

Effect of Rising Health Costs on Retirement Security

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Motivation

Health care spending has been and is expected to continue to be a rising share of GDP over time.

The burden of health care spending depends on the share of health spending in the consumption basket.

- A 10% increase in health costs has much larger effects on “income net of health expenses” when the share of health spending in income is 50% than when it is 5%.

Out-of-pocket healthcare expenses (including premiums) are a large share of the elderly’s total spending—14% for 65+ versus 9% overall in 2021.

- For low-income elderly, the share is much larger: 30% in 2016 in the bottom quintile according to our calculations.

These facts imply rising burden of health expenses for the elderly over time.

But in Follette and Sheiner (2008), we found that the burden of health spending had been relatively stable from 1987 to 2004 because federal financing of health care expanded over time to keep health care from being unaffordable

In this paper we ask: What has happened since 2004 to affordability? What is likely to happen in the future?

Data

Health spending data from the Medicare Current Beneficiary Survey (MCBS)

Our main focus is on “out of pocket” spending, including premiums, coinsurance, deductibles, cash payments for care.

- Other payers include Medicare and Medicaid, and retiree health (which arguably was “paid” for by employee but which we ignore.)
- In addition, private insurance “profits” (difference between premiums and payouts) are ignored.

Income measurement is poor in the MCBS, and the income questions changed during our time period, making analysis of trends difficult

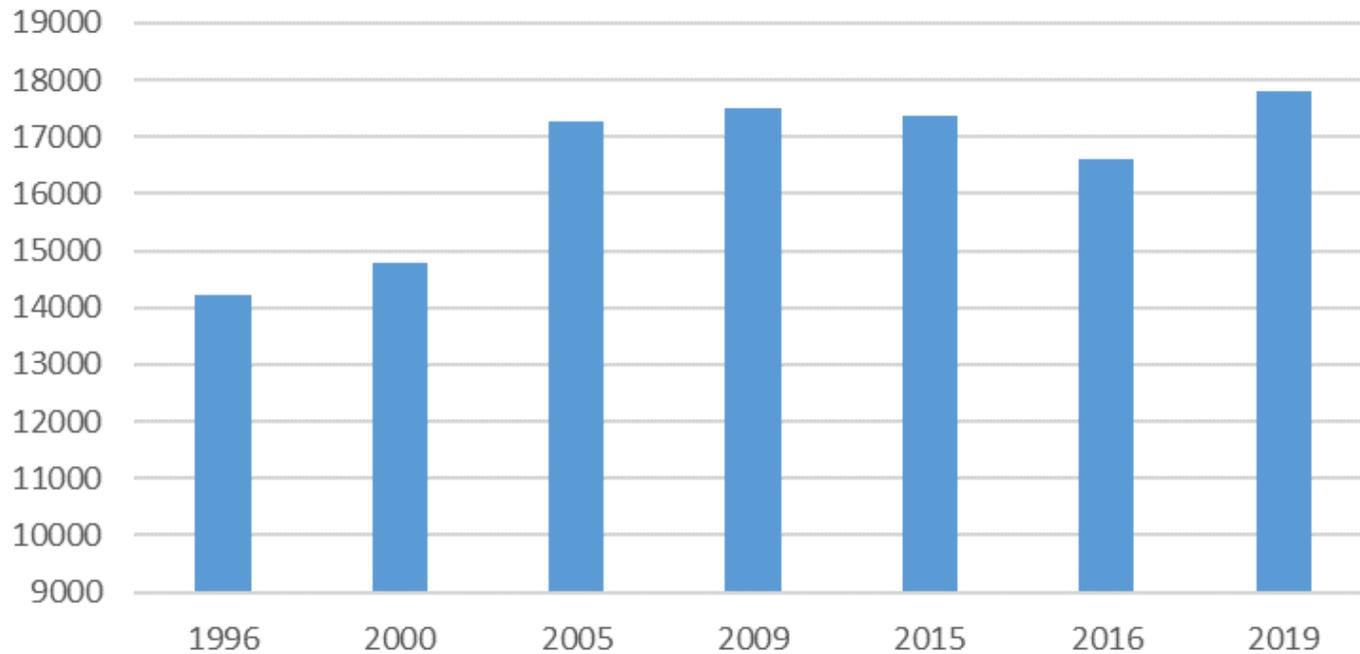
We impute income using the Health and Retirement Survey (HRS), which has been found to be a reasonably reliable source of income data

- We use MCBS income to sort people into quintiles, and then replace income by the HRS average income for each age, marital status, and income quintile cell
- For our analysis using income and the MCBS, our last year is 2016. (We have 2019 MCBS but too early to have HRS income for that year.)

