



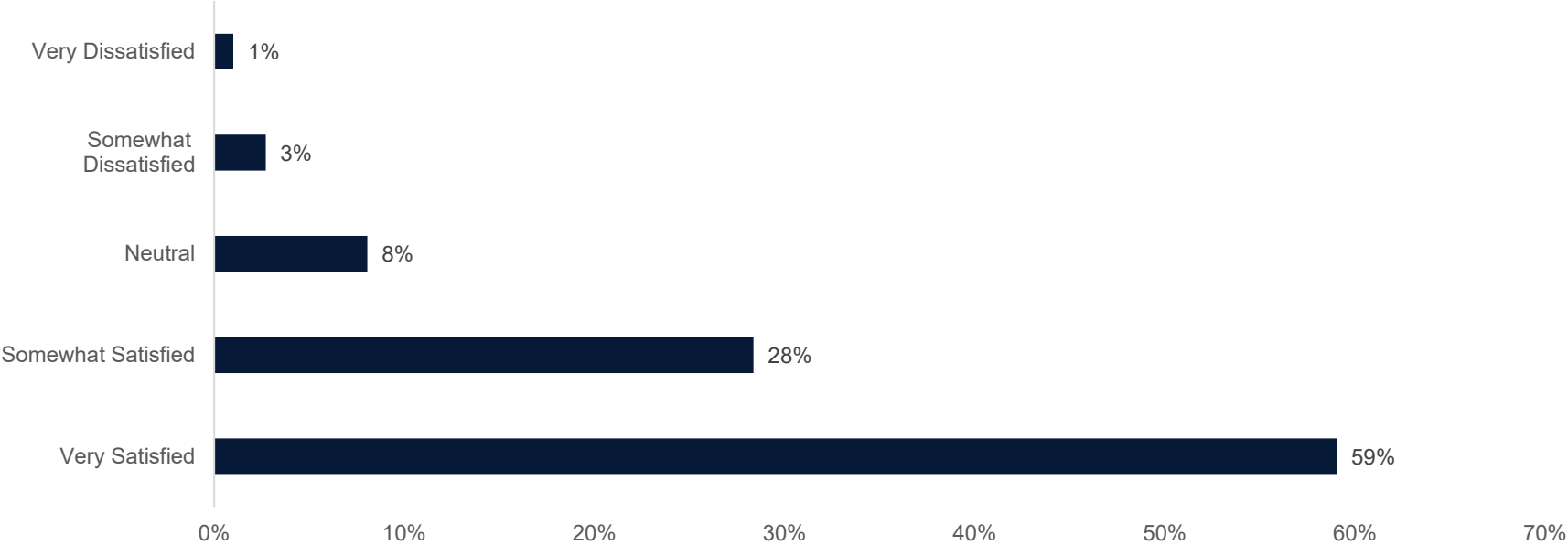
T.RowePrice

Navigating Health Care Costs in Retirement

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Some Good News...

Figure 1: Satisfaction with Health Care Among Medicare Recipients



Source: Author's calculations from Health and Retirement Study (HRS), 2022.

Q: Thinking about the quality, cost, and convenience of your health care, how satisfied are you overall?

What do we know?

Empirical Trends and Distributional Analysis

- Expenses double between ages 70 and 90 (DeNardi et. al., 2016)
- Top 10% of all spenders account for more than 50% of all medical spending each year (DeNardi et. al., 2016)
- Spending risk increases at the end-of-life. 5% spent above \$62,040 in the last year of life (Fahle, McGarry & Skinner, 2016)

Modeling Out-of-Pocket Expenses

- Out-of-pocket expenses well described by a combination of an AR(1) process and a white noise shock (Feenberg & Skinner, 1994; French & Jones 2004; DeNardi et. al. 2025)

Cumulative Healthcare Costs in Retirement

- On average a household at 65 will spend \$272,000 on medical care of which \$59,000 will be out-of-pocket. At 90th percentile these move up to \$563,000 and \$121,000 respectively (Arapakis et. al. 2021) .
- To have a 90% chance of covering their health insurance premiums and out-of-pocket expenses a 65-year- old household with Medigap needs \$351,000 (Spiegel & Fronstin, 2024).

