# OPTIMIZING HEALTHCARE COSTS: QUANTIFYING THE ROLE OF ANNUAL WELLNESS VISITS

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## Executive Summary

Annual Wellness Visits (AWVs) play a crucial role in Medicare's preventive care services, aiming to improve health outcomes through early risk identification and personalized prevention plans. Introduced as part of the Affordable Care Act (ACA) in 2010, AWVs are fully covered under Medicare Part B, focusing on long-term health management rather than immediate medical concerns.

This report investigates the impact of AWV utilization on Medicare Fee-For-Service (FFS) enrollees' cost of care, using data from 2016-2022. Key findings reveal that AWV utilization has steadily increased over time, reaching 30% in 2022. However, disparities exist, with lower utilization rates among younger enrollees, men, dual-eligible members, and those in socioeconomically disadvantaged areas. Notably, AWV utilization is associated with 19% lower risk-adjusted costs compared to non AWV utilizers, with even greater cost savings observed among dual-eligible individuals and those with chronic conditions like diabetes and cardiovascular disease.

While these findings suggest a relationship between AWV utilization and lower healthcare costs, it is essential to acknowledge that this association is not necessarily causal. For example, selection bias may be at play, with those who engage in AWVs potentially having better health ownership and more proactive attitudes toward their health. As such, the lower costs among AWV utilizers could reflect inherent differences in health behaviors rather than the direct effect of the wellness visit itself.

The analysis highlights that while AWVs are beneficial in reducing healthcare costs, only 40% of Medicare FFS members completed an AWV in 2022, pointing to potential barriers to access. Future studies will explore the longitudinal impact of AWVs on healthcare costs and the influence of social determinants of health on AWV utilization.

## Background

Annual Wellness Visits are an essential component of Medicare’s preventive care services. These visits are designed to help Medicare and Medicare Advantage beneficiaries maintain their health and well-being through early identification of health risks, personalized prevention plans, and fostered relationships between patients and their care partners. First introduced during the signing of the Affordable Care Act (ACA) in 2010, this service would become a mainstay in the evolving push towards patient-centered healthcare.

## What is an Annual Wellness Visit?

An Annual Wellness Visit is a yearly preventive healthcare appointment cover under Medicare part B, tailored for Medicare beneficiaries. These visits focus on evaluating health risks, promoting wellness, and developing personalized prevention plans in collaboration with their healthcare provider. This service is provided annually, at no cost to the beneficiary.

During the visit, a patient's primary care provider performs the following:

### Data Collection and Assessment

- **Health Risk Assessment**: This typically involves gathering information about the patient's medical history, family history, medications, lifestyle, and current health status.
- **Review of Functional Abilities and Level of Safety**: Assessments of activities of daily living, fall risk, and home safety are often included.
- **Measurement of Height, Weight, and Blood Pressure**: These basic measurements are taken to track changes and identify any potential health concerns.

### Personalized Care

- **Establishment of a Personalized Prevention Plan**: Based on the health risk assessment, the provider and patient collaborate to create a personalized plan focusing on health promotion, disease prevention, and early detection.
- **Detection of Cognitive Impairment**: Providers may conduct a screening for cognitive impairment if necessary.
- **Discussion of Advance Directives**: Providers may discuss advance care planning and help the patient understand their options for future healthcare decisions.

Initial data collection is performed during a beneficiary's first AWV. In subsequent AWVs, patient data is updated to maintain accuracy.

### Annual Wellness Visits vs. Regular Physician Visits

The two main differences between AWVs and regular physician visits are patient cost-sharing and focus on preventive care. AWVs are fully covered by Medicare Part B, which means zero cost-sharing for all Medicare and Medicare Advantage enrollees irrespective of their plan's benefit package. As detailed above, these AWVs center around illness prevention and active health management. While a regular doctor visit may occur in a response to a patient's specific health concerns at a given moment, AWVs attempt to address general health concerns on a longitudinal basis.

Understanding Annual Wellness Visit Impact – A Deep Dive

How has the introduction of a free wellness visit impacted the cost profile of Medicare enrollees? How do cost patterns differ across age, gender, dual status, and geographic area? Does AWV adherence have a meaningful impact on cost among members with Diabetes and Cardiovascular Disease (CVD)? We explore these questions below.

