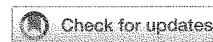


Impact of the Affordable Care Act on Colorectal Cancer Screening, Incidence, and Survival in Kentucky



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BACKGROUND: Kentucky ranks first in the US in cancer incidence and mortality. Compounded by high poverty levels and a high rate of medically uninsured, cancer rates are even worse in Appalachian Kentucky. Being one of the first states to adopt the Affordable Care Act (ACA) Medicaid expansion, insurance coverage markedly increased for Kentucky residents. The purpose of our study was to determine the impact of Medicaid expansion on colorectal cancer (CRC) screening, diagnosis, and survival in Kentucky.

STUDY DESIGN: The Kentucky Cabinet for Health and Family Services and the Kentucky Cancer Registry were queried for individuals (≥ 20 years old) undergoing CRC screening (per US Preventative Services Task Force) or diagnosed with primary invasive CRC from January 1, 2011 to December 31, 2016. Colorectal cancer screening rates, incidence, and survival were compared before (2011 to 2013) and after (2014 to 2016) ACA implementation.

RESULTS: Colorectal cancer screening was performed in 930,176 individuals, and 11,441 new CRCs were diagnosed from 2011 to 2016. Screening for CRC increased substantially for Medicaid patients after ACA implementation (+230%, $p < 0.001$), with a higher increase in screening among the Appalachian (+44%) compared with the non-Appalachian (+22%, $p < 0.01$) population. The incidence of CRC increased after ACA implementation in individuals with Medicaid coverage (+6.7%, $p < 0.001$). Additionally, the proportion of early stage CRC (stage I/II) increased by 9.3% for Appalachians ($p = 0.09$), while there was little change for non-Appalachians (-1.5%, $p = 0.60$). Colorectal cancer survival was improved after ACA implementation (hazard ratio 0.73, $p < 0.01$), particularly in the Appalachian population with Medicaid coverage.

CONCLUSIONS: Implementation of Medicaid expansion led to a significant increase in CRC screening, CRC diagnoses, and overall survival in CRC patients with Medicaid, with an even more profound impact in the Appalachian population. (*J Am Coll Surg* 2019;228:342–355. Published by Elsevier Inc. on behalf of the American College of Surgeons.)

CONCLUSIONS

The incidence and mortality of colorectal cancer in Kentucky are among the highest in the United States. Affordable Care Act Medicaid expansion has positively affected insurance coverage in this population, leading to improved CRC screening and improved short-term survival. Future long-term survival studies are needed, but the short-term benefits of the ACA expansion have bridged a gap in CRC disparities in Kentucky.