Data

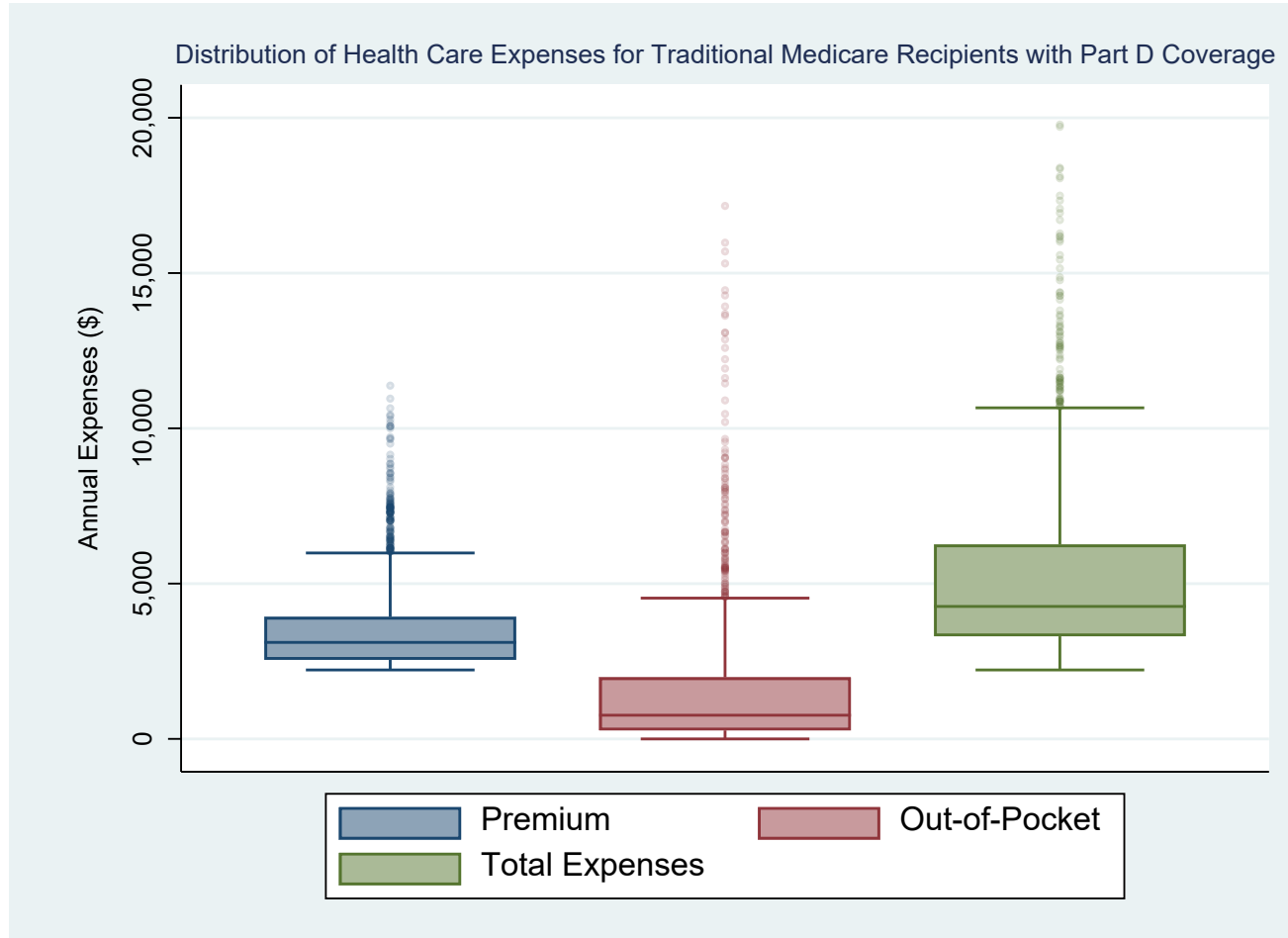
- Health and Retirement Study (HRS)
- Medicare recipients (65+)
- Not covered by Medicaid or military plans such as TRICARE or CHAMPVA
- Core sample – HRS 2020 (n=6,226)
- Exit Sample (last year of life) – HRS 2014 – 2018, total health care expenses>0 (n=1,461)
- Health insurance premiums self-reported except Part B (Medicare published rates)
- All dollars adjusted to 2024 using medical inflation adjustments (a component of CPI-U)

Components of Health Care Costs

Core – Hospital stays, nursing home stays, doctor visits, dentist visits, outpatient surgery, prescription drugs, home health care, and special facilities.

Exit – All Core variables, plus hospice and a catch-all “other” category.

