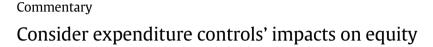
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## EClinicalMedicine

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Wallis et al. used twelve years of Medicare data to examine changes in spending between 2007 and 2018 among groups of beneficiaries defined by expenditure strata [1]. The authors find positive but modest increases in spending within all beneficiary groups, with the highest growth rates among beneficiaries with expenditures below the median, rather than among those with the highest expenditures (99th percentile and above), as had been predicted. While per capita expenditures increased only 0.4% per annum, the authors note that current spending is already substantial, [2] and the Medicare-eligible population continues to grow, suggesting that even small increases could have significant impact.

Wallis et al. propose three approaches to control healthcare expenditures: 1) target growth in spending among those with expenditures at the 99th percentile or higher (who account for 14.9% of all Medicare Parts A and B spending); 2) target growth among those with expenditures below the median (who account for only 4.3% of total spending, but are the largest group and have the fastest growth in spending); or 3) address spending across the entire Medicare population. Related potential policies or interventions should be evaluated not only by their impact on reining in Medicare expenditures, but also by their impact on equity. Equity criteria could be related to health status, race and ethnicity, urbanicity, and other socioeconomic factors including, but not limited to, income, education, sexual orientation, and gender identity.

Negative health effects of expenditure controls should be limited, and to the extent that beneficiary health is affected, differential impact across groups should be minimized. Wallis et al.'s Table 1 shows that the beneficiaries spending below the median have less reported disease; a more nuanced analysis could clarify whether the findings are affected by limited access to care and missed diagnoses [1]. The authors also find that inpatient care is an important driver of expenditures in the highest stratum, likely because of the high prevalence of chronic conditions associated with inpatient care, end-of-life

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care, and complex care for multi-comorbid patients. Given known disparities in chronic condition prevalence, it is unsurprising that the highest expenditure stratum contains a higher proportion of Black and Hispanic individuals than lower expenditure strata [3]. In contrast, while rural older adults tend to be less healthy than urban counterparts, [4] the highest expenditure stratum does not have the largest proportion of rural Medicare enrollees. The lack of rural Medicare enrollees in the highest expenditure stratum may reflect poor access to healthcare.

The results in Table 1 suggest that a change targeting the highest expenditure stratum would have the largest impact on the least healthy population and an inordinate impact on Black and Hispanic individuals. If the approach streamlined care or provided higher quality and less costly care (e.g., guided by a patient navigator, [5] or improved end-of-life care choices), equity could improve. However, policies using cost sharing to force patient choices could exaggerate existing inequities. Policies or interventions targeting those with expenditures below the median could inordinately impact the rural population and exacerbate inequities. Policies not targeting any expenditure stratum could create additional rural/urban inequities as the rural population already has limited access to costly (but medically indicated) care. Broadly speaking, any policy or intervention that targets reducing costs by controlling access to care could exacerbate within group or population-level inequities. For example, it has been suggested that a Medicare policy penalizing hospitals for readmissions could contribute to inequity [6].

The provision of care has evolved since 2018 (the latest year in Wallis et al.'s analysis), in ways that could impact how policies aimed at different expenditure stratum affect expenditure growth and equity. For example, telehealth is unlikely to impact the most resource intense care (i.e., inpatient) but will impact the increasingly utilized outpatient care that accounts for a large portion of care used by those with lower expenditures. During the period of these authors' data, telehealth, which is associated with equity issues, [7] was not nearly as pervasive as it is today [8]. Additionally, the authors did not include Medicare Part D. Uptake of prescription drug coverage through Medicare Part D has been found associated with individuals demographics [9]. Additional analyses including these data could reveal opportunities to control expenditure growth without exacerbating inequities.

Wallis et al.'s findings and recommendations for target groups for policy and intervention are important contributions. Evaluation of policy without equity considerations, however, could lead to

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unintended consequences and increasingly inequitable care and outcomes. Equity considerations should go beyond what is most readily available in Medicare administrative data to focus on all elements of diversity in our society.

## **Declaration of Competing Interest**

The authors declare no conflicts of interest.

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