RETIREMENT INSIGHTS

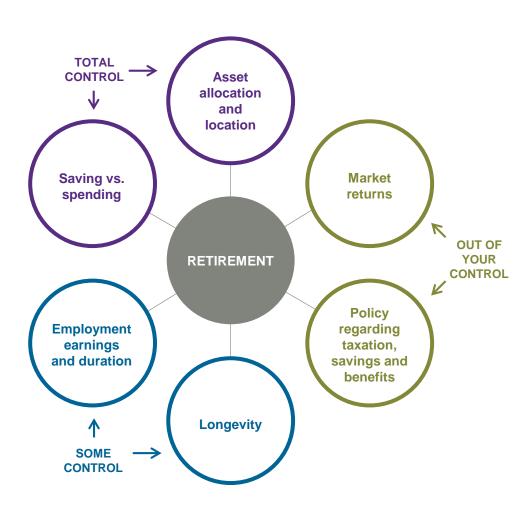
Guide to Retirementsm

2020 Edition





The retirement equation



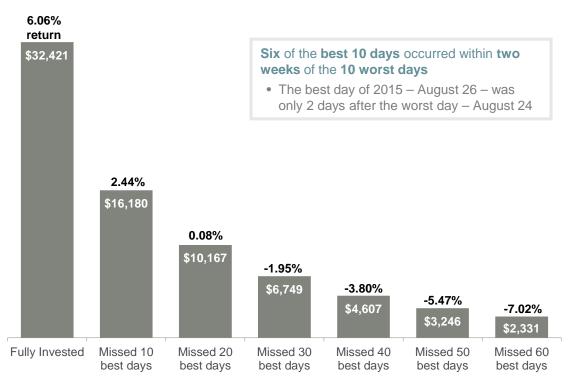
A SOUND RETIREMENT PLAN

Make the most of the things that you can control but be sure to evaluate factors that are somewhat or completely out of your control within your comprehensive retirement plan.



Returns of the S&P 500

Performance of a \$10,000 investment between January 3, 2000 and December 31, 2019



PLAN TO STAY INVESTED

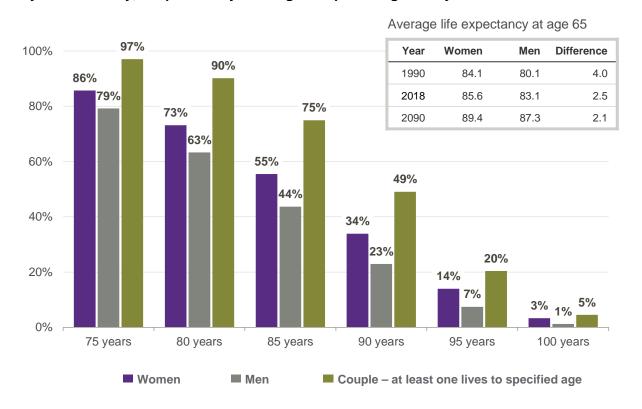
Trying to time the market is extremely difficult to do. Market lows often result in emotional decision making. Investing for the long term while managing volatility can result in a better retirement outcome.

Source: J.P. Morgan Asset Management analysis using data from Bloomberg. Returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Indices do not include fees or operating expenses and are not available for actual investment. The hypothetical performance calculations are shown for illustrative purposes only and are not meant to be representative of actual results while investing over the time periods shown. The hypothetical performance calculations for the respective strategies are shown gross of fees. If fees were included, returns would be lower. Hypothetical performance returns reflect the reinvestment of all dividends. The hypothetical performance results have certain inherent limitations. Unlike an actual performance record, they do not reflect actual trading, liquidity constraints, fees and other costs. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact of certain market factors such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. Returns will fluctuate and an investment upon redemption may be worth more or less than its original value. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2019.



Life expectancy probabilities

If you're 65 today, the probability of living to a specific age or beyond



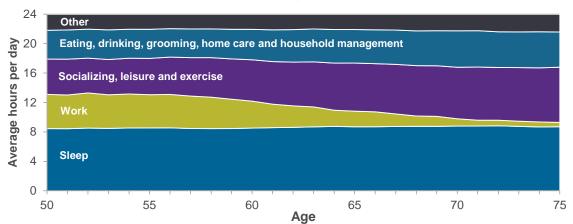
PLAN FOR LONGEVITY

Average life expectancy continues to increase and is a mid-point not an end-point. You may need to plan on the probability of living much longer – perhaps 30+years in retirement – and invest a portion of your portfolio for growth to maintain your purchasing power over time.

