The need for long-term services and supports (LTSS), such as home care, nursing home care, and other residential care, creates financial hardship for many older Americans. Based on microsimulation modeling, we estimate that 15% of older adults who survive to age 65 have household income that falls below the federal poverty level for at least one year. This estimate increases to 69% when we use a broader measure of economic hardship that subtracts from income out-of-pocket spending on health care and LTSS. Steep health care and LTSS costs threaten financial security for older Americans across the income distribution, including those who might otherwise be well-prepared for retirement. About three in ten older adults in the top quintile of lifetime earnings will experience economic hardship for at least three years after taking into account health care and LTSS spending. The vast majority of older people who receive extensive paid LTSS will experience economic hardship for multiple years.

Background

Even those older adults who enter retirement with substantial resources may experience adverse shocks that undermine their financial security. Widowhood can result in the loss of spousal income from Social Security and employer pensions. Medical episodes and chronic health conditions are more common at older ages and can result in large medical bills, while disability onset can require expensive long-term services and supports (LTSS).¹

LTSS episodes often lead to economic hardship and increase the risk of falling into poverty because insurance coverage for LTSS expenses is usually incomplete. Medicare does not cover the cost of LTSS, and relatively few older adults are covered by private long-term care insurance (LTCI). Because paid LTSS is costly, older adults who need help with everyday activities typically rely on unpaid family caregivers. But when unpaid caregivers are unavailable or LTSS needs exceed what family and friends can provide, older adults with disabilities must turn to paid helpers, either at home or in other residential settings, such as assisted living or nursing homes. They must generally pay for this care out-of-pocket, and some may deplete their savings and enroll in Medicaid if these costs exceed their income. More than one-half of older adults,

¹ LTSS includes a range of services and supports individuals may need to meet their health or personal needs over an extended period. Most LTSS is not medical care, but rather assistance with the basic personal tasks of everyday life, such as bathing, dressing, toileting and eating, sometimes called “Activities of Daily Living” (ADLs) (Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963).
regardless of their lifetime earnings, are estimated to experience serious LTSS needs and use some paid LTSS after turning 65 (Johnson et al. 2020). More than one-third (39%) will receive nursing home care.

Previous research has shown that health and disability shocks, particularly the onset of cognitive impairment and nursing home care, often lead to wealth declines at older ages, although the size of the impact remains unclear (Coile and Milligan 2009; De Nardi, French, and Jones 2015; Johnson, Mermin, and Uccello 2006). Willink et al. (2019) found that poor health and disability were more likely to lead to Medicaid enrollment. However, Poterba, Venti, and Wise (2018) conclude that although health declines and the loss of a spouse raise the likelihood of having limited wealth at death, the financial impact of those shocks is modest. They find that nearly two-thirds of older adults with less than $50,000 in net worth at death also had less than $50,000 at age 65.

A common measure of economic hardship is lacking enough household income to meet the federal poverty threshold (referred to hereafter as the federal poverty level or FPL). The FPL, designed to measure the minimum expenditure needed to get by, increases with household size, is lower for households headed by adults age 65 or older, and adjusts each year with the change in the consumer price index. In 2019, the FPL was $12,261 for a single adult age 65 or older and $15,453 for an older couple (U.S. Census Bureau 2020). By comparison, the average annual Social Security benefit for a retired worker in 2019 was about $18,000 (SSA, 2020).

One shortcoming of the FPL as a standard of economic adequacy, especially at older ages, is that it does not fully account for out-of-pocket spending needs for health care and LTSS (Blank and Greenberg 2008; Citro and Michael 1995). The U.S. Census Bureau now computes a supplemental poverty measure that adjusts for this problem (Fox 2019). Another approach to dealing with the problem is to subtract out-of-pocket spending on health care and LTSS from income and compare the remaining income to the FPL.

**Methods**

We assess the financial security of older adults by simulating income, wealth, and spending on health care and LTSS using the Urban Institute’s Dynamic Simulation of Income Model 4 (DYNASIM4). Our sample consists of adults born between 1941 and 1974 who survive to age 65. The analysis measures the risk of experiencing economic hardship after age 65 and shows how that risk varies with LTSS use (nursing home care and other paid LTSS), and lifetime earnings quintile. We define economic hardship as having household income minus out-of-pocket spending on health care and LTSS that falls below 100% of the FPL. Income includes Social Security and employer-sponsored pension benefits, other government cash benefits, any employment income, interest, dividends, and withdrawals from retirement accounts. Our out-of-pocket spending measure includes premiums for Medicare and other health insurance (including Medigap), Medicare copays and deductibles, and spending on paid home care, nursing
home care, other residential care, and medical services and equipment not covered by Medicare or other insurance.

