Effects of Increasing Pharmaceutical Access on Elderly People's Functional Outcomes and Implications for Caregivers

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One in four elderly Americans faces some limitation in activities of daily living (ADLs), such as bathing, eating, or walking across a room. Such functional limitations can reduce elderly individuals' labor force participation, worsen their health outcomes, and diminish their ability to live independently. Those with functional limitations are more likely to need in-home and nursing home care, for which Medicaid is the largest payer (Brown & Finkelstein, 2011). Moreover, seniors with poor functional outcomes often rely on informal (unpaid) caregiving from spouses and relatives, which decreases caregivers' labor force participation (Kydland & Pretnar, 2019). The proposed study will assess the impact of pharmaceutical access on elderly individuals' functional outcomes by exploiting increased prescription drug availability generated by the introduction of Medicare Part D in 2006. I will use nationally representative individual-level survey data from the Health and Retirement Study (HRS) and estimate difference-in-differences (DD) models exploiting variation in prescription drug coverage across age groups and over time. Preliminary results suggest that Part D reduced the probability of having any ADL limitations by 10 percent and the number of ADL limitations by 13 percent.

I will also use data from the American Time Use Survey to evaluate the implications of elderly people's functional outcomes for non-elderly people's informal caregiving obligations. Leveraging the introduction of Part D, I will compare post-2006 changes in time spent on elderly caregiving among non-elderly individuals who have at least one person above age 65 in their household versus non-elderly individuals in households with all members below 65. My preliminary analysis suggests that Part D reduced the amount of time that non-elderly spouses and children spend on providing care to older individuals by about 0.5 hours per week. In further analysis, I will assess how caregivers allocated this extra time between labor and leisure.

These results have important implications for federal and state policies that intend to expand pharmaceutical access through lower drug prices and expanding health insurance. My early findings suggest that increasing pharmaceutical access for the elderly not only improves their own functional outcomes but also has positive spillover effects for non-elderly caregivers. In future work, I will use sub-state geographic identifiers in the restricted HRS and exploit geographic variation in the impact of Part D (Dunn & Shapiro, 2019) to better identify the policy's impact on functional outcomes and caregiving needs. I seek funding for summer support and research assistance to conduct additional analysis and prepare an NIA proposal.

References

Brown, J. R., & Finkelstein, A. N. (2011). Insuring Long-Term Care in the United States. *Journal of Economic Perspectives*, *25*(4), 119–142.

Dunn, A., & Shapiro, A. H. (2019). Does Medicare Part D Save Lives? *American Journal of Health Economics*, *5*(1), 126–164.

Kydland, F., & Pretnar, N. (2019). *The Costs and Benefits of Caring: Aggregate Burdens of an Aging Population* (NBER Working Paper Series No. 25498). https://doi.org/10.3998/mpub.4772634.9

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