## Methodology

Wakely utilized the Limited Data Set (LDS), a 5% sample of all Medicare Fee-for-Service enrollees for years 2016 through 2022. These data contain Part A and Part B claims data and member-month level enrollment data. Claims cost was measured on an allowed basis. No pharmacy data were included in this study.

Risk scores for each year were calculated on the Center for Medicare and Medicaid Services (CMS) HCC v24 model, using prior year diagnosis codes from LDS claims data.

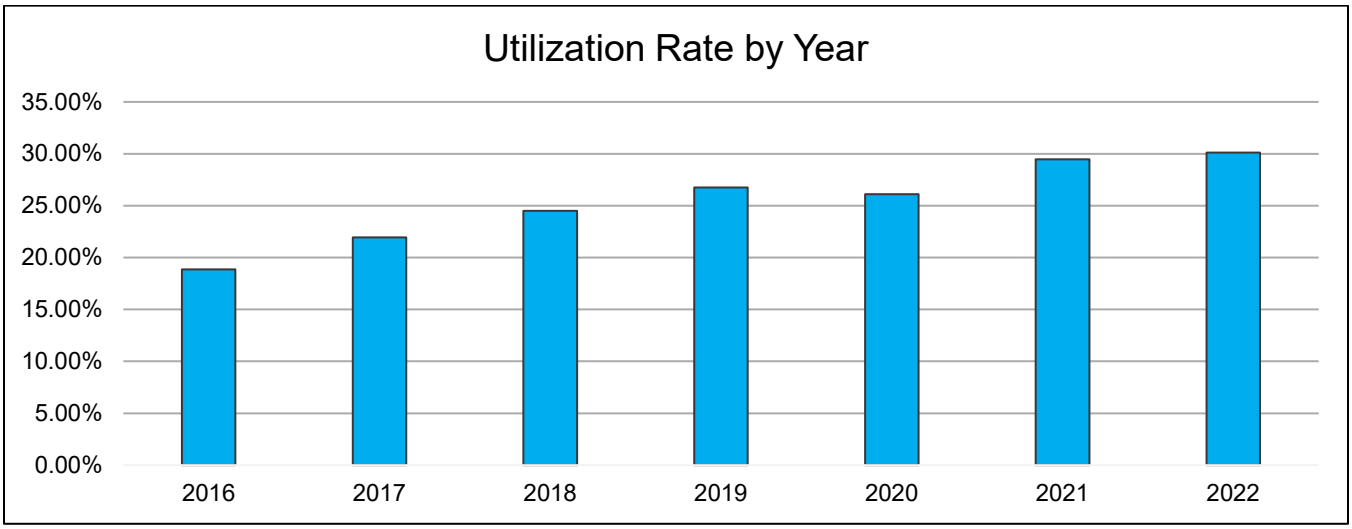
In analyzing AWVs, Wakely used the Social Deprivation Index (SDI) developed by the Robert Graham Center. The SDI score is a composite measure of area level deprivation based on seven demographic characteristics:

1. Percent of population with income less than 100% of the Federal Poverty Limit
2. Percent of population 25 years and older with less than 12 years of education
3. Percent of population ages 16-24 that are unemployed
4. Percent of households living in renter-occupied housing units (renting their home)
5. Percent of households living in crowded housing units
6. Percent of families that are single parent with dependent(s) less than 18 years of age
7. Percent of households with no transportation vehicle