Annual Expenses: Traditional Medicare + Part D



Some Observations

- Positively skewed distribution
- On average, premiums constitute the majority of expenses
- But out-of-pocket expenses have an extended tail
- Income related adjustments likely responsible for the extended tail of the premium distribution

Source: Author's calculations from the Health and Retirement Study (HRS), Core 2020.

Annual Expenses: Comparing Different Coverage Types

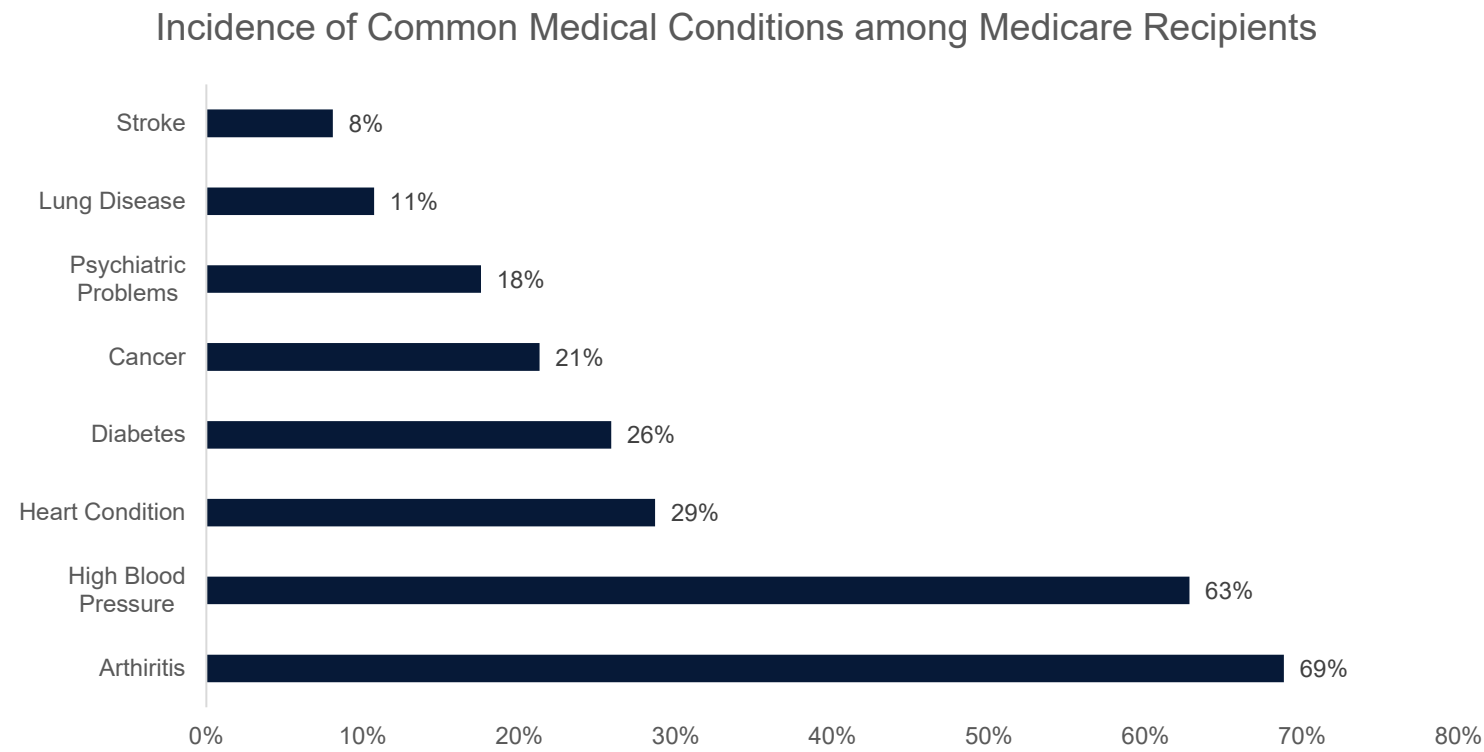
	Traditional Medicare w/ Part D			Medicare Adv. w/ Drug Plan			Traditional Medicare w/ Medigap		
	Premium	OOP	Total	Premium	OOP	Total	Premium	OOP	Total
Median	\$3,100	\$800	\$4,300	\$3,100	\$800	\$4,400	\$5,100	\$800	\$6,400
90th %tile	\$6,000	\$4,000	\$9,100	\$5,800	\$4,000	\$8,800	\$7,900	\$3,900	\$10,900
95th %tile	\$7,400	\$6,300	\$11,200	\$7,100	\$6,400	\$10,700	\$9,200	\$5,600	\$13,100

- On average, Medigap buyers used additional \$2,300 of medical care (Arapakis et al. 2023)
- The additional spending is consistent with moral hazard

Source: Author’s calculations from the Health and Retirement Study (HRS), Core 2020.

