Retirement Health Care Costs and Income Replacement Ratios

HealthView
INSIGHTS

SUMMARY

Financial advisors, plan sponsors, and millions of investors rely on income replacement ratios (IRRs) – a percentage of pre-retirement income – to estimate how much will be needed to maintain desired lifestyles in retirement.

IRRs have provided advisors with a streamlined, top-down approach for assessing a client's retirement readiness without having to calculate and project individual line-item expenses: a bottom-up strategy that is more comprehensive, but also time-consuming.

A key assumption underpinning the use of IRRs is that pre-retirement income is a good basis for calculating income needs in retirement. Unfortunately, when it comes to health care this is not the case. Those who have saved for retirement using an IRR believe they will have sufficient savings to cover major expenses, but since most Americans are only paying 25% of their health care costs when working, IRRs only cover a portion of future health care costs. In addition, IRRs assume that household expenses in retirement can be projected forward using the general inflation rate of 2.5% to 3%. Unfortunately, health care costs are expected to rise at approximately 6% a year for the foreseeable future. Over time, this disparity will widen the gap between retiree savings and health-related expenditures.

The purpose of this paper is to examine the effectiveness of income replacement ratios through the very narrow lens of retirement health care costs. HealthView's research indicates that current IRRs, which do not include unexpected out-of-pocket medical expenses, accurate health care inflation rates, life expectancy projections, and Medicare means-testing surcharges, will likely fail to produce sufficient income for retirees to afford quality health care and maintain the standard of living they have planned for. The research also reveals that while the health care savings gap will be substantial, it can be managed through modest additional contributions to 401(k) plans, HSAs, Roths, annuities, or other products, such as life insurance.

For a 45 year-old as little as $90 per pay period can reduce, or possibly even eliminate, the impact of unplanned medical expenses in retirement

For the purpose of this paper, the abbreviation IRR will be used to refer to income replacement ratios

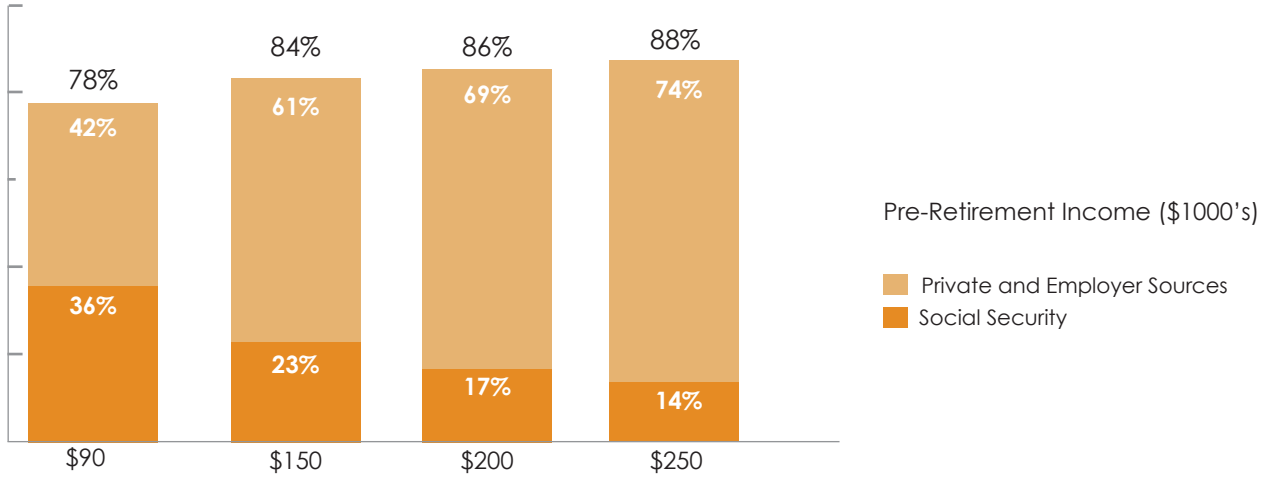
INCOME REPLACEMENT RATIOS

The most widely used range of income replacement ratios is 75-85% of pre-retirement income. In fact, 80% is so widespread that it has evolved into a basic retirement planning rule. The figure is not arbitrary and has been the subject of a significant research and debate. Income data from the Health and Retirement Study (HRS), a comprehensive 16-year analysis that began in 1992 and finished its ninth cohort in 2008, discovered that the median replacement ratio in the first or second year of retirement was 0.735.[1]