We divide household income by 1.7 for couples in order to create “single-equivalent” income

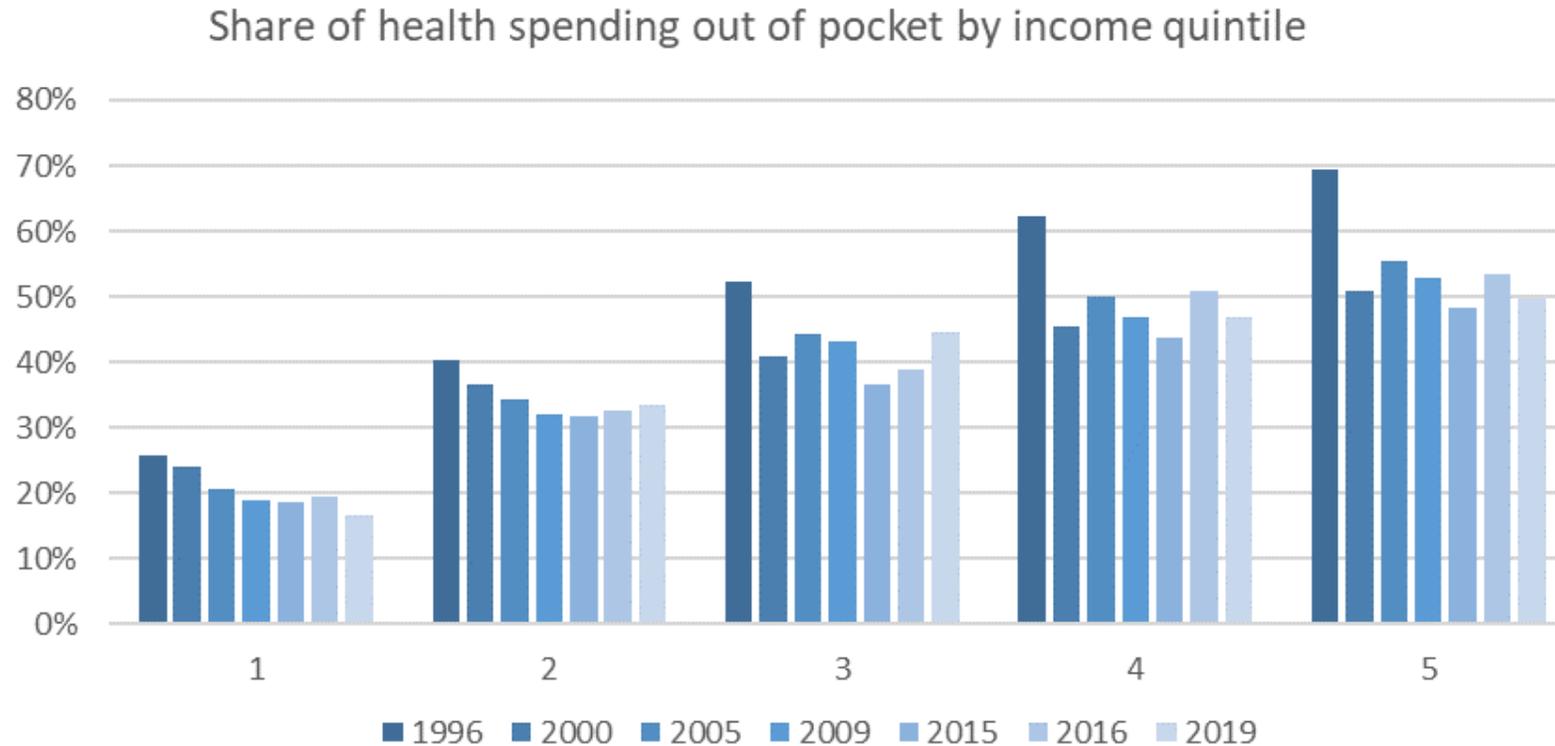
Striking Stability in Per Beneficiary Health Spending since 2005

Real health expenditure per beneficiary in MCBS (2021 \$)



Note: Real health expenditures are adjusted according to the age distribution of Medicare beneficiaries in 2019.