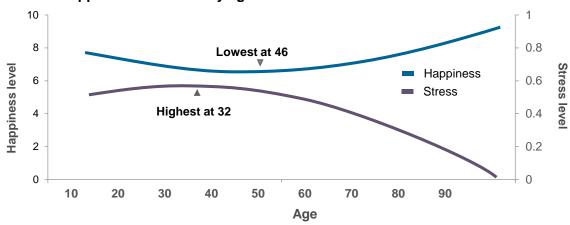


Changes in lifestyle

Amount of daily hours spent per activity by age



Levels of happiness and stress by age



SPEND TIME PLANNING YOUR TIME

Retirement offers the gift of time to do the things that matter most to you. While our happiest years may be in retirement, the transition isn't always a walk on the beach. Knowing what activities and social connections are fulfilling prior to retiring can ease the stress often associated with this new life stage.

Values include people who do and do not participate in the activities. Values are weighted by the age and then averaged across rolling five-year age groups. Each category includes time spent traveling to and from the activity if applicable.

Source (top chart): Bureau of Labor Statistics American Time Use Survey 2016, J.P. Morgan Asset Management analysis.

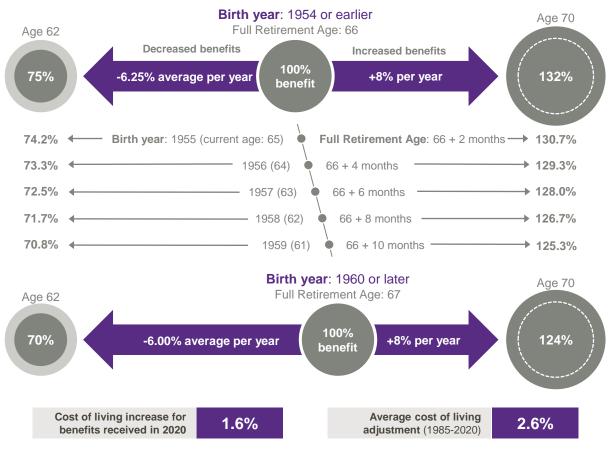
Source (bottom chart): Carol Graham & Julia Ruiz Pozuelo, 2017. "Happiness, stress and age: how the U curve varies across people and places," Journal of Population Economics, 256. Values are for married Americans.



Social Security timing tradeoffs

Benefits differ by birth year and claim age

Full Retirement Age = 100% benefit



UNDERSTAND THE TRADEOFFS

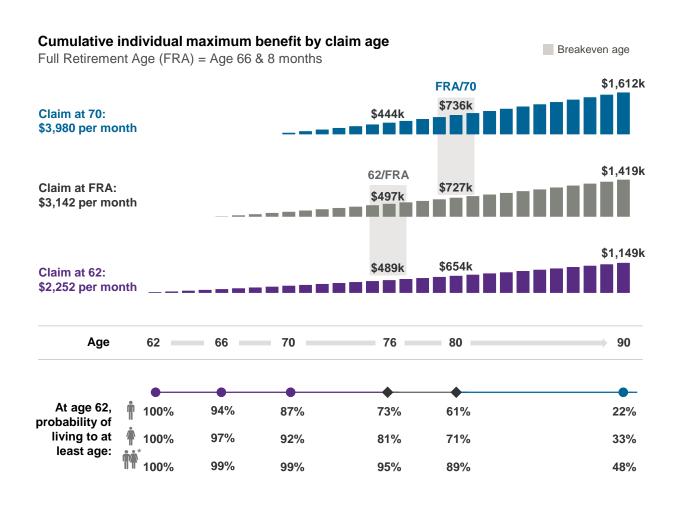
Deciding when to claim benefits will have a permanent impact on the benefit you receive. Claiming before your full retirement age can significantly reduce your benefit, while delaying increases it.