Some experts believe the most widely used IRRs are insufficient, and that individuals and families with low annual incomes often need replacement ratios of 90% or more. According to Patrick Purcell of Social Security's Division of Policy Evaluation, "Lower-income households typically need higher replacement ratios than middle-income households because they spend a larger proportion of their incomes on necessities."[2]

Surprisingly, higher IRRs may also be required for those in the $150,000 to $250,000 annual income range. According to AON Consulting's extensive 2008 Replacement Ratio Study, it is becoming difficult for affluent individuals to generate sufficient retirement income based on Social Security and an employer's qualified plan alone.[3] These individuals generally require a substantial portion of their retirement income to originate from non-qualified savings. Despite the fact that the AON study is seven years old, the conclusions clearly apply to future retirees.

EXHIBIT A: BASELINE AND PROJECTED INCOME REPLACEMENT RATIOS



Purcell corroborates AON's study and proposes that higher-income households may also need higher replacement ratios if they expect to spend substantial sums on recreation and leisure activities. [4]

INCOME REPLACEMENT RATIO ASSUMPTIONS AND HEALTH CARE

IRRs are based on the assumption that pre-retirement income and expenses can be used to predict what will be required in retirement. While income distribution may change, basic living expenses, such as housing, transportation, food, clothing, taxes, and health care, don't go away, so the methodology does seem logical.

However, this does not necessarily mean that all expenses can simply be projected forward into retirement. As the data indicates, health care expenditures before and during retirement are, in fact, very different.

1. Purcell, Patrick J. Income Replacement Ratios in the Health and Retirement Study. Office of Social Security and Disability Policy, Volume 72, No. 3, 2012. http://www.ssa.gov/policy/docs/ssb/v72n3/ssb-v72n3.pdf
2. Purcell, *Replacement Ratios.*
3. http://www.aon.com/about-aon/intellectual-capital/attachments/human-capital-consulting/RRStudy070308.pdf
4. Purcell, *Replacement Ratios.*

EMPLOYER-SPONSORED HEALTH CARE VS MEDICARE AND SUPPLEMENTAL INSURANCE

According to HealthView data, employees pay approximately 25% of group insurance premiums, while employers subsidize the remaining 75%.

In order to maintain a similar level of coverage enjoyed during employment, retirees must sign up for Medicare Parts A, B and D, and purchase a supplemental policy, most of which have premiums and copays. (Note that Part A is "free" for most Americans because it is subsidized through payroll taxes.) Vision, hearing, and dental are not covered by Medicare or supplemental insurance and must be paid out-of-pocket.

IRR calculations use the same 25% figure that employees contribute for health care premiums enrolled in group plans, but retirees are responsible for almost 100% of their health care costs. Since IRRs only include a portion of future health care costs, at retirement many retirees will face a substantial budget shortfall if, like most, they assume achieving their IRR goal will cover all of their health care expenses when they stop working.

Some may contend that since Medicare is subsidized, pre- and post-retirement outlays should be comparable. The following example demonstrates that after switching from an HMO to Medicare, a 64-year-old's costs jump from $1,245 to $3,563 – an increase of 186% in the first year of retirement.

EXHIBIT B: PRE-RETIREMENT VERSUS IN RETIREMENT FOR A 65 YEAR OLD MALE*

	Employer Group Plan			*Medicare***
	PPO	**HMO**	**HDHP**	**Parts B, D, Gap**
Total Cost of Premiums	$5,361	$4,982	$4,251	$3,563
Percent Covered By Recipient	25%	25%	**25%**	**100%**
Recipient Cost in real dollars	$1,340	$1,245	**$1,062**	**$3,563**

*Since health care premiums covered under employer plans are based on an average 45-year-old male, other out-of-pocket costs for the 64-year-old may be even higher.

**Medicare includes Medicare Part B, Part D and MedSup premiums, which is basically the equivalent of commercial group plan insurance.

It is important to note that these calculations do not factor the impact of health care inflation, catastrophic health-related events, or long-term care premiums. Also, depending upon the chosen plan, out-of-pocket costs for working Americans under the Affordable Care Act are capped at $8,500 for an individual and $13,200 for a couple, but are unlimited for retirees.

The stark reality is that health care is going to cost more than most retirees have saved using traditional IRR-based plans.