Share Health Spending Paid by Beneficiaries Has Declined over Time for Bottom Quintiles

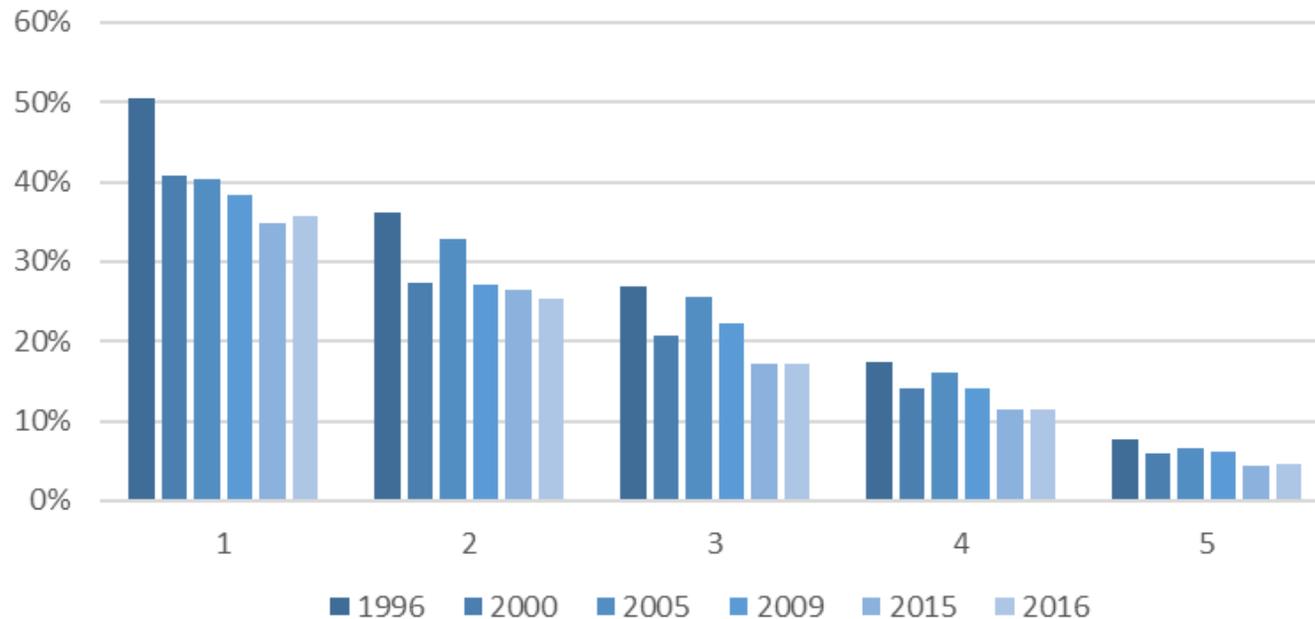


Note: Out of pocket includes premiums, co-pays and deductibles.

Source: Medicare Current Beneficiary Survey.

Out of Pocket Spending (including premiums) as a Share of Income has Declined since 2005

Private spending as share of income by income quintile



Note: Private spending includes premiums, co-pays and deductibles. Income is adjusted using the Health and Retirement Study.

Source: Medicare Current Beneficiary Survey, Health and Retirement Study, Authors' calculations.

Despite financing a much lower share of health spending, health costs are still most burdensome for low-income elderly—about 25% - 30% of income for bottom two quintiles.

- Only about 45% of people in lowest income quintile and 10% in second quintile had Medicaid for the full year.
- Even a small amount of health spending is a large share of income for those at the bottom of the income distribution.

What Accounts for Decline in Health Spending Share of Income?

Health spending growth overall very muted over this period.