DYNASIM4 starts with a nationally representative sample of the US population from the 2004 and 2008 panels of the Survey of Income and Program Participation. It “ages” the population year-by-year, simulating demographic and economic events using transition probabilities and rule-based algorithms. The model’s aging rules are based on rich longitudinal data from multiple household surveys, and the health and mortality projections incorporate socioeconomic differences, including those defined by education, lifetime earnings, marital status, and race and Hispanic origin. DYNASIM4 projections reflect compositional changes in the population over the next seven decades. Many outcomes are calibrated to the intermediate assumptions of the 2019 Social Security trustees report (Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds 2019), typically based on age and sex. The report and the projections do not take into account any effects from the 2020 coronavirus pandemic.

Matching Preretirement Income Levels

Although some researchers have focused on whether older adults can live as well in retirement as they did when they were working (Munnell, Hou, and Sanzenbacher 2018), the ability to maintain preretirement living standards does not always measure economic hardship. Some retirees who had limited financial resources throughout their lives may struggle financially in old-age, even if they can match their preretirement consumption levels. And some retirees with substantial financial resources throughout their lives may live quite well in retirement, even if they cannot match their preretirement levels.

Projections of LTSS utilization are based on equations of different types of paid care--home care, nursing home, and residential care--that are estimated jointly and depend on disability severity, other personal and family characteristics, and relative prices. Prices for paid care in DYNASIM4 are based on the state-specific median for each service type (Genworth 2019), with small adjustments based on income, LTCI coverage, and disability severity.

We show how economic hardship varies with the duration of paid LTSS. These paid services include those financed by insurance, including Medicaid, and services paid out-of-pocket. We consider only paid LTSS received by adults with significant LTSS need, who require help with two or more ADLs or have severe cognitive impairment; this definition is similar to the eligibility requirement for benefits under tax-qualified LTCI policies as specified in the Health Insurance Portability and Accountability Act of 1996. Our care measure reflects LTSS receipt for only a given individual, not the experience of his or her spouse, even though spousal LTSS receipt can also lead to economic hardship.

We also report the prevalence of economic hardship for each fifth of the lifetime earnings distribution. Lifetime earnings, which indicate one’s ability to amass wealth to fund retirement and health and LTSS needs, are measured by summing inflation-adjusted earnings over a worker’s career up to age 65. During years in which a worker
is married, we incorporate the average of each spouse’s earnings into the measure. For people who survived to age 65 and reached that age between 2018 and 2022, the earnings cutoff is $1.48 million (in 2020 inflation-adjusted dollars) for the bottom quintile, $2.44 million for the second quintile, $3.43 million for the third quintile, and $4.75 million for the fourth quintile. (The fifth quintile includes those with lifetime income that exceeds $4.75 million.) Dividing these figures by 40, the number of years in a typical career, we estimate that cutoffs for average annual lifetime earnings are $37,100 for the bottom quintile, $61,100 for the second quintile, $85,690 for the middle quintile, and $118,830 for the fourth quintile.

Results

Before accounting for the financial burden of health care and paid LTSS, we find that economic hardship is relatively rare at older ages, affecting only 15% of adults for at least one year after age 65, 10% for at least three years, and 9% for at least five years (Figure 1). Estimated economic hardship rates are much higher when our measure accounts for health care and LTSS spending. Family income minus health care and LTSS spending falls below the FPL for at least one year after age 65 for 69% of adults who survive to that age. For many older adults, health care costs that consume much of their family income persist for many years. When health care and LTSS spending is subtracted from family income, net income falls below the FPL for three or more years for about half (53%) of older adults and for five or more years for about four in ten (42%).

**FIGURE 1. Percentage of Adults Experiencing Economic Hardship After They Reach Age 65, Before and After Accounting for Health Care and LTSS Spending**

<table>
<thead>
<tr>
<th></th>
<th>At least 1 yr</th>
<th>At least 3 yrs</th>
<th>At least 5 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income less than 100% of FPL</td>
<td>15%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Income less than 100% of FPL after accounting for health care and LTSS spending</td>
<td>69%</td>
<td>53%</td>
<td>42%</td>
</tr>
</tbody>
</table>

**NOTE:** Estimates are for adults born between 1941 and 1974 who survive to age 65.
**Risk of Economic Hardship by Lifetime Earnings**

Not surprisingly, the risk of poverty at older ages is much more common for those with limited lifetime earnings. Figure 2 shows the percentage of adults experiencing economic hardship for at least three years before and after accounting for health care and LTSS spending by lifetime earnings quintile. When we do not account for out-of-pocket spending on health care and LTSS, we estimate that 41% of older adults in the bottom lifetime earnings quintile (with annual earnings less than $37,100 in 2020) have family income below the FPL for at least 3 years, compared with only 2% of those in the middle quintile (with annual earnings between $61,000 and $85,690) and less than 1% of those in the top quintile (with annual earnings exceeding $118,830).

