Insurance Estimates (SAHIE) program for the years of 2013 and 2015. SAHIE uses the ACS definition of insured: Is this person currently covered by any type of health insurance or health coverage plan?

Health Outcomes maps:

Measurements of fair or poor health status, physically unhealthy days, and mentally unhealthy days come from the 2013 and 2015 Behavioral Risk Factor Surveillance System (BRFSS).

The primary care physicians rate is the ratio of the population to total primary care physicians multiplied by 100,000. Data comes from the 2014 American Medical Association’s Area Health Resource Files (AHRF).

GIS procedures:

Data was joined to an Ohio counties shapefile obtained from ESRI and displayed as choropleth maps. Two maps were created to present the change in the uninsured rate over time. Data were classified into 7 groups and classifications remain the same for both maps for ease of comparison.

New variables were created to calculate the changes in health outcomes from 2013 to 2015. Maps were plotted with diverging color schemes to represent positive or negative change.

RESULTS

The percentage of adults under the age of 65 who are uninsured declined in all 88 counties between 2013 and 2015. The most modest reduction (2.2%) was seen in Holmes county, which had the highest rate of uninsured adults in both 2013 and 2015. Holmes county’s rate of uninsured adults was 24.4% in 2013 and 22.2% in 2015. The greatest reduction was seen in Athens county (7.6%), which had an uninsured rate of 16.1% in 2013 and 8.5% in 2015. The state averaged a statistically significant 5.4% reduction across all counties.

The changes in the numbers of physically and mentally unhealthy days per month across the state from 2013 to 2015 are mixed. The average county saw a decrease of 0.1 physically unhealthy days per month and an increase of 0.1 mentally unhealthy days per month.

Self-rated overall health appears to be worst in the Southeast region of the state, where 18.23% - 21.86% of adults rated their overall health as either poor or fair. Several of the counties in this area have relatively low rates of primary care physicians per 100,000 people. This region of the state, in particular, appears to represent the area of greatest unmet healthcare needs and may stand to benefit from targeted public health and health system interventions.

The widespread decreases in the rate of uninsured adults in the states of Ohio does not appear to yet have yielded a significant impact on overall health. Data should continue to be analyzed in subsequent years in order to monitor health impacts.

DISCUSSION

Ohio’s 2014 expansion of Medicaid has definitively improved one pillar of access to healthcare across the state. While the results clearly show that many Ohioans have gained access into the healthcare system, further research on ability to access healthcare facilities and access to providers capable of meeting particular patients’ needs is needed in order to assess the overall state of access to healthcare in Ohio.

Further research should be conducted on the health and economic impacts of expansion of Medicaid in the state. Policymakers should consider the health and economic impacts before enacting legislation that would alter the insurance coverage landscape in the state. Roughly 700,000 people have gained health insurance since Ohio’s Medicaid expansion, so legislative changes may affect a significant portion of the state’s population.

This study identifies regions of the state where unmet need in healthcare exists. The south-east region of the state may stand to benefit from increased healthcare resources and public health interventions. Public health officials should consider demographic variables within these regions in order to identify populations of particular vulnerability.

Strengths of this study include the illustration of changes over time and use of large datasets. Limitations include the use of self-reported health measurements rather than clinical assessments and use of model-based insurance coverage estimates, which may be less reliable than other, less immediate, methods.

REFERENCES