- A lot of this likely attributable to effects of ACA.

Medicare spending growth rose even less than overall.

Expansions of public programs contributed as well: Introduction of Medicare Part D in 2006, elimination of Part D “donut hole”, perhaps some effect of ACA on Medicaid enrollment (“woodwork” effect.)

Elderly's Out of Pocket Spending Moves Mostly With Medicare Spending

Medicare offers only partial protection against rising health costs:

- After accounting for copays, deductibles, and premiums, Medicare and Medicaid together pay for just about 60% of the health costs of the elderly.
- People with greater health needs spend more:
 - Under traditional Medicare and Medicare Advantage, spending not fully insured.
 - Medicare Advantage has out-of-pocket maximums, but still most plans have significant out-of-pocket expenses.
 - Some people with certain types of Medigap plans are fully insured (but pay a lot for those plans.)
 - On average, out of pocket payments (not including premiums) cover about 20% of health costs.

Health cost risks are mostly related to changes in per beneficiary Medicare spending:

- Medicare premiums vary with Medicare spending.
- Medicare co-pays and deductibles vary with Medicare spending.
- Premiums for supplemental insurance vary with Medicare spending.
- Long-term care costs that are not covered by Medicare vary with (non-Medicare) long-term care costs.

→ Burden of health spending for elderly depends more on Medicare Costs than overall health costs.

Slowing the Growth Rate of Medicare Had Large Benefits for Low-Income Elderly

Increased public financing can improve health care affordability.

Another approach is to control overall costs.

- ACA significantly lowered Medicare reimbursements for hospitals and most other non-physician services; also included some measures to reduce unnecessary utilization.
- ACA changed formula that updates reimbursement rates over time: from changes in input to costs, to changes in input costs less economy-wide MFP. Not one-time level adjustment.
- Physician payments, governed by other legislation, increase even more slowly over time.
- Lowering provider payments reduced spending on premiums and copays by elderly.

Medicare spending rose much less since 2010 than projected by CBO in 2009, pre-ACA.

- By 2019, Medicare spending 20% less than projected in 2009.
- As a share of GDP, Medicare spending 14% less than projected.

Medicare Slowdown Improved Well-being of Elderly

To measure affordability, we use “income net of health expenses”.

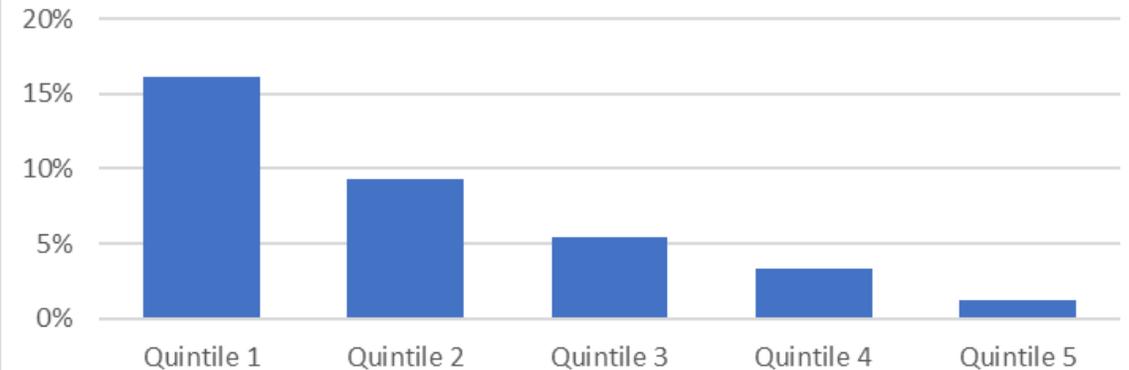
- If in year 1, income is \$100 and health spending is \$60, income net of health expenses is \$40.
- A 10% increase in health spending (to \$66) will lower “income net of health expenses” by 7% ($\$40/\$66-1$)

For those in the lowest, income quintile, the slowdown in Medicare spending relative to what was projected pre-ACA increased income net of health expenses by 16%.

For second quintile, increase was 9%.

Medicare beneficiaries still had good access to health providers, so were better off.

