Breast and colorectal cancers are leading causes of death in older adults. Early detection greatly improves survival. Yet in 2010, over half of adults ≥65 were not up to date on preventive services, including cancer screening. To address this, Medicare expanded prevention benefits through the Affordable Care Act (ACA) by: (1) eliminating cost sharing for prevention services; (2) introducing the Annual Wellness Visit; and (3) providing bonus payments to PCPs in health care shortage areas. The causal effect of these policy changes on cancer detection and mortality is unknown.

We use a difference-in-differences (DID) design to estimate outcomes before and after 2011 for a Medicare-eligible population over age 65. We compare to the near elderly (i.e., age 59-64) who were not affected by the policy changes. The validity of this design relies on the arbitrariness of age 65 as the Medicare-eligibility threshold. We model outcomes using negative binomial regression, controlling for time trends, effect of aging, and county-level factors (e.g., health care supply).

Our sample included 291,666 tumors and 442,974 cancer deaths in people age 59-70 from 2008-2013. Medicare’s benefit expansion was associated with an increase in breast cancer detection (11.25/100k pop., p=0.002) driven by early-stage cancers (11.09/100k pop., p<0.001). There was no change in late-stage cancers or breast cancer mortality. There was no change in colorectal cancer detection, total or by stage. There was a small decrease in colorectal cancer deaths (-1.49/100k pop., p=0.026).

By encouraging and improving access to preventive services, Medicare’s prevention benefit expansion increased early-stage breast cancer detection and decreased colorectal cancer mortality.