

October 1, 2018

Maryland Health Enterprise Zones Linked to Reduced Hospitalizations and Costs

NET SAVINGS MUCH GREATER THAN COST OF HEALTH ENTERPRISE ZONE INITIATIVE, DESPITE JUMP IN ER VISITS

Maryland's Health Enterprise Zones, state-funded initiatives designed to improve health care outcomes and prevent unnecessary hospitalizations in underserved communities, were associated with large reductions in inpatient stays, according to a study by researchers at Johns Hopkins Bloomberg School of Public Health.

The study, published today in the October issue of *Health Affairs*, links the Health Enterprise Zones to a decline of more than 18,000 inpatient stays in the four years of the initiative, and an overall health care cost reduction of about \$93 million.

"We see a large cost saving here from a relatively small investment," says study lead author Darrell J. Gaskin, PhD, the William C. and Nancy F. Richardson Professor in Health Policy in the Department of Health Policy and Management and director of the Hopkins Center for Health Disparities Solutions at the Bloomberg School.

Maryland in 2013 designated five small areas of the state as Health Enterprise Zones: Annapolis/Morris Blum, Capitol Heights, Caroline and Dorchester counties, Greater Lexington Park and West Baltimore.

Within each, the state recruited primary care physicians and other health workers to improve health care access and promote healthier behaviors in communities with high rates of Medicaid use, lower than average life expectancy or other indicators of being disadvantaged. Each Zone's initiative was tailored to the specific features of its communities, but the overall goals were to improve health outcomes and reduce unnecessary hospitalizations.

Gaskin and colleagues analyzed state data on hospital inpatient stays and readmissions, as well as emergency room visits, for the years around the study period, 2013 - 2016. They compared trends in these measures for people in 16 zip codes covered by Health Enterprise Zones and in 94 zip codes that were not covered but met the criteria for the Zones. The analysis excluded visits related to childbirth, trauma or cancer, which were not targeted by the Zones initiative.

The researchers found that the rate of inpatient stays per 1,000 residents declined in both populations during the study period—but declined more in the population served by the Zones. The analysis linked the Zones to relative declines of 13.73 inpatient stays per 1,000 residents in 2013, 18.03 in 2014, 16.76 in 2015 and 17.47 in 2016. For the four-year study period, there were a total of 18,562 fewer inpatient stays than would otherwise have been expected. Relative declines were even greater for the chronic, often lifestyle-related conditions, such as diabetes, hypertension and chronic obstructive pulmonary disorder, that the Zones initiative was specifically meant to reduce.

Unexpectedly, the analysis also linked the Zones to a large increase in emergency room visits—32.40 per 1,000 in 2013, 41.01 in 2014, 38.78 in 2015 and 31.75 in 2016—implying a total of 40,488 extra visits during the study period.

“We think that many of these patients visiting emergency rooms normally would have been admitted to hospitals, but in the Zones, with their community-based resources, the hospitals may have been better able to send those patients home to rely on those community resources instead of admitting them,” Gaskin says.

Despite the increase in emergency room visits, the analysis suggests that the Zones brought a large net cost savings. The 40,488 extra emergency room visits cost insurers and patients an estimated \$59.9 million. The reduction of 18,562 inpatient stays saved an estimated \$168.4 million for a net savings of \$108.5 million, against the \$15.1 million cost of the Zones initiative during the same period.

“Policymakers should consider extending the Health Enterprise Zones to other eligible communities,” says Gaskin.

“The Maryland Health Enterprise Zone Initiative Reduced Hospital Cost And Utilization In Underserved Communities,” was written by Darrell J. Gaskin, Roza Vazin, Rachael McCleary, and Roland J. Thorpe Jr.

Funding for the research was provided by the Maryland Department of Health.

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Media contacts for the Johns Hopkins Bloomberg School of Public Health: Barbara Benham at 410-614-6029 or bbenham1@jhu.edu and Robin Scullin at 410-955-7619 or rsculli1@jhu.edu.