HEALTH CARE COST INFLATION

The second main assumption of IRRs is that retirement expenses can be projected forward using the general inflation rate; however, the data indicates that IRRs using an industry-average 2.5-3% inflation rate will fall far short of the savings and income required to address health care. HealthView's 2015 Retirement Health Care Costs Data Report projects health care inflation (including Medicare Part B) to grow at an average of 6% annually for the next ten years. These estimates are consistent with a year-end summary from the Centers for Medicare

and Medicaid, which expects retirees to endure at least eight years of health care inflation between 5% and 7%.[5]

Medicare Part D premiums, which have been growing at approximately 12% annually, are projected to drop to an average of 8% per year over the next decade. Despite this adjustment, the differential between the inflation rate incorporated into IRRs and the actual projected Medicare inflation rate will, over time, create a significant shortfall in retiree savings.

THE COMPOUNDING EFFECT OF HEALTH CARE INFLATION

Most are aware of the benefits of compounding interest. Unfortunately, this concept can work the same in reverse. If health care inflation rates are underestimated by around 3% annually, as the majority of IRRs are, future premiums will compound like a high-interest-rate credit card and expand medical costs beyond what retirees have allocated in their budgets.

EXHIBIT C: IMPACT OF HEALTH CARE INFLATION ON A 45-YEAR-OLD RETIRING AT AGE 65

	Projected Cost Based on 3% inflation	Actual Retirement Health Costs	Incremental Costs
Age 65	$6,912	$13,203	$6,291
Age 70	$8,013	$18,521	$10,508
Age 75	$9,289	$25,831	$16,542
Age 80	$10,768	$35,694	$24,926
Age 86	$12,858	$52,104	$39,246

The table above illustrates the incremental increases between actual retirement health care costs at an average 6% inflation rate and projected retirement health costs at a 3% inflation rate for a 45-year-old male retiring at 65. Because of the differential, as this man ages, the gap will continue to widen, causing a shortfall of nearly $40,000 in his last year of life (age 86).

LIFE EXPECTANCY

An additional assumption built into IRRs is average longevity. Simply put: living longer will result in higher health care costs, and consequently, more savings will be needed to fund them. This discrepancy has not been factored into commonly used income replacement ratios and will likely create greater deficits in retiree budgets.

A 55-year-old male with an average life expectancy of 86 who lives to age 88 will be responsible for an additional $69,627 in health care costs that are not included in top-down IRR-based calculations.

MEDICARE SURCHARGES

Medicare surcharges, which are triggered when Modified Adjusted Gross Income (MAGI) surpasses $85,000 for individuals and $170,000 for couples, can more than double Medicare Parts B and D premiums, but this additional expense is generally absent from income replacement ratios. While these surcharges typically impact

5. http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/tables.pdf

more-affluent Americans, as salaries rise and eventually surpass these income thresholds, which are not expected to adjust for inflation, more retirees will inevitably face higher premiums.

Depending on retirement income, Medicare means testing can increase B and D premiums from 37% to over 200%. Projecting forward, a 55-year-old who plans to retire at age 65, has a life expectancy of 86 and generates over $85,000 per year in retirement income will exceed MAGI thresholds and can expect to pay up to $373,706 in lifetime premium surcharges (in real dollars) in retirement.

EXHIBIT D: MEANS-TESTING SURCHARGES

Income Level	Health Care Costs	Marginal Increase	Total Increase
$85,000 or less	$183,360		
$85,001 - $107,000	$250,407	37%	37%
$107,001 - $160,000	$353,226	41%	93%
$160,001 - $214,000	$456,045	29%	149%
Above $214,000	$557,066	22%	204%

For "basic Medicare" (Parts A, B and D), the lifetime premium of just under $200,000 can grow as high as over $550,000 with the addition of surcharges. Anyone who earns a dollar more than $85,000 (or $170,000 for a married couple) will see surcharges of at least 37%.

Given the potential impact of Medicare surcharges, future retirees must manage MAGI through account diversification and asset/product optimization. Investing in non-qualified annuities, Roth and Roth 401(k)s, life insurance, and longevity insurance may effectively lower lifetime health care costs by hundreds of thousands of dollars. This topic is covered extensively in a prior HealthView paper, "Understanding the Impact of Modified Adjusted Gross Income on Retirement Health Care Costs: Strategies to Reduce Medicare Income Surcharges."