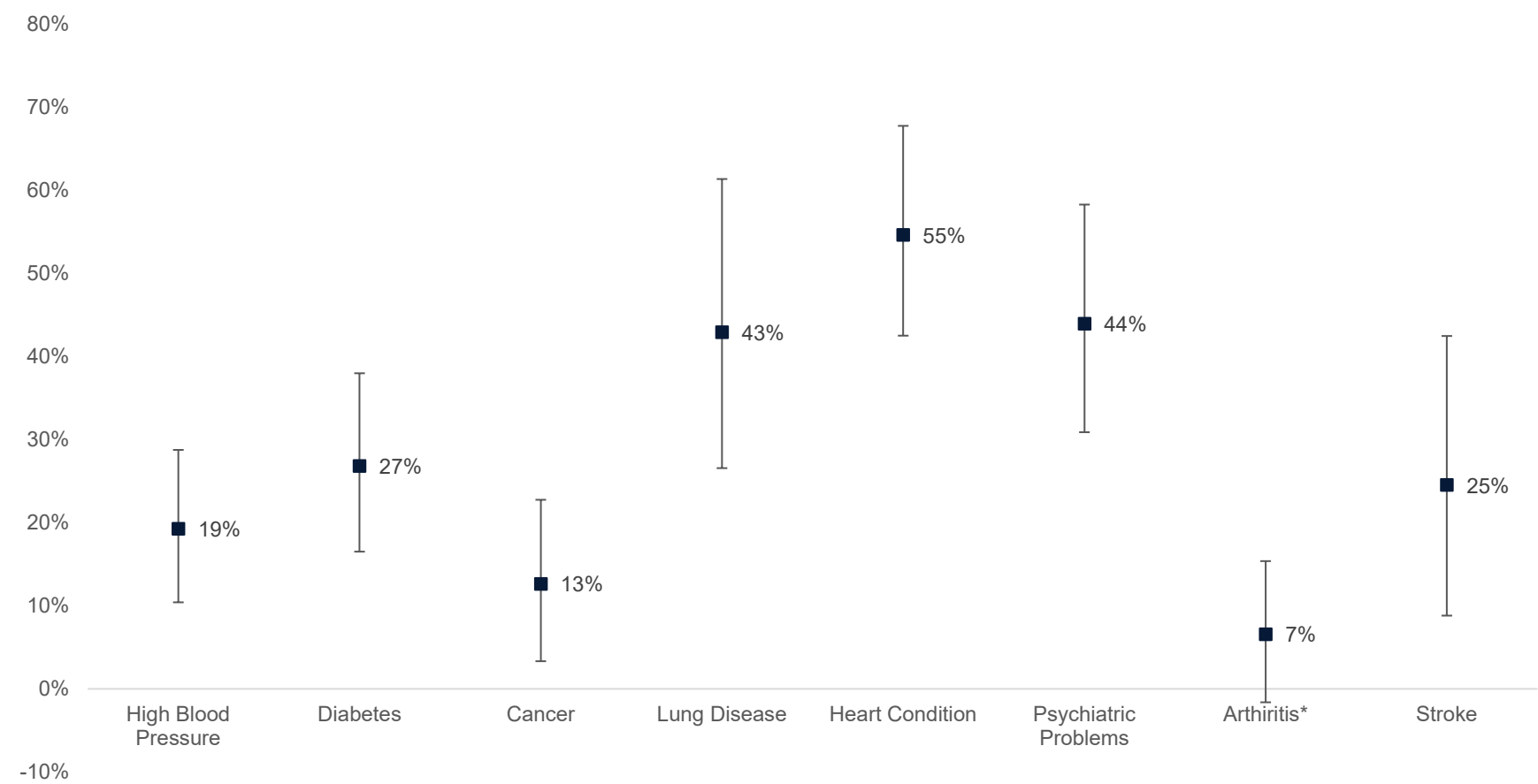
Dollars rounded to nearest ‘00s.