In 2017, full retirement age began transitioning from 66 to 67 by adding two months each year for six years. This makes claiming early even more of a benefit reduction.

For illustrative purposes only. The Social Security Amendments Act of 1983 increased FRA from 65 to 67 over a 40-year period. The first phase of transition increased FRA from 65 to 66 for individuals turning 62 between 2000 and 2005. After an 11-year hiatus, the transition from 66 to 67 (2017-2022) will complete the move. This material should be regarded as educational information on Social Security and is not intended to provide specific advice. If you have questions regarding your particular situation, you should contact the Social Security Administration and/or your legal or tax advisors. Source: Social Security Administration, J.P. Morgan Asset Management.



Maximizing Social Security benefits – maximum earner



PLANNING OPPORTUNITY

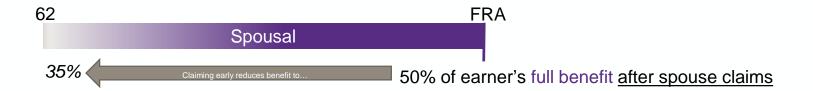
Delaying benefits means increased Social Security income later in life, but your portfolio may need to bridge the gap and provide income until delayed benefits are received.

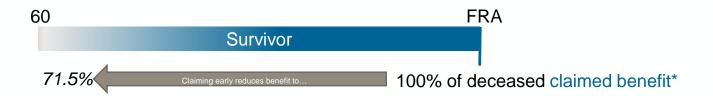
Source: Social Security Administration, J.P. Morgan Asset Management.

*Couple assumes at least one lives to the specified age or beyond. Breakeven assumes the same individual, born in 1958, earns the maximum wage base each year, retires at the end of age 61 and claims at 62 & 1 month, 66 & 8 months and 70 respectively. Benefits are assumed to increase each year based on the Social Security Administration 2019 Trustee's Report intermediate estimates (annual benefit increase of 2.6%). Monthly amounts with the cost of living adjustments (not shown on the chart) are: \$2,252 at age 62; \$3,485 at FRA; and \$4,891 at age 70. Exact breakeven ages are 76 & 5 months and 80 & 5 months.



Claiming ages: Spousal and survivor (born 1960 or later)





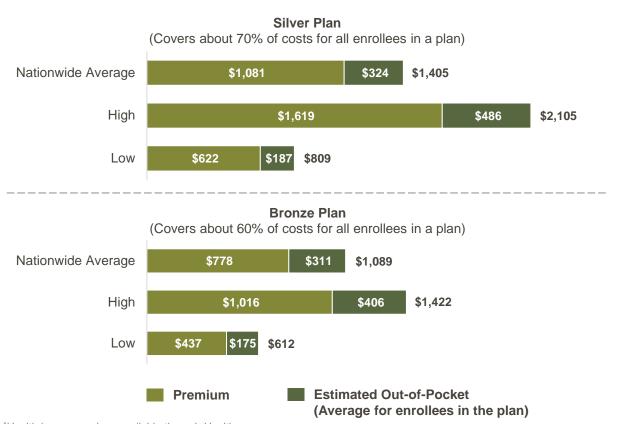
- If spouse died prior to full retirement age and had not claimed benefits, survivor benefit will be based on the FRA amount.
- If spouse died after full retirement age and had not claimed benefits, survivor benefit will be based on the benefit amount at the age of death.
- Spousal benefit reduction for claiming early when FRA is 66 is 30%. Survivor benefit reduction amounts remain the same across all FRAs.

Source: Social Security website on January 14, 2020, Not personal advice- check with the Social Security Administration per your specific situation



Health care costs for retirees before age 65

2020 Marketplace¹ plan monthly cost estimate for one person: non-smoker, age 64



¹Health insurance plans available through Healthcare.gov.

Source: Healthcare.gov, Kaiser Family Foundation subsidy calculator as of December 16, 2019; https://www.kff.org/interactive/subsidy-calculator/. Low costs shown above are for zip code 11217 in Brooklyn, New York and high costs are for zip code 32320 in Apalachicola, Florida.

