WORKING PAPER
Executive Summary

DECEMBER 2008, WP# 2008-16

CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

DUAL-ELIGIBLE MEDICAID SPENDING: ARE WE ON THE FLAT OF THE CURVE?

BY MELISSA A. BOYLE, JOANNA N. LAHEY, AND MARGARET E. CZERVIONKE

Since the 1950s, the United States has experienced a more than five-fold increase in health care spending. At this rate, health care expenditures are expected to account for 38% of the nation's GDP by 2075 (Chernew 2003).[1] Many health economists attribute the increase in spending to beneficial technological advances in the health care sector (i.e. Cutler 2003, Finkelstein 2007, Fuchs 1996, and Newhouse 1992). At the same time, there is evidence that for some populations, including Medicare recipients, this spending is being allocated inefficiently and health outcomes do not improve with increased expenditure (Skinner et al. 2001, Skinner and Wennberg 1998, Skinner et al. 2006, Fisher et al. 2003a, Fisher et al. 2003b, Fuchs 2004, Wennberg et al. 2002, Baiker and Chandra 2004). This phenomenon has been referred to as "flat of the curve" medical spending, referring to the fact that additional dollars result in unchanged or "flat" health outcomes.[2]

This paper focuses on a subset of the Medicare population, those who are eligible for both Medicare and Medicaid, and examines the marginal benefit associated with additional Medicaid spending for these "dual eligibles". While the literature overwhelmingly demonstrates that Medicare recipients overall do not benefit from additional spending, the evidence is not as clear for the most vulnerable Medicare-eligibles – low-income elderly who are dually eligible for both Medicare and Medicaid. These individuals tend to have poorer health than the average Medicare recipient, have resulting higher than average medical costs, and are additionally less able to afford the cost-sharing required by Medicare (KCMU 2004, Komisar et al. 2005). It is therefore possible that they will respond differently to increases in public health care spending on their behalf. Evidence for younger Medicaid beneficiaries (i.e. pregnant women and children) is mixed and suggests that additional spending may indeed lead to improvements in health (Cohen and Cunningham 1995, Currie and Gruber 1996, and Currie et al. 1995). It is consequently plausible that for elderly with very low incomes, additional Medicaid spending will lead to changes in services use and accompanying health improvements. We therefore examine whether or not additional Medicaid spending is on the "flat of the curve" for dual-eligibles.

---

[1] See full paper for full references.

[2] The "flat of the curve" theory suggests that initially there is a large marginal benefit of medical spending on health outcomes, but as spending increases the marginal benefit decreases (Fuchs 2004). In this theory, there exists an ideal spending rate for which the marginal dollar of medical spending results in one dollar's worth of improved health outcomes. Beyond this spending rate, the increases in spending are no longer efficient in terms of providing improved health conditions. Eventually, additional spending does not affect health outcomes at all. When this occurs, medical spending has reached the "flat of the curve," and increased spending is no longer effective.

We utilize data from the *Medicare Current Beneficiary Survey* (MCBS) Cost and Use files for the years 2000-2004. The MCBS is a rotating panel of Medicare beneficiaries, with an over-sampling of older individuals. These data combine a survey component with Medicare claims records, resulting in a dataset containing demographics for each survey participant, as well as detailed information about the individual's health status, utilization of medical care and medical spending. We compare a treatment group of elderly dual-eligibles to a control group comprised of other low-income Medicare recipients just above the means test cutoff for Medicaid benefits. Using various statistical techniques, we ensure that the treatment and control groups are comparable along observable dimensions. We utilize a methodology known as "difference-in-differences" regression, which allows us to compare elderly Medicaid recipients to our control group of "near-eligibles" in states with above- and below-average levels of Medicaid spending per dual-enrollee. Comparing near-eligibles in high- and low-spending states captures non-Medicaid related differences in the low-income elderly population across these locales. By essentially differencing the "eligible" and "near-eligible" comparisons, we isolate the impact of higher Medicaid spending on elderly dual eligibles.

Our results indicate that increased spending leads to increased utilization according to some measures. We find that while higher spending has no significant impact on whether an individual has any inpatient stays or doctor visits, it does have a small (3.24%) effect on the number of doctor visits, conditional on having any visits at all. There is also a positive (4%) and significant impact of higher per-eligible Medicaid spending on dual-eligibles' prescription utilization. Finally, states with higher Medicaid spending per dual eligible experience higher utilization rates of home health care services (13%) for this population.

However, higher spending does not lead to health improvements for the average dual-eligible individual. We find a small and insignificant impact of higher spending on self-reported health, limitations on activities of daily living, and mortality. Taken together, our results for utilization and health outcomes suggest that increased spending leads to higher utilization of certain health services (namely home health care and prescriptions) but does not result in increased health for the dual-eligible population. We therefore conclude that medical spending for those that are "dual-eligible" for Medicare and Medicaid is on or near the "flat-of-the-curve."

The prescription results provide suggestive evidence regarding the effectiveness of the low-income subsidy for Medicare Part D, administered by the Social Security Administration, suggesting that utilization will increase but health may not improve. The remaining results are in line with other findings for the Medicare community as a whole and differ from results that find increases in health outcomes for pregnant women and children with increased Medicaid spending, suggesting that for most ambulatory services, additional spending does not impact service use or health outcomes for low-income elderly.

 The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement Research Consortium (RRC). The findings and conclusions expressed are solely those of the authors and do not represent the views of SSA, any agency of the Federal Government, College of the Holy Cross, Texas A&M University, or Boston College.

CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

Hovey House, 140 Commonwealth Avenue, Chestnut Hill, MA 02467-3808

phone 617.552.1762 fax 617.552.0191 crr@bc.edu www.bc.edu/crr