Incidence of Medical Conditions



Source: Author’s calculations from the Health and Retirement Study (HRS), Core 2020.

Marginal Effects of Different Medical Conditions on Annual Out-of-Pocket Spending



OLS with ln(OOP) as dependent variable
Demographic controls: age, gender, race, education, total assets

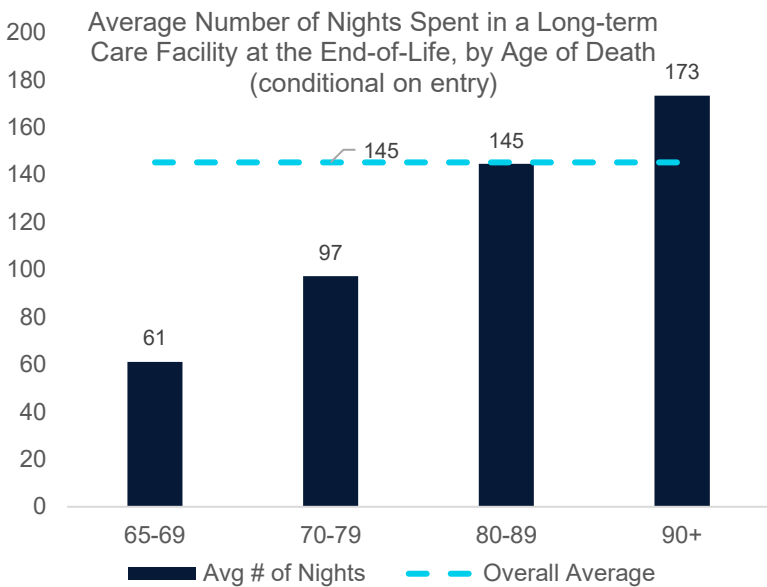
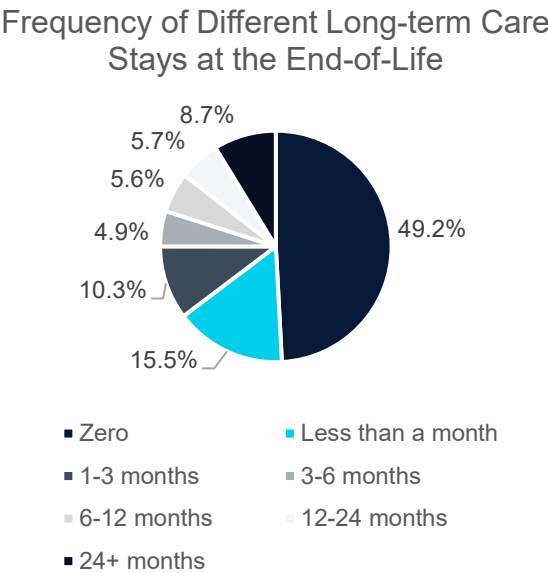
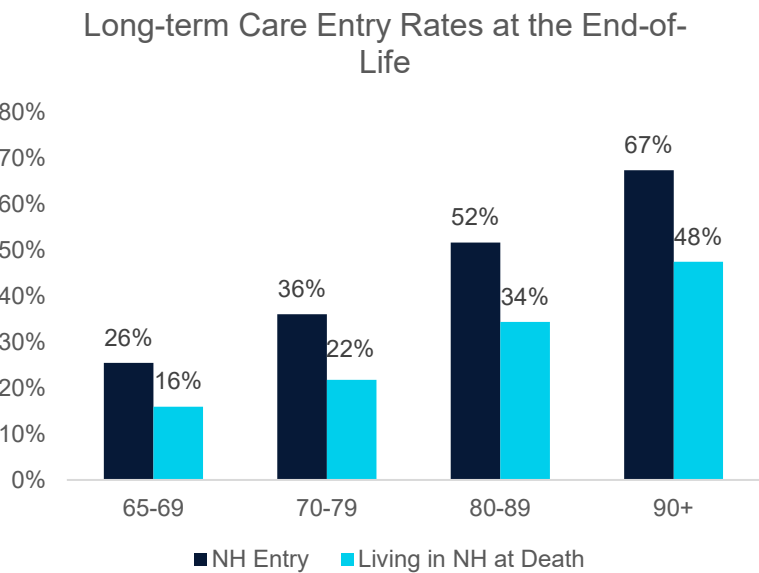
* Statistically insignificant at p=0.05
Source: Author's calculations from the Health and Retirement Study (HRS), Core 2020.