COST WILL VARY BY GEOGRAPHY, AGE AND OTHER FACTORS. FOR YOUR ESTIMATE, SEE:

https://www.kff.org/interactive/subsidy-calculator/

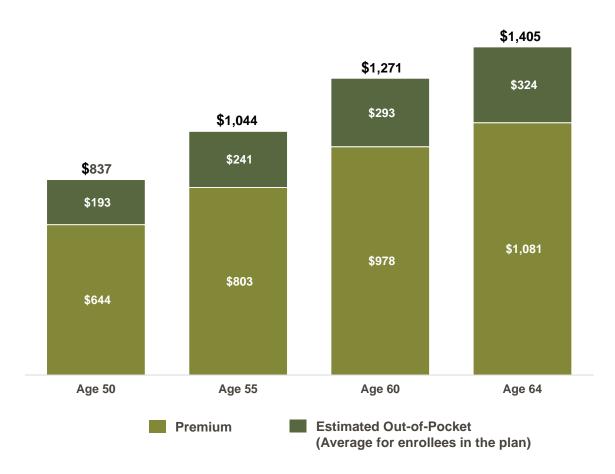
Enrollees in Bronze plans may be healthier than those in Silver plans. For any specific individual, out-of-pocket expenses will likely be higher in a Bronze plan. Regardless of which plan type you choose, deductibles and co-payments will vary from plan to plan.

Premium tax credits and cost-sharing subsidies may be available to some individuals with Modified Adjusted Gross Income below \$49,960 for an individual or \$67,640 for a couple in most states.



This is not meant to be personal advice. Those with incomes below \$17,236 for an individual or \$23,336 for a couple may not be eligible for a subsidy in some states; other states have lower limits. A qualifying plan will allow you to make contributions to a Health Savings Account (HSA). When searching for a qualifying plan on the Marketplace website, look for the HSA eligible flag in the upper left-hand corner or use the filter option in the right-hand corner. Qualifying plans may provide less coverage; be sure to evaluate tradeoffs, especially if you are eligible for a premium subsidy.

2020 Marketplace plan monthly cost estimate for one person: non-smoker, national average



UNDERSTAND COSTS SPECIFIC TO YOUR SITUATION

Marketplace plan insurers typically charge older individuals more than younger ones.

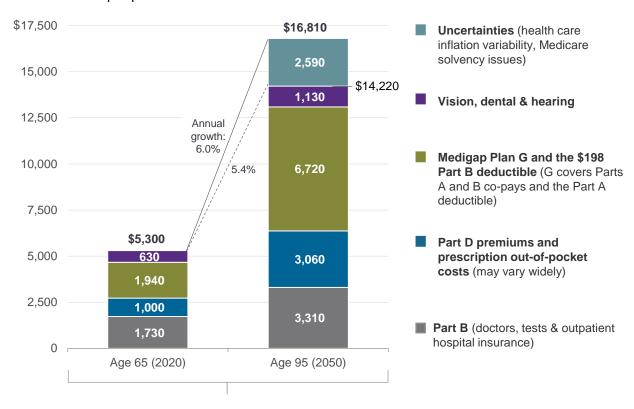
To account for age-related increases plus inflation, use an annual cost increase of **6.0%** for health care costs prior to Medicare eligibility.

Cost trends and increases due to age vary by geography. For more information see: https://www.kff.org/interacti ve/subsidy-calculator/



Rising annual health care costs in retirement

Original Medicare costs in retirement (in 2020 dollars) Annual amount per person



A GROWING CONCERN

Given variation in health care cost inflation from year to year, it may be prudent to assume an annual health care inflation rate of 6.0%, which may require growth as well as current income from your portfolio in retirement.

In 2020 Dollars

Notes: Future value age 95 estimated total median cost is \$30,440. Today's dollar calculation used a 2% discount rate to account for overall inflation. Medigap premiums increase due to age, in addition to annual inflation, except for the following states: AR, CT, MA, ME, MN, NY, VT, WA. In addition, most policies sold in these states may not increase due to age: AZ., FL, GA, ID, NH and MO. If Plan G is not available, analysis includes the most comprehensive plan available.