The estimated risk of economic hardship is much higher across the lifetime earnings distribution after we take health care and LTSS spending into account. The share of the bottom fifth of lifetime earners projected to experience economic hardship for at least three years after age 65 increases from 41% to 73% after out-of-pocket health care and LTSS spending are removed from income. Accounting for health care and LTSS spending, we estimate that more than one-half (55%) of people in the middle earnings quintile and nearly one-third (29%) of people in the top quintile will experience hardship for at least three years.

**FIGURE 2. Percentage of Adults Experiencing Economic Hardship for at Least 3 Years After They Reach Age 65 Before and After Accounting for Health Care and LTSS Spending, by Lifetime Earnings Quintile**

<table>
<thead>
<tr>
<th>Lifetime Earnings Quintile</th>
<th>Before Accounting</th>
<th>After Accounting for Health Care and LTSS Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom</td>
<td>41%</td>
<td>73%</td>
</tr>
<tr>
<td>Second</td>
<td>9%</td>
<td>67%</td>
</tr>
<tr>
<td>Third</td>
<td>2%</td>
<td>55%</td>
</tr>
<tr>
<td>Fourth</td>
<td>1%</td>
<td>40%</td>
</tr>
<tr>
<td>Top</td>
<td>0.30%</td>
<td>29%</td>
</tr>
</tbody>
</table>

**NOTE:** Estimates are for adults born between 1941 and 1974 who survive to age 65.

**Risk of Economic Hardship by Duration of Paid LTSS Spending**

The risk of experiencing economic hardship that accounts for the financial burdens posed by health care and paid LTSS is estimated to be especially high for older adults who receive extensive paid LTSS. For those in the bottom lifetime earnings quintile, the likelihood of experiencing economic hardship increases from 66% for those who do not
receive any paid LTSS to 78% for those who receive paid LTSS for five or more years (Figure 3).

For adults in the top earnings quintile, 85% of those who receive paid LTSS for five or more years experience economic hardship for at least three years after age 65, compared with only 12% of those who do not receive any paid LTSS. Among people who receive five or more years of paid LTSS, the likelihood of experiencing economic hardship for at least three years after age 65 is remarkably similar across the top four earnings quintiles, ranging from 85% to 88%. Individuals with relatively high lifetime earnings may have enough resources to cover LTSS expenses for short durations, but even they are at substantial risk for economic hardship if they require extended LTSS. The risk of economic hardship is somewhat lower for adults in the bottom lifetime earnings quintile who receive extensive paid LTSS, because many of them qualify immediately for Medicaid.

**FIGURE 3. Percentage of Adults Experiencing Economic Hardship (accounting for health care and LTSS spending) for at Least 3 Years After They Reach Age 65, by Duration of Paid LTSS Use and Lifetime Earnings Quintile**

NOTE: Estimates are for adults born between 1941 and 1974 who survive to age 65.

**Conclusion**

Many older adults are at risk of facing economic hardship, especially if they receive extensive paid LTSS. When out-of-pocket spending on health care and LTSS is factored in, we estimate that about seven in ten adults who survive to age 65 will experience economic hardship for at least one year after that age and about one-half will experience hardship for at least three years. Rates of economic increase dramatically when people receive paid LTSS, especially for an extended period, even if they have substantial financial resources. These results highlight the need for better preparation for LTSS expenses and other unexpected health care needs by both individuals and policymakers, especially as the population ages.
References

http://www.brookings.edu/~/media/Files/rc/papers/2008/12_poverty_measurement_blank%20/12_poverty_measurement_blank.pdf.


https://aspe.hhs.gov/basic-report/most-older-adults-are-likely-need-and-use-long-term-services-and-supports-issue-brief

https://www.urban.org/sites/default/files/publication/42971/411265-When-the-Nest-Egg-Cracks.PDF.


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The Risk and Costs of Severe Cognitive Impairment at Older Ages: Literature Review and Projection Analyses

To be posted March 2021 at https://aspe.hhs.gov/bhdap.
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To be posted March 2021 at https://aspe.hhs.gov/bhdap.

Projections of Risk of Needing Long-Term Services and Supports at Ages 65 and Older
To be posted March 2021 at https://aspe.hhs.gov/bhdap.

The Risk and Costs of Severe Cognitive Impairment at Older Ages: Key Findings from our Literature Review and Projection Analyses Research Brief
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