Is there a spike in out-of-pocket expenses at the end-of-life?



Source: Author’s calculations from the Health and Retirement Study (HRS), Core 2020 and Exit 2014-2020.

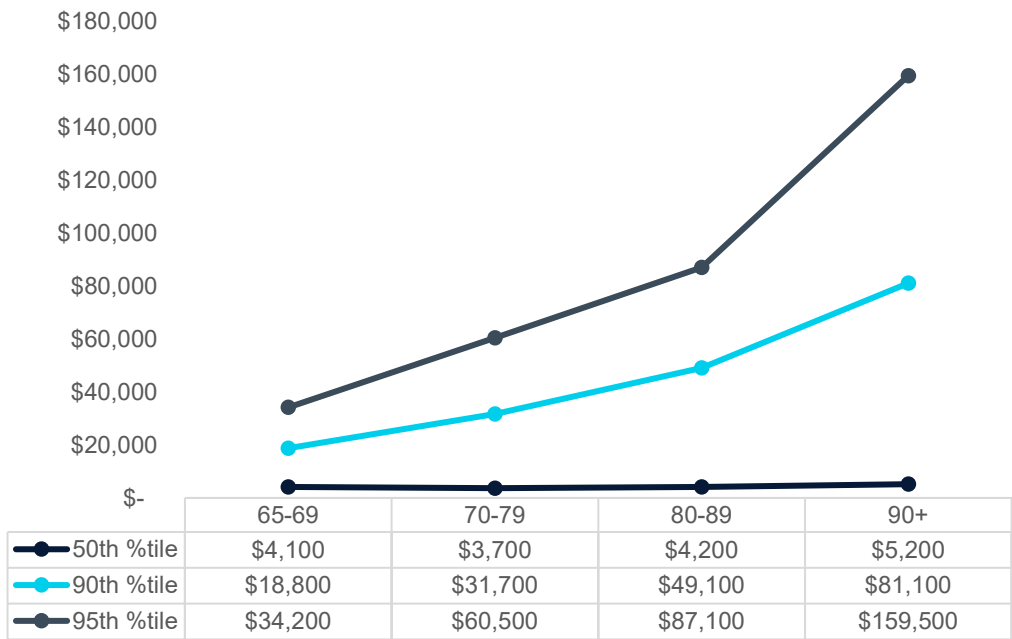
Nursing Home / Long-term Care Stays at the End-of-Life



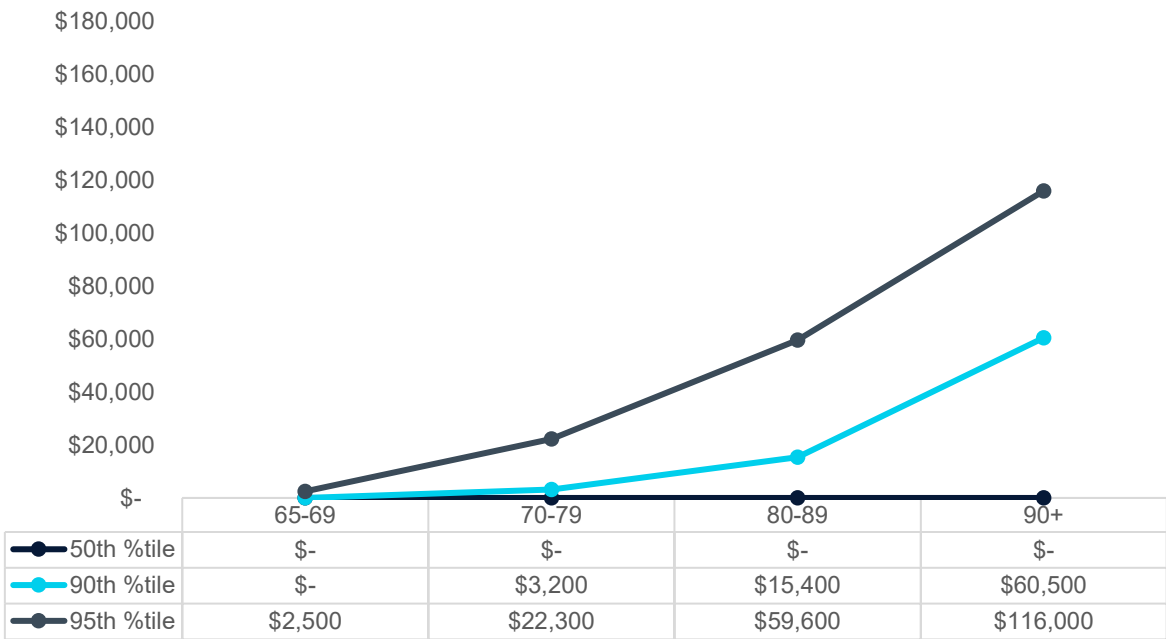
Source: Author's calculations from the Health and Retirement Study (HRS), Exit data from 2014-2020.