Annual Medicare surcharges

The surcharge amount is the same for all income levels within a band

If you go over a threshold, you pay the additional premium for that band

Modified Adjusted Gross Income (2 Years Prior)		
A FILING SINGLE	<u>QQ</u> FILING JOINTLY	Additional Annual Premium Amount Per Person Parts B & D in 2020
\$87,000 - \$109,000	\$174,000 - \$218,000	\$840
\$109,001 - \$136,000	\$218,001 - \$272,000	\$2,101
\$136,001 - \$163,000	\$272,001 - \$326,000	\$3,385
\$163,001 - \$499,999	\$326,001 - \$749,000	\$4,657
\$500,000 or more	>\$750,000 or more	\$5,081

SURCHARGE DETAILS

There may be a bigger impact for singles and surviving spouses:
Medicare surcharge thresholds for singles are half of the thresholds for couples.

Couples are less likely to be affected unless they have significant pensions, work or rental income.

Filing an appeal?

If you have stopped work or you have lower income due to circumstances outside of your control, you might be eligible for an appeal. See form SSA-44 for details:

https://www.ssa.gov/forms/ssa-44-ext.pdf



Federal taxes; states may differ. This is not intended to be individual tax advice. Consult your tax advisor.

³ There are eligibility requirements. Qualified medical expenses include items such as prescriptions, teeth cleaning and eveglasses and contacts for a medical reason. Cosmetic procedures, such as teeth whitening, and general health improvement, such as gym memberships and vitamins, are not qualified expenses. A 20% tax penalty applies on non-qualified distributions prior to age 65. After age 65, taxes must be paid on non-qualified distributions. See IRS Publication 502 for details.



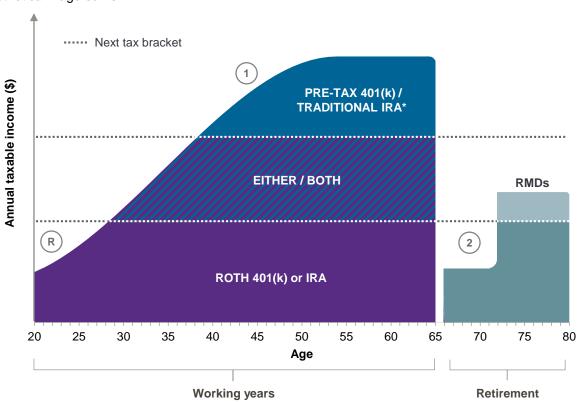
¹ Income and other restrictions may apply to contributions. Non-tax deductible may also be referred to as after-tax contributions. Tax penalties usually apply for early withdrawals. Qualified withdrawals are generally those taken over age 59½; gualification requirements for amounts converted to a Roth from a traditional account may differ; for some account types, such as Roth accounts, contributions that are withdrawn may be qualified. See IRS Publications 590 and 560 for more information.

² Withdrawals from after-tax 401(k) and non-deductible IRAs must be taken on a pro-rata basis including contributions and earnings growth. For nondeductible IRAs, all Traditional IRAs must be aggregated when calculating the amount of pro-rata contributions and earnings growth.

Evaluate a Roth at different life stages

Changes in lifetime taxable income

Hypothetical wage curve



TAX DIVERSIFICATION

Managing taxes over a lifetime requires a balance of your current and future tax pictures. Make income tax diversification a priority to have more flexibility and control in retirement.

Rule: Contributing to a Roth early in your career and shifting as your income increases.

- 1. Roth 401(k) contributions in peak earning years if wealth is concentrated in tax-deferred accounts.
- 2. Proactive Roth conversions in lower income retirement years if RMDs are likely to push you into a higher bracket.

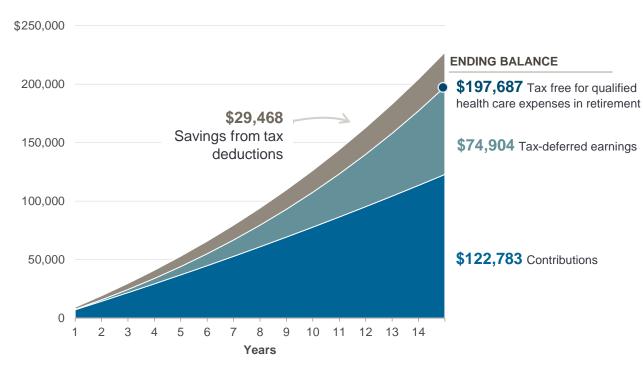
^{*}If eligible to make a deductible contribution (based on your MAGI). The illustration reflects savings options into Traditional and Roth IRA accounts, as well as into pre-tax and Roth 401(k) accounts. RMD = Required Minimum Distributions, which are typically due no later than April 1 following the year the owner turns 72 and are calculated every year based on the year-end retirement account value and the owner/plan participant's life expectancy using the IRS Uniform or Joint Life Expectancy Table. Employer contributions are typically pre-tax and are subject to tax upon distribution.