## AWV Utilization Rate

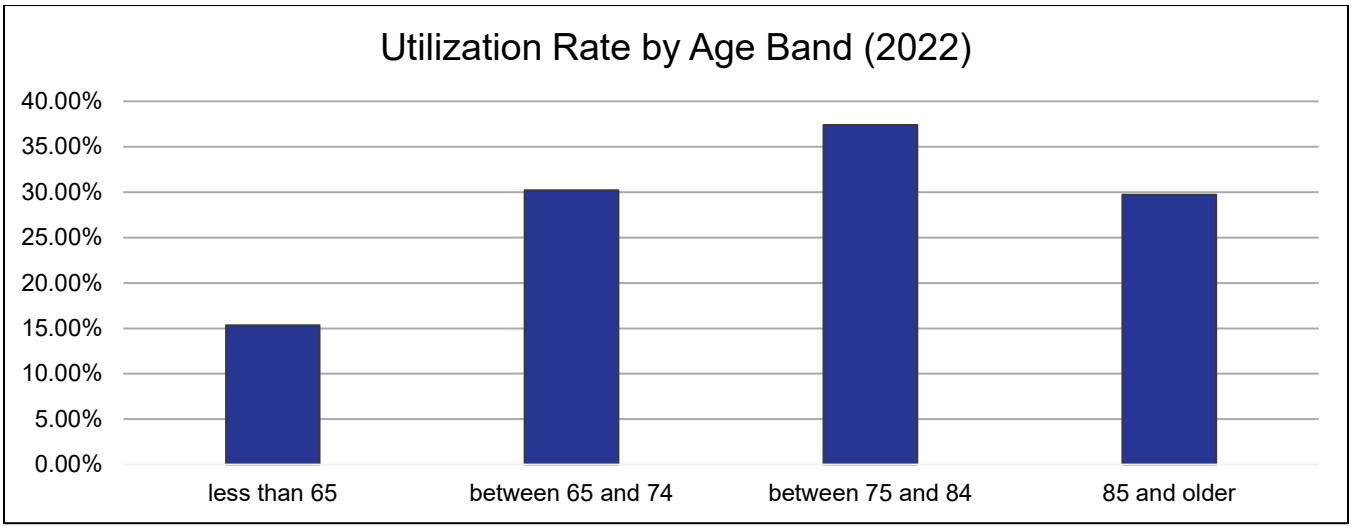
AWV utilization rate is defined as the percentage of individuals utilizing their AWV within a given year. We discuss utilization rate using the following examples.

***How has AWV utilization rate changed over the years following its introduction as part of the ACA?***



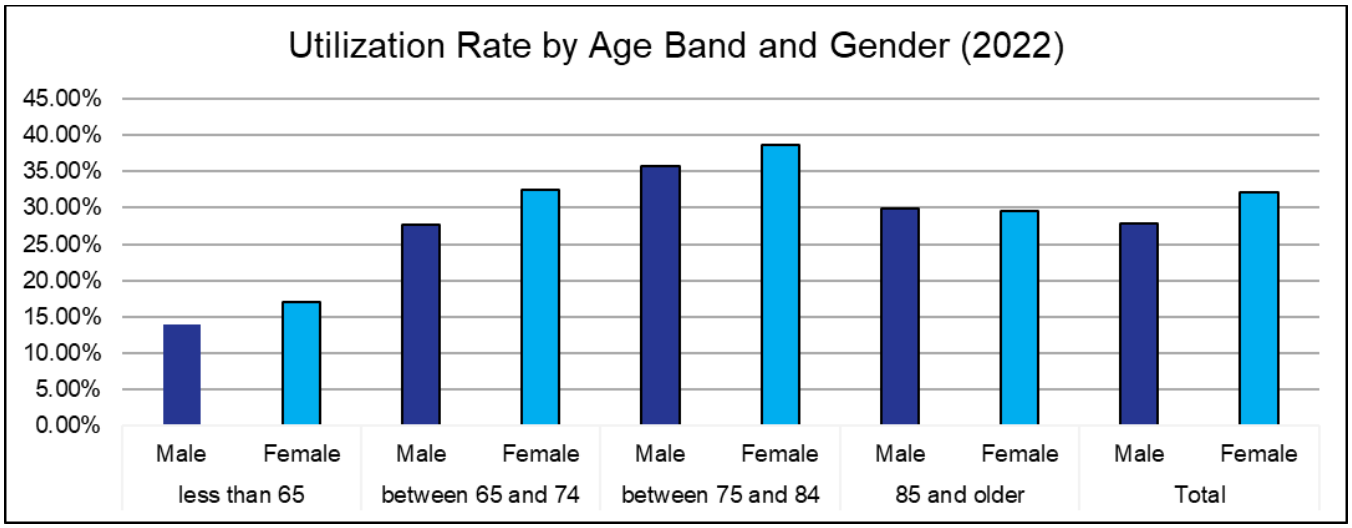

AWV utilization has been steadily increasing over the years, with a slight dip in 2020 due to the COVID-19 pandemic.