CASE STUDIES: ADDRESSING THE HEALTH CARE COST GAP IN IRRS

Americans currently using IRRs in long-term investment plans have already addressed a portion of future health care costs, but not enough. The following case studies highlight the additional savings required to reduce the gap.

While these case studies focus on 401(k) contributions, making a lump-sum investment in a range of capital market and insurance products can achieve the same outcome.

In both cases, Paul and John begin investing at their current ages, and 401(k) savings will compound at an average 6% return based on a 60% stock/40% bond portfolio. Their advisors employ traditional 80% IRRs using an average inflation rate of 3% to account for basic household needs (including medical expenses). Health care costs are projected to grow at an average 6% inflation rate.

PAUL AT 45

Paul is a healthy 45-year-old male who earns $50,000 per year. He is enrolled in his firm's 401(k) plan and would like to retire in 20 years. He is making the necessary contributions, based on a standard IRR, to earn 80% of his final employed income (growing at 3% annually) beginning at age 65.

In order to maintain comparable health care coverage in retirement to that of his current group plan, Paul will have to enroll in Medicare Parts A, B, and D, and purchase a supplemental insurance policy. His projected lifetime retirement health care costs, less Medicare Parts A (already paid through FICA tax) and B (deducted from Social Security), are $504,349. This includes out-of-pocket costs associated with elected coverage, such as copays and deductibles. (All calculations are based on the national average and presented in real dollars.)

It is assumed that Paul's salary will increase by 3% per year for the next 20 years, resulting in a future annualized salary of $90,305. In order to generate 80% of his pre-retirement income after he stops working, Paul will require $72,244, which he will earn through a combination of savings and Social Security benefits.

EXHIBIT E: PAUL'S RETIREMENT INCOME BASED ON AN 80% IRR

Paul's Salary at 45	Paul's Salary at 65	Paul's Retirement Income Needs Based on 80% IRR
$50,000	$90,305	$72,244

While employed, Paul is responsible for 25% of his group health insurance premiums, which are deducted from his payroll check, and all other out-of-pocket expenses such as copays and deductibles, which he pays directly to providers. Paul's current 401(k) contribution of $2,933 is projected to achieve his 80% IRR. This IRR-based figure assumes his portion of pre-retirement health care costs will rise at 3% annually. Unlike most of Paul's other expenses, health care is expected to increase at approximately 6% annually (basically double the historical 3% U.S. average inflation rate). When retired, Paul will also be responsible for 100% of premiums (not 25%) associated with three separate health insurance policies, as well as other out-of-pocket expenses, such as the cost of hearing aids, which are not included in IRR calculations.

Because Paul's pre-retirement health insurance coverage and costs are not directly comparable to those in retirement, he is actually underfunding his 401(k). Paul believes his contributions to his 401(k), which will reach $114,358 at the point of retirement, will cover his future health care expenses. However, he will actually require $249,296 at that point, which would leave him short $134,937. In other words, the annual contribution necessary to cover his costs is $6,393, but he is only saving $2,933 in retirement contributions, leaving him $3,460 short.

Paul will need to increase his 401(k) contributions by $3,460 annually, or around $90 per pay period (assuming 26 pay periods per year and a 50% employer match), to eliminate this gap.

EXHIBIT F: PAUL'S UNDERFUNDED AND PROPERLY FUNDED 401(K)

Current savings earmarked for health care:	$2,933
Total Savings required:	$6,393
Shortfall:	$3,460
Additional contribution per pay period	$90
Pay periods per year	26
Company match:	$45
Rate of return:	6%
Total additional savings: (Based on a 60% stock, 35% bond and 5% cash portfolio)	$135

Exhibit G reveals Paul's risk of continuing to underfund his 401(k). If he waits until 55, his annual shortfall will increase from $3,460 to $9,658, a difference of $6,198. Should Paul do nothing and wait until age 64, he will need to make a lump-sum investment of $127,299 (in addition to his ongoing $2,933 annual contribution) to fully cover health care expenses in retirement.