Maximizing an HSA for health care expenses in retirement

Health Savings Account (HSA) savings are triple tax advantaged¹

Maximum annual family contribution, 6% return and 24% marginal tax rate



MAKE THE MOST OF IT

If you are enrolled in a qualified high-deductible health plan and are eligible to contribute to a Health Savings Account, be sure to open and fund your HSA.

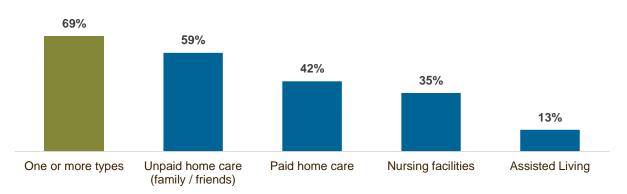
Investing your HSA contributions for the long term and paying for current health care expenses out of income or short-term savings can provide significant tax-free funds for health care expenses in retirement.

Must have a qualifying high-deductible health plan to make contributions. Funds in the HSA may be withdrawn tax free for qualified medical expenses unless a credit or deduction for medical expenses is claimed. After age 65 funds also may be withdrawn at ordinary income tax rates without penalty for any reason. Some health insurance premiums may be qualified expenses such as COBRA coverage, coverage while receiving state or Federal unemployment compensation, Medicare Part B and D premiums and qualified long-term care insurance premiums up to certain limits, but excludes Medigap / Medicare supplement policies and most long-term care policies that include annuity income or life insurance. See IRS Publications 969 and 502. This is not intended to be individual tax advice; consult your tax advisor.

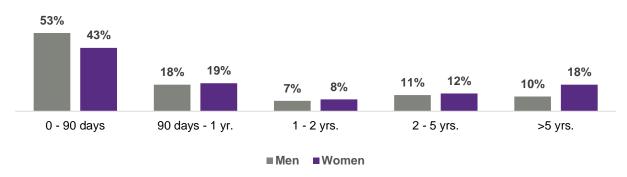
The above example is for illustrative purposes only and not indicative of any investment. Does not include account fees. Present value of illustrated HSA after 15 years is \$146,885. Estimated savings from tax deductions at a 37% marginal rate are \$45,430. Assumes cash or income used for health care expenses is not withdrawn from an account with a tax liability. The example assumes the HSA is fully invested; if \$2,000 was held in a cash account, the illustrated cumulative HSA account value would be \$192,894. 2020 family contribution limit is \$7,100 adjusted for inflation of 2.0% for 30 years. Individual 2020 contribution limit is \$3,550. \$197,687 is projected to be enough to fund about 13 years of projected average qualified Medicare-related health care expenses for a couple.



Lifetime probability of needing long-term care (LTC) services by type



Lifetime distribution and duration of need for significant LTC at age 65



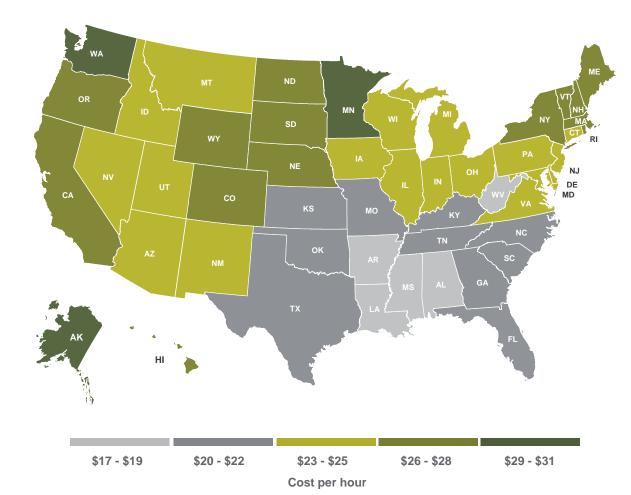
CONSIDER THE RANGE OF POSSIBLE CARE NEEDS

There is a high likelihood of needing care. This often starts at home before progressing to other settings.