***How does utilization rate compare across age categories?***



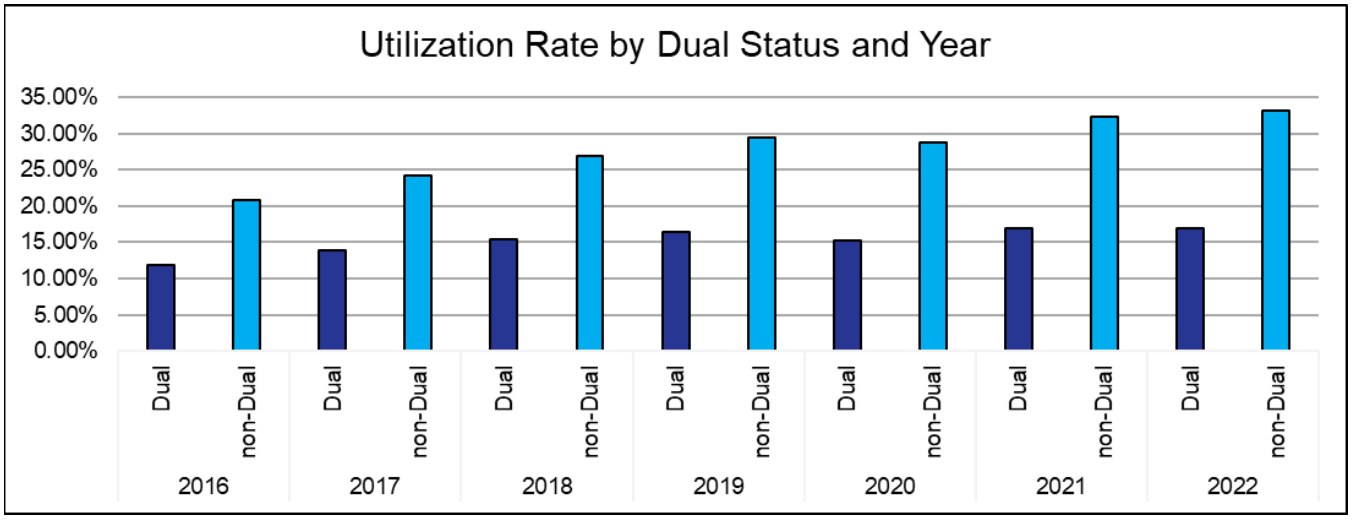

Utilization among individuals who are less than 65 years of age and qualified for Medicare through disability or ESRD was the lowest at 15%, compared to individuals between 75 and 84 at 37%. Data were limited to 2022 as this was the most recent complete data year available.

***How does utilization rate compare across both age and gender?***



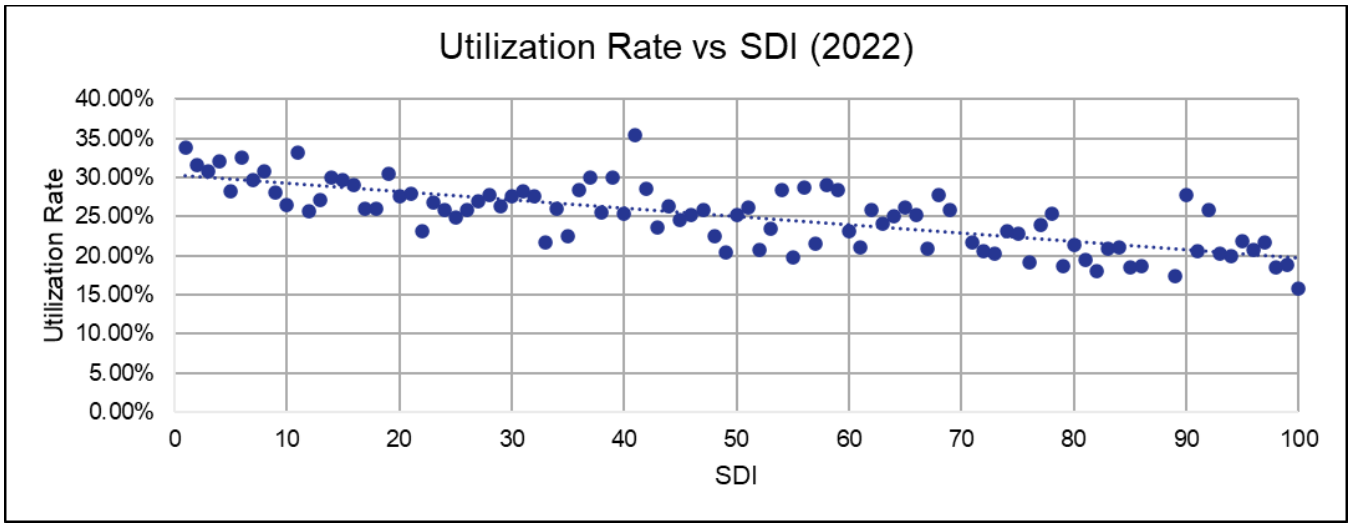

Women utilize AWVs at a higher rate than men across all age bands except 85 and older, where they slightly trail men. Overall in 2022, their utilization rate is 4% higher than men.