Annualized Out-of-Pocket Expenses at the End-of-Life

Distribution of Out-of-Pocket Expenses in the Last Year of Life



Distribution of Nursing Home/ Long-term Care Expenses in the Last Year of Life



Source: Author's calculations from the Health and Retirement Study (HRS), Exit data from 2014-2020.

How to Plan for Health Care Expenses

Choosing the right Medicare coverage

- Don't miss the initial enrollment period. If still working, consult Medicare.
- Choose the right coverage. Consider network restrictions, drug coverage etc. Some choices could be irreversible.
- Stay up to date on plan changes and shop for plans during the open enrollment period (Oct 15 – Dec 7).

Saving and Investing

- If possible, use Health Savings Accounts (HSA) for long term investing.
- Plan for insurance premiums and OOP separately. Consider paying premiums from income and OOP from savings that is replenished periodically.
- Use the OOP distribution to decide how much to hold in a savings account for OOP expenses.

Plan for Long-term Care

- Decide whether to get LTCI coverage
- Understand Medicaid coverage requirements
- Adjust investments with room for growth if planning to self-insure.
- Keep an eye on public policy developments (e.g., WA Cares Fund).

Conclusions

- Vast majority of Medicare recipients are satisfied with their care.
- Health care expenses are highly concentrated, manageable for most but few face very high risk.
- Medigap users spend more than others.
- Heart conditions, psychiatric problems and lung disease have the highest impact on annual OOP expenses.
- There is a significant increase in OOP expenses at the end of life.
- LTC and nursing home expenses drive the large increases in the final year of life.
- A successful plan to navigate these expenses depends on
 - Choosing the right Medicare coverage
 - Saving and investing properly
 - Having a plan cover LTC expenses



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Thank You



Retirement research sources

The Health and Retirement Study

The University of Michigan Health and Retirement Study (HRS) is a longitudinal panel study that surveys a representative sample of approximately 20,000 people in America, supported by the National Institute on Aging (NIA U01AG009740) and the Social Security Administration.

Through its unique and in-depth interviews, the HRS provides an invaluable and growing body of multidisciplinary data that researchers can use to address important questions about the challenges and opportunities of aging.

References:

Arapakis, K., E. French, J.B. Jones, and J. McCauley (2021). 'On the Distribution and Dynamics of Medical Expenditure Among the Elderly.' Ann Arbor, MI. University of Michigan Retirement and Disability Research Center (MRDRC) Working Paper; MRDRC WP 2021-436.

De Nardi, M., E. French, J.B. Jones, and J. McCauley (2016). 'Medical Spending of the U.S. Elderly.' *Fiscal Studies*. 37 (3/4): 717–47.

De Nardi, M., E. French, J.B. Jones, and R. McGee (2025). 'Why Do Couples and Singles Save during Retirement? Household Heterogeneity and Its Aggregate Implications.' *Journal of Political Economy*. 0022-3808. <https://doi.org/10.1086/733421>.

Fahle, S., K. McGarry, and J. Skinner (2016). 'Out-of-Pocket Medical Expenditures in the United States: Evidence from the Health and Retirement Study.' *Fiscal Studies*. 37 (3-4): 785-819.

Feenberg, D. and J. Skinner (1994). 'The Risk and Duration of Catastrophic Health Care Expenditures.' *The Review of Economics and Statistics*. 76 (4):633–647.

French, E. and J.B. Jones (2004). 'On the distribution and dynamics of health care costs.' *Journal of Applied Econometrics*. 19 (6):705–721. <https://onlinelibrary.wiley.com/doi/abs/10.1002/jae.790>.

Spiegel, J., and P. Fronstin. 'Projected Savings Medicare Beneficiaries Need for Health Expenses Increased Again in 2023: Some Couples Could Need as Much as \$413,000 in Savings.' EBRI Issue Brief, no. 599 (Employee Benefit Research Institute, January 18, 2024).

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