While considering the range of possibilities, take into account that 1 in 10 men and nearly 2 in 10 women are projected to have a significant care need for more than 5 years.

Top chart: Includes all types of care including managing finances, taking medications, shopping, using transportation and food preparation, as well as more significant care needs. Bottom chart: Significant care needs includes two or more activities of daily living such as eating, dressing, bathing, transferring and toileting or severe cognitive impairment. Those who meet the cognitive impairment criteria who require care for less than 90 days are included in the 90 days – 1 year category.





THE COST OF CARE

The median cost for a home health aide is \$23 an hour but can vary widely. While the most common starting point for care is at home, it may progress to other settings.

The national annual median cost for a private room in a nursing home is \$102,200. These costs are commonly between \$85,000 and \$120,000 but may be lower or higher. For costs specific to your area see:

www.genworth.com/costofcare

Notes: Costs also vary within states by county and city. Median values are rounded to the nearest dollar. For more information on cost of care in your location see the Genworth website at: www.genworth.com/costofcare



Long-term care planning solutions

Consider utilizing more than one solution



FAMILY

Family and friends may provide some assistance or help coordinate care



SAVINGS

Savings may fund paid care – and some other expenses such as travel may go down



INSURANCE

Options include traditional long-term care insurance, combination life and annuity products, life insurance for a surviving spouse, and deferred annuities for income late in life



CONTINUING CARE RETIREMENT COMMUNITIES

Known as CCRCs, these are communities where people start living on their own and as care needs develop additional services or facilities are provided (costs and services vary)²



HOME EQUITY

Second homes may be sold; the home equity in your primary residence may be used if your other options are limited; credit availability and home values may fluctuate

MEDICAID

After exhausting other options

Rules to qualify vary by state but generally you must be low income with few assets to qualify¹



START PLANNING EARLY

- Will you want to move closer to your family?
- If insurance affordability is an issue, is it feasible to buy less coverage and combine it with other solutions?
- Are you saving in a Health Savings Account (HSA)? HSAs may be used tax free for qualified expenses or after tax without penalty after age 65 for non-qualified expenses.³
- If you want care at home, consider how you will remain socially connected and the potential costs of doing so.

³ HSAs may be used to fund qualified traditional long-term care policy premiums up to certain limits. Necessary home improvements may qualify if they don't improve the value of your home. Services for chronically ill individuals who are unable to perform two or more activities of daily living or who have severe cognitive impairment may be qualified if they are part of a prescribed plan from a licensed practitioner. For a list of qualified expenses see IRS Publication 502 or consult your tax advisor; this is not meant to be personal tax advice.



¹ If you transfer assets to others there is a five-year "look back" where the government will recover the assets transferred if you go on Medicaid. This is not personal advice: consult an Eldercare attorney if you have questions about Medicaid. Medicaid qualification and look-back rules.

² There are about 2,000 CCRCs in the United States. Mylifesite.net has information about Continuing Care Retirement Communities (CCRCs).

Short-term goals

Includes emergency reserve fund of total spending needs for 3-6 months

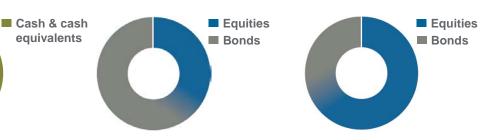
Medium-term goals

5-10 years, e.g. college, home

Long-term goals

Stocks ■ Bonds ■ 50/50

15+ years, e.g. retirement

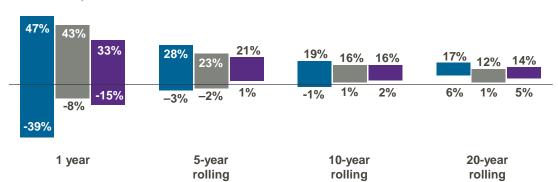


DIVIDE AND CONQUER

Aligning your investment strategy by goal can help you take different levels of risk based on varying time horizons and make sure you are saving enough to accomplish all of your goals – not just the ones that occur first.