Figure 14: Increase in non-health consumption by 2019 from slower growth of medicare savings since 2009, by income quintile



Note: 2016 shares of health spending over income are used to proxy for 2019 shares.

Source: Medicare Current Beneficiary Survey, 2016.

Slowdown in health spending

Overall excess cost growth (demographically-adjusted per beneficiary health spending growth less per capita GDP growth) slowed to 0 from 2010-2019.

Decomposition of Health Spending 1980-2019				
	1980- 1990	1990- 2000	2000- 2010	2010- 2019
CMS Adjusted Real Health Spending Growth per Capita	4.5	2.3	2.5	0.9
Real GDP Growth Per Capita	1.3	1.3	-0.1	0.9
CMS Excess Cost Growth	3.2	1.0	2.6	0.0

Understanding the Slowdown in Excess Cost Growth

Slow Income Growth.

- By some accounting, slow income growth may have led to slow excess cost growth (depends on income elasticity of health spending.)
- If so, then a return to more normal income growth will boost excess cost growth.

Health prices rose in line with inflation, relative to 1-2 ppts higher as in previous decades.

- To a large extent, the result of the ACA and other federal legislation that lowered Medicare reimbursements.
- Not only direct effect, but good evidence that lower Medicare reimbursements leads to lower private reimbursements, particularly for physicians.
- Will this continue, or will private/public reimbursements increasingly diverge?

Insurance coverage increased but share of spending paid for by insurance has been expanding at a slower pace over time.

- There is less scope for this channel to continue boosting spending, since out of pocket (ex premiums) spending share so low.

Unexplained portion also fell.

- Implications for future hard to predict.

Bottom Line?

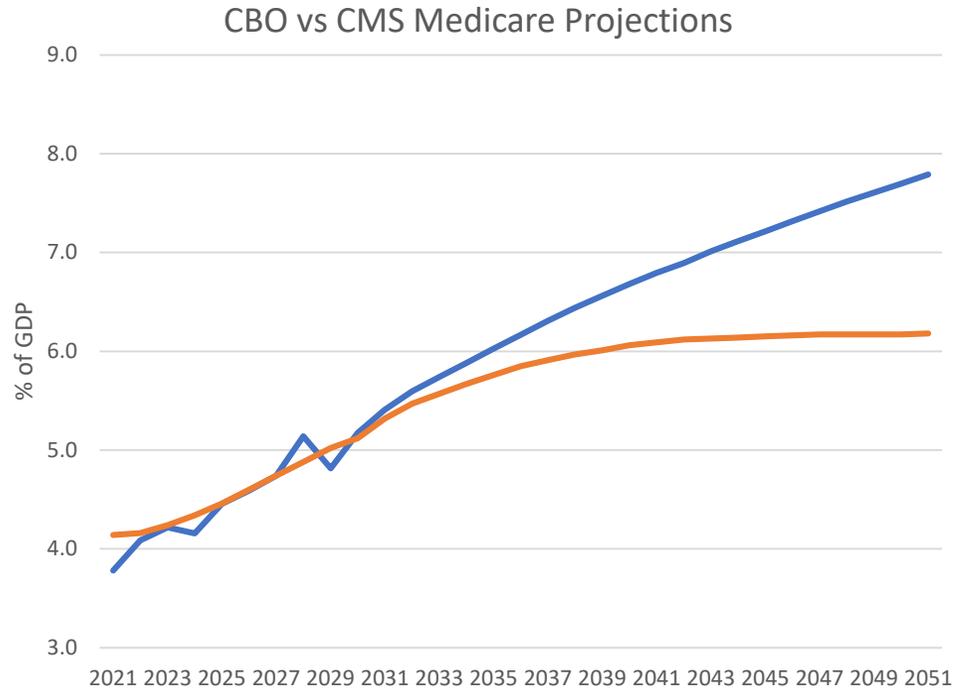
Obviously tremendous uncertainty.

Some chance we've seen fundamental shift, and excess cost growth will remain low.

