

Supplementary Online Content

Sonik RA, Parish SL, Mitra M. Association of health status with receipt of Supplemental Security Income among individuals with severe disabilities and very low income and assets [published online April 1, 2019]. *JAMA Intern Med*. doi:10.1001/jamainternmed.2018.8609

eAppendix.

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Data

We utilized data from the 2008 panel of the Survey of Income and Program Participation, a longitudinal nationally representative survey of the non-institutionalized population of the United States conducted by the US Census Bureau. Respondents were interviewed over 16 waves. Due to attrition, many respondents did not participate in the final waves of the survey; we therefore only utilized data from the first 12 waves.

A set of core questions are asked during each wave and focus on income, demographics, and participation in public benefit programs (including Supplemental Security Income, SSI). In addition, a smaller set of questions called topical modules were asked during most waves. The questions in these topical modules varied from wave to wave. In wave six, a topical module included detailed questions about disability status (a lengthy series of questions about functional limitations and activities of daily living, which the US Census Bureau summarized into an additional single disability variable) and included a self-reported measure of health status (respondents could identify their health status as excellent, very good, good, fair, or poor).

Sample

We identified three samples, one for our primary analysis and two for qualitative/graphical comparison purposes. The primary sample was identified as described in the main text of the paper because health status was only recorded in wave 6. We were therefore limited to one time point of outcome data. However, even at this single time point, different individuals were at different stages in the process of pre- and post-SSI receipt. For example, some had already started receiving SSI by the time wave 6 occurred, whereas others would not start receiving SSI until several waves later. As described in the **Table** and the main text, we leveraged this fact—along with the SSI receipt data that was present in each wave—to identify 11 groups of people who, at the time of the wave 6 data collection, ranged from being two years before their initial SSI receipt to being a year and four months after their initial receipt.

For qualitative/graphical comparison purposes, we also identified two additional groups. The first group, identified as “long-term SSI recipients” in the **Figure**, was comprised of individuals who reported receiving SSI in each of waves 1 through 12 ($n = 593$). The second group, identified as “eligible non-recipients” in the **Figure**, was comprised of individuals who reported never receiving SSI in any of waves 1-12 but who met categorical, income, and asset requirements to qualify ($n = 3,856$). Categorical eligibility was determined, as previously,⁴ based on self-reported disability status and age. Income- and asset-based eligibility was determined, as in prior studies,⁵ using the detailed income and asset data available in the Survey of Income and Program Participation.

Analysis

Identifying our primary analytic sample resulted in eleven data points that could be mapped onto a timeline, with the seventh point on this timeline constituting a change from pre- to post-SSI receipt. These data were amenable to interrupted time series (ITS) analytic techniques, as described in the main text of the paper, to assess associations between the “interruption” of going from pre- to post-SSI receipt and patterns of health status. However, it is important to note that our approach is an atypical context in which to apply these techniques, given that all of the outcome data were actually collected at one time point. Our ITS model therefore is not modeling an interruption as commonly conceived, as the experience of the interruption is not actually captured in the data for any given individual in the study.

Stata (version 15.0) and its ITSA package were used to conduct the ITS analysis. The ITSA package uses Newey-West standard errors to account for autocorrelation and heteroskedasticity; it uses t statistics to assess the statistical significance of coefficients, using a 2-sided test.

Ethical Review

The Institutional Review Board of Brandeis University determined that the present study was exempt from review.