Range of stock, bond and blended total returns

Annual total returns, 1950-2019

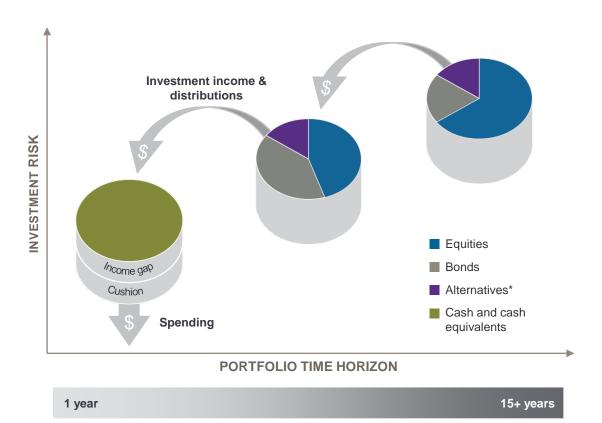


Source (top chart): J.P. Morgan Asset Management.

Source (bottom chart): Barclays, Bloomberg, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2019. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Bloomberg Barclays Aggregate thereafter.



Structuring a portfolio in retirement – the bucket strategy



TIME-BASED SEGMENTATION

Aligning your time horizon with an investment approach may help you be more comfortable with maintaining diversified portfolio allocations in retirement.

For the near-term portfolio, consider maintaining:

- Funds to cover 1-3 years worth of the gap between your income and spending needs
- A cushion for unexpected expenses

For illustrative purposes only. Source: J.P. Morgan Asset Management. Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. Equity securities are subject to stock market risk, meaning that stock prices in general may decline over short or extended periods of time. Investing in alternative assets involves higher risks than traditional investments and is suitable only for the long term. They are not tax efficient and have higher fees than traditional investments. They may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain.

Longer-term &

legacy needs



Intermediate-term

needs

Near-term

needs

J.P. Morgan Asset Management – Index definitions & disclosures

Unless otherwise indicated, all illustrations are shown in U.S. dollars.

Past performance is no guarantee of comparable future results.

Diversification does not guarantee investment returns and does not eliminate the risk of loss.

Indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market. This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

The Barclays Capital U.S. Aggregate Index represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise

The price of **equity** securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk," meaning that stock prices in general may decline over short or extended periods of time.

Investing in **alternative assets** involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

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NOT FDIC INSURED. NO BANK GUARANTEE. MAY LOSE VALUE.



Prioritizing long-term retirement savings

Taxable account

IRA³

Additional payments on lower interest loans (such as student loans with interest <6%)2

Defined Contribution savings to maximize employer match

Start here

brokerage accounts

Tax-advantaged retirement savings accounts

Additional loan payments / debt reduction

Tax-advantaged savings for health care expenses

GETTING STARTED

Start with emergency savings and make sure to

available.

accounts.

take advantage of employer

matching funds if they are

If long-term retirement savings are your objective,

leave HSA funds in your account to grow while you

fund current health care

expenses from other

Prioritizing goals **Additional Defined Contribution savings** (up to the maximum contribution) Additional Health Savings (HSA)1 Additional payments on higher interest loans (credit card debt / student loans with interest >6%)2 (if available) HSA (Health Savings Account) if eligible for match¹ Emergency reserve (3 – 6 months of living expenses) Savings accounts and taxable

³ Income limits may apply for IRAs. If ineligible for these, consider a non-deductible IRA or an after-tax 401(k) contribution. Individual situations will vary; consult your tax advisor.



¹ Must have a high-deductible health insurance plan that is eligible to be paired with an HSA. Those taking Social Security benefits age 65 or older and those who are on Medicare are ineligible. Tax penalties apply for non-qualified distributions prior to age 65; consult IRS Publication 502 or your

² This assumes investment in a diversified portfolio may earn 6% over the long term. Actual returns may be higher or lower. Generally, consider making additional payments on loans with a higher interest rate than your long-term expected investment return.