

FINDINGS AND RECOMMENDATIONS RELATING TO THE AGE-SEX DISTRIBUTION OF SPENDING

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Finding 1: The age distribution of spending has changed over time in ways that currently are not accounted for in the Trustees Report. Accounting for changes in the growth of spending by age over time has sizeable impacts on the relative contribution of demographics to spending projections, but these differences are small compared with overall Medicare spending.

The panel considered three sources of evidence on this topic: published literature, panelist calculations, and OACT’s calculations. All sources suggest that over a period of decades, spending is growing most rapidly for older age groups (85+) compared with younger ages (65-69). The literature suggests that, with changes in the age distribution of the population and changes in mortality rates, these differences could lead to overestimates of spending on younger age groups (as end of life spending is pushed to older ages), and underestimates of spending on older groups for whom we now provide increasing post-acute services.

In response to questions regarding the source of changes in the age distribution of spending over time, OACT prepared a decomposition of the causes of rising relative spending at older ages.

Finding 2: Medicare spending has grown much more rapidly at older ages (85+) compared with younger groups (65-69) over recent decades for two reasons: increased use of post-acute care like skilled nursing facility care, and changes in expected time to death as longevity increases and pushes expensive end of life spending to older ages.

As seen in Table 1, about 2/3 of rising relative spending relates to increased use of skilled nursing and hospice care, while 1/3 of the increase can be explained by changing time to death, since spending in the last year of life is over five times as high compared with average Medicare spending.

Table 1
Ratio of spending per enrollee for 85+ years age cohort vs 65-69 years age cohort

	1991	2012	% growth 1991-2012
Ratio of 85+ to 65-69 PMPM spending, 2014\$	2.13	2.60	23
Increase explained by TTD			7
Increase explained by SNF and hospice			19
Residual			-3

Source: calculations by OACT staff using Medicare claims.

The rise in SNF since 1991 may be expected to level off as new payment models give incentives to constrain care in expensive post-acute settings (panel presentation by Mark Miller of MedPAC), and with the proliferation of payment models that encourage bundling of inpatient and post-acute services (cites on APMs). Current Trustee Reports control for growing SNF use in the short-term because short-term projections allow different rates of growth by type of service. Over the long run, there is little evidence to suggest a continuation of growth in SNF at the rates seen since 1991.

Still, about one third of growing relative spending at older ages relates to changes in survival, which can be captured with changing time to death. Increased survival is a trend that is expected to continue, so the panel spent time considering whether time to death should be reflected in projections. One argument against pursuing the added complexity of incorporating time to death into projections is that (1) demographic contributions are small compared with total Medicare spending and (2) appropriately reflecting time to death does not affect the key projections in the report, but instead reflects a less crucial piece of information, the relative contribution of demographics.

Finding 3: Incorporating Time to Death into long range projections would convey a more accurate sense of the contribution of demographic trends (and improvements in both health and survival), into projections, although the impact of demographic trends relative to total spending in Medicare is small.

Since demographic trends are a relatively fixed feature with respect to Medicare's financial status and policies, it is important to document how much of the trends we see are related to demographic trends. OACT staff have worked extensively on methods to incorporate time to death into projections. They presented this material at the December 19-20, 2016 panel meeting. The annual average historical contribution of demographic change to growth in Medicare spending per member per month (1991-2008?) is -0.30% with current TR methods and 0.16% when adjusted for time to death (2/1 memo from OACT staff). While these are small in absolute terms, controlling for time to death actually changes the direction of the effect of demographics (from increasing spending to decreasing spending). Also, for some services, like hospice and inpatient care, adjusting for time to death further lowers the estimated annual average contribution of demographic change to growth in Medicare per member per month spending.

Even if its impact is small, the act of accurately reflecting the contribution of demographics could be useful if only to demonstrate the small magnitude of demographic effects to readers of the Trustees Report, since characterizations of Medicare in public sources often do not make clear the small role demographics have had on historical Medicare spending. Furthermore, adjustments for time to death are a relatively straightforward way to account for trends in the health of the population if mortality improvements are correlated with morbidity improvements. For these reasons, the panel recommends that OACT incorporate time to death into projections.

Recommendation: OACT should seek to incorporate time to death in its projections to account for the impact of rising longevity and changes in health on the age-sex distribution of spending over time.

After considering OACT's method with 6 TTD categories (0,1,2,3,4,5+ years to death), panel members asked to see examples using a simple dichotomous 0, 1+ category distinction. End of life spending occurs primarily in the year of death, and the two category approach does not require simulating the distribution across time to death categories. The two category measure has the advantage of being more transparent to readers of the TR, which panelists support. However, the six category version would also be an improvement over current methods.