EXHIBIT G: ADDITIONAL LUMP SUM SAVINGS REQUIRED AT AGE 64	
Annual increase in contribution beginning at age 45:	$3,460
Annual increase in contribution beginning at age 55:	$9657
Lump-sum investment at age 64	$127,299
Accumulated savings based on IRR allocation beginning at age 45:	$114.358
Additional savings required at age 64:	$249,296

JOHN AT 55

Let's examine a 55-year-old healthy male named John, who is retiring at 65, will earn under $85,000 per year, and has a life expectancy of 86. Coverage in retirement will include Medicare Parts A, B, D, a Medicare supplemental plan, dental insurance, and all other out-of- pocket costs. (Totals are based on the national average and presented in real dollars.)

EXHIBIT H: JOHN'S RETIREMENT HEALTH CARE COSTS					
Part B	Part D	Medicare Supplemental	Dental	Out of Pocket Costs	Total Health Care Costs
$95,586	$89,955	$114,934	$18,939	$69,456	$388,870

John's projection reveals that he will be responsible for close to $390,000 in retirement health care costs. The total is substantial, but it represents John's lifetime medical-related expenditures over a 21-year period (age 65-86).

EXHIBIT I: SAVINGS NEEDED TO COVER HEALTH CARE *WITHOUT* AN IRR-BASED SAVINGS PLAN		
Total Cost for Coverage	Lump Sum Investment at age 55 *without IRR* Retirement Plan Based on a 6% Return	Annual Savings for 10 Years starting at 55
$388,870	$81,328	$10,424

As the table above indicates, if John hadn't already partially saved for health care, he would need a lump-sum investment of $81,328 to pay for his health care in retirement.

John assumed that using an 80% IRR would cover all of his health care, but as indicated in Exhibit J, John must add $25,679 to reach that goal. A modest $3,291 annual investment, (or $274 per month) over ten years at a 6% return would also allow John to the close this gap.

EXHIBIT J: SAVINGS NEEDED TO COVER HEALTH CARE WITH AN IRR-BASED SAVINGS PLAN		
Total Cost for Coverage	Lump Sum if Meeting IRR Requirements	Annual Investment
$388,870	$25,679	$3,291

If John decides to take action, he will need to increase his 401(k) contributions by $84 per pay period (assuming 26 pay periods in a year and a 50% employee match).

As mentioned above, it is also important to remember that Medicare surcharges are not included in standard IRRs. For example, if John's retirement MAGI income surpasses $85,000 annually, his premiums will be significantly higher because of means-testing surcharges.

CONCLUSION

Retirees who have invested in IRR-based plans will be better positioned to face retirement health care expenses than those who have not saved at all, but as the data has shown, these tools will not generate enough income to cover all health care expenses in retirement.

When it comes to health care, which cannot simply be projected into retirement using pre-retirement costs and the general U.S. inflation rate, the assumptions that underpin IRRs are flawed. IRRs also fail to account for longevity and Medicare surcharges in their calculations.

Retirees will have to pay more for comparable health care coverage in retirement than while they were working because they will be 100% responsible for Medicare Parts B, D, and supplemental insurance premiums, as well as all other out-of-pocket expenses, including co-pays, hearing, vision, and dental.

Americans who have used IRR-based savings plans may well have to adjust their retirement expectations because of rising health care costs – unless they take action. As detailed in the case studies, the additional savings needed to close the health care savings gap can be modest. Boosting 401(k)/Roth 401(k) contributions and benefiting from company matching; investing in a health savings account (HSA); annuities; life insurance; IRAs, and a Roth are the best strategies to not only address medical expenses, but also avoid means testing.

Advisors who adjust portfolios to include MAGI-reducing investment products can save clients hundreds of thousands of dollars in lifetime Medicare surcharges. Consequently, choosing the right product mix is as important as asset allocation when creating retirement plans.

ABOUT HEALTHVIEW SERVICES

Founded in 2008 by a team of seasoned financial professionals, health care industry executives, and expert physicians, HealthView Services is the nation's leading producer of health care cost-projection software. The firm's suite of tools covers Medicare costs, long-term care expenses, and Social Security optimization strategies, which prepare current and future retirees for the impact of health care costs. HealthView has also emerged as a thought leader in this evolving domain, producing substantial educational content on the importance of integrating health care expenses into retirement plans.

HealthView Services' HealthWealthLink is an integrated retirement-planning platform that draws upon cost data from more than 50 million annual health care cases to assist financial advisors in preparing personalized estimates of retirement health care costs. The system provides advisors with the tools necessary to implement various strategies to achieve clients' retirement goals.

HealthView Services also provides retirement health care cost planning tools for individuals through its website.

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