A more balanced approach would project excess cost growth to reassert itself, but not to the levels seen in the past when

- (a) insurance was expanding quickly
- (b) health care was largely fee-for-service based on usual charges
- (c) there was less management of care than in the past
- (d) health care was smaller share of income so less resistance to rapid increases in spending

CBO and CMS Projections for Medicare



Source: CBO, 2021; Medicare Trustees Report, 2021.

CBO and CMS have similar approaches for projecting spending over next decade, and similar projections as % of GDP.

After that, they diverge.

- CMS projects Medicare spending to grow much more slowly than overall health spending, because of lower provider reimbursements (that they don't think private sector will match).
 - From 2031-2051, CMS projects Medicare excess cost growth of about 0.5 percent on average
 - They also assume a larger slowdown in overall health spending than CBO.
- CBO has similar growth rates for Medicare and other spending.
 - For Medicare, they expect an average rate of excess cost growth of 1.15 for 2031-2051.

Evaluating the Effect of Health Costs on Retirement Security

We do two sets of simulations. Evaluate spending for:

- A 65-year old today over time. We assume income increases with inflation.
- Different cohorts over time (e.g., 65 year old today, 65-year old in ten years, etc.) We assume income increases with GDP.

We consider effect of health prices on CPI

- To extent excess cost growth due to faster growth of health prices, Social Security and other government benefits will rise faster and cushion some of the blow

We allow Medicare growth to diverge from growth of National Health Expenditures (NHE)

- We examine 3 excess cost growths: 0, 1, and 2 for NHE and Medicare

We assume no changes in Medicaid share of health spending over time

- Rising income could mean lower Medicaid eligibility over time
- But take-up rates for Medicaid fairly low, so lots of scope for higher take-up to offset lower eligibility

We examine “income net-of-health expenses” as a measure of affordability.

- In future version of the paper, will also evaluate resources net of health expenses, where resources include measure of annuity value of assets

Results for Current Cohort Over Time: Assuming No Change in CPI

Difference in Income Net-of Health-Expenses Relative to Baseline Scenario where Medicare Costs Increase with Inflation			
No Effect on CPI			
Medicare Excess Cost Growth	2%	1%	0%
<i>Quintile 1</i>			
65-69	-2%	-1%	-1%
70-74	-13%	-9%	-5%
75-79	-37%	-24%	-12%
80-84	-196%	-123%	-61%
<i>Quintile 2</i>			
65-69	-3%	-2%	-1%
70-74	-13%	-9%	-5%
75-79	-35%	-22%	-12%
80-84	-91%	-57%	-29%

Income net-of-health-expenses falls as someone gets older even if real age-adjusted health spending is constant over time, because health spending rises with age.

Simulation compares net income over time if real health spending per person is rising to net income if it is not.

Effects much larger for older people:

- Effects cumulate over time (more years of excess cost growth)
- Health spending higher share of income for older people
- For lowest income quintiles, even 0% excess cost growth lowers net income by 12% by 75-79; much larger at older ages.
- 1% excess cost growth (below what CBO is assuming) causes major affordability problems, even by ages 70-74.

Results for Current Cohort Over Time: Assuming Large Change in CPI

Difference in Income Net-of Health Expenses Relative to Baseline Scenario where Medicare Costs Increase with Inflation						
Medicare Excess Cost Growth	No Effect on CPI			2% NHE Excess Cost Growth -- All Real NHE Growth Due to Higher Relative Prices		
	2%	1%	0%	2%	1%	0%
	<i>Quintile 1</i>					
65-69	-2%	-1%	-1%	-2%	-1%	0%
70-74	-13%	-9%	-5%	-11%	-7%	-3%
75-79	-37%	-24%	-12%	-35%	-21%	-9%
80-84	-196%	-123%	-61%	-202%	-125%	-59%
	<i>Quintile 2</i>					
65-69	-3%	-2%	-1%	-2%	-2%	-1%
70-74	-13%	-9%	-5%	-11%	-7%	-3%
75-79	-35%	-22%	-12%	-32%	-20%	-8%
80-84	-91%	-57%	-29%	-90%	-55%	-24%

CPI adjustment helps, but only very little, despite assuming very fast increases in relative health prices

Why? Because health spending share of income in the CPI is much lower than the share of health spending in income for the low-income elderly.