***How do Dual (eligible for both Medicare and Medicaid) and non-Dual members compare?***




Non-Duals utilize AWVs at a much higher rate across all years. Analyzing the relationship between utilization rate and SDI will help to determine the extent to which disadvantaged areas are associated with lower AWV use.

***What is the relationship between SDI and utilization rate?***

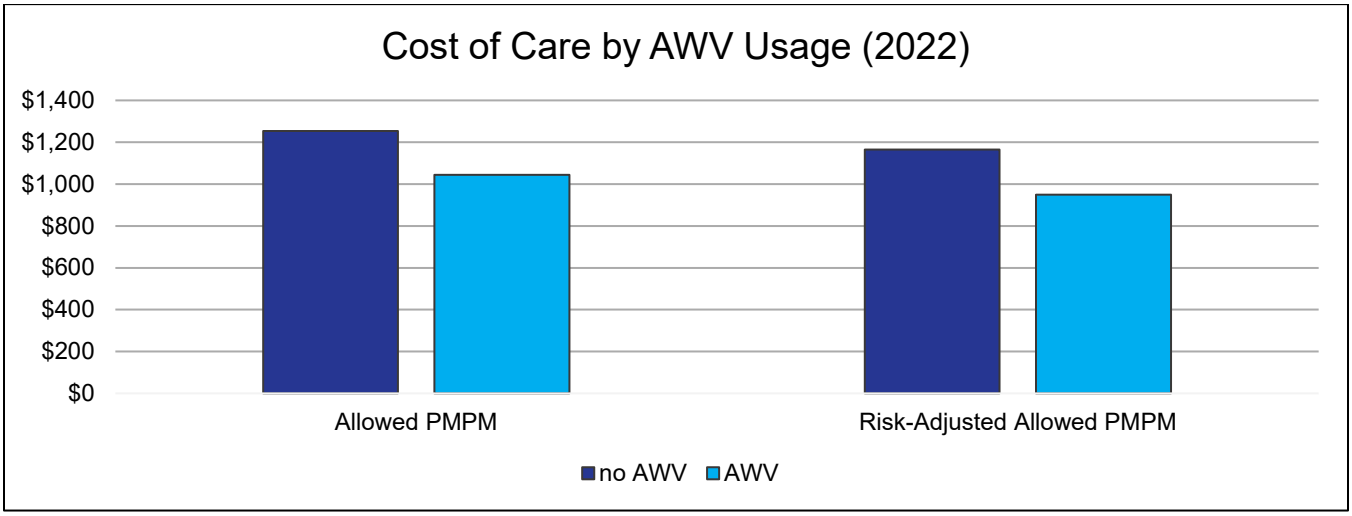



An increase in SDI score is associated with a decrease in AWV utilization rate among individuals residing in the area.