For higher-income elderly (not shown), effect is proportionately larger

Highest income quintile can be better off if Medicare spending growth < NHE and NHE health prices increase quickly

Results for Different Cohorts Over Time: No Effect on CPI

Difference in Income Net-of Health Expenses Relative to Current Cohort Baseline Scenario where Medicare Costs Increase with Inflation								
No Effect on CPI								
	2% Excess Medicare Cost Growth				0% Excess Medicare Cost Growth			
	65-69	70-74	75-79	80-85	65-69	70-74	75-79	80-85
	<i>Quintile 1</i>							
2026	-7%	-13%	-13%	-24%	0%	0%	0%	0%
2036	-15%	-29%	-28%	-54%	0%	0%	0%	0%
	<i>Quintile 2</i>							
2026	-5%	-7%	-8%	-11%	0%	0%	0%	0%
2036	-12%	-16%	-18%	-23%	0%	0%	0%	0%
	<i>Quintile 3</i>							
2026	-4%	-5%	-5%	-6%	0%	0%	0%	0%
2036	-9%	-11%	-12%	-12%	0%	0%	0%	0%
	<i>Quintile 4</i>							
2026	-3%	-3%	-4%	-5%	0%	0%	0%	0%
2036	-6%	-7%	-9%	-11%	0%	0%	0%	0%
	<i>Quintile 5</i>							
2026	-1%	-1%	-1%	-2%	0%	0%	0%	0%
2036	-2%	-2%	-3%	-4%	0%	0%	0%	0%

0% excess cost growth:
 Since income grows with GDP, if health spending rises with GDP, future cohorts spend same share of income on health expenses

With 2% excess cost growth in Medicare, future cohorts are significantly worse off because health spending is increasing faster than income

Results for Different Cohorts Over Time: Large Change in CPI

2% NHE Excess Cost Growth -- All Real NHE Growth Due to Higher Relative Prices								
	2% Excess Medicare Cost Growth				0% Excess Medicare Cost Growth			
	65-69	70-74	75-79	80-85	65-69	70-74	75-79	80-85
	<i>Quintile 1</i>							
2026	-3%	-10%	-9%	-22%	4%	4%	4%	4%
2036	-7%	-22%	-21%	-50%	8%	8%	8%	8%
	<i>Quintile 2</i>							
2026	-2%	-4%	-4%	-7%	4%	4%	4%	4%
2036	-5%	-9%	-10%	-17%	8%	8%	8%	8%
	<i>Quintile 3</i>							
2026	0%	-1%	-2%	-2%	4%	4%	4%	4%
2036	-1%	-3%	-4%	-5%	8%	8%	8%	8%
	<i>Quintile 4</i>							
2026	1%	0%	-1%	-1%	4%	4%	4%	4%
2036	2%	1%	-1%	-4%	8%	8%	8%	8%
	<i>Quintile 5</i>							
2026	3%	3%	2%	2%	4%	4%	4%	4%
2036	6%	6%	5%	4%	8%	8%	8%	8%

0% Medicare excess cost growth:
 If Medicare costs very muted, but overall health prices rising quickly, future cohorts are better off.

With 2% excess cost growth in Medicare, low-income cohorts are worse off, because the CPI adjustment is not big enough, but higher-income cohorts are better off

Policy Implications and Discussion

Slow growth in Medicare spending helps increase health care affordability for seniors and helps federal budget

- Of course, providers are worse off

Even with modest excess cost growth, however, affordability will become increasingly difficult over time

- If Medicaid eligibility fell over time because of rising income, this would exacerbate affordability challenges
- But CBO projections don't seem to include a decline in Medicaid eligibility

Furthermore, some question whether the cuts to provider payments are sustainable over the long run

- CMS offers "Illustrative Alternative Scenario" because they think it possible that access to health care will eventually decline under current law

If resolving affordability problems by cutting overall spending proves more difficult over time, demand for expanded federal financing of care will rise

- Suggests current long-term budget challenges could be larger than reported
- But CBO assumes >1 percent excess cost growth for all federal health expenditures over next 30 years. Lower excess cost growth would create "room" in the budget relative to current projections for expanded federal financing of health care for lower-income elderly.