## Total Cost of Care

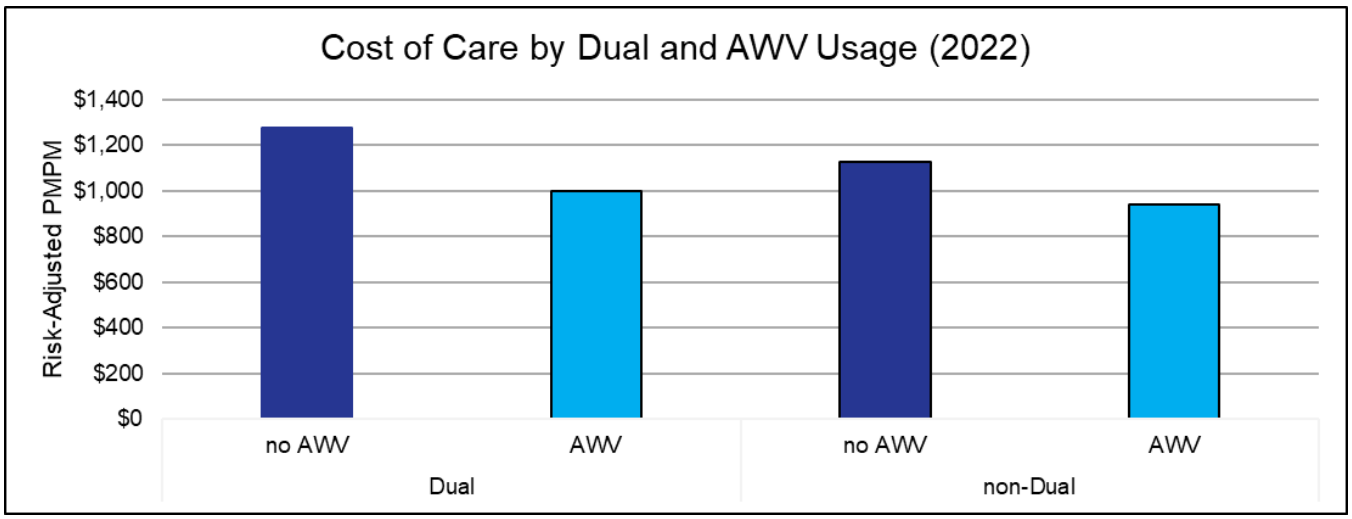
Total cost of care for a given member is measured by their allowed cost. These values are adjusted for risk score under the CMS HCC v24 model. We compare risk-adjusted total cost of care per-member-per-month (PMPM) across different cohorts below.

***What is the difference in total cost of care between Medicare Fee-For-Service members who did and did not utilize their free annual wellness visit?***



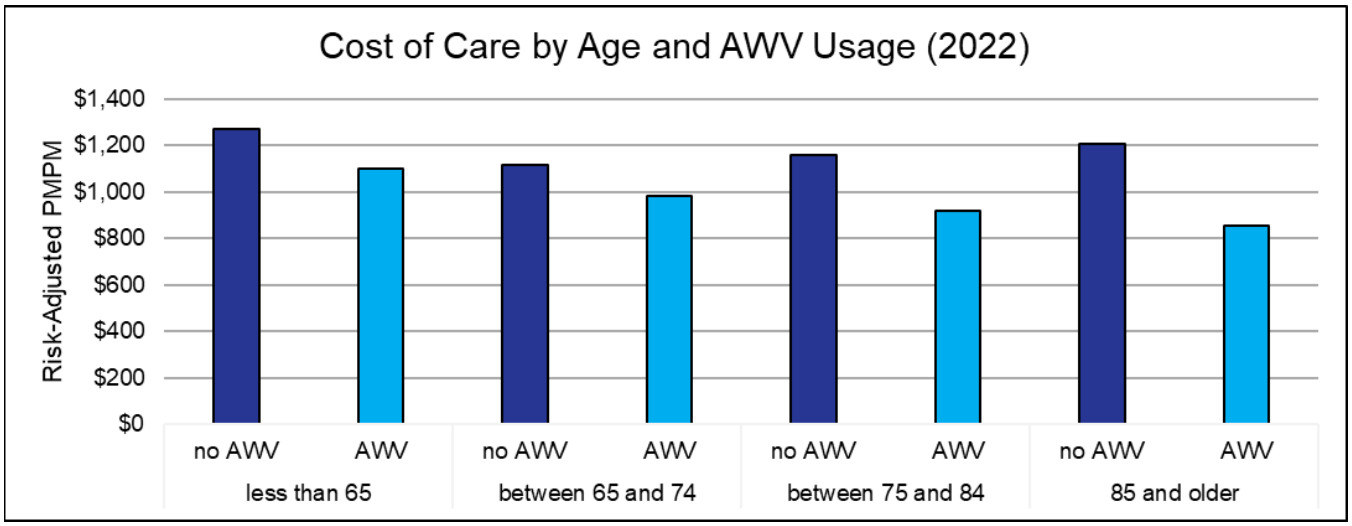
Members in 2022 who utilized their AWV experienced 17% lower costs than those who did not. When adjusting for risk, this difference increases to 19%.

***How do these differences compare between Dual and non-Dual members?***




Both Dual and non-Dual members experience lower risk-adjusted costs among members who completed their AWV. The cost reduction is 22% for Dual and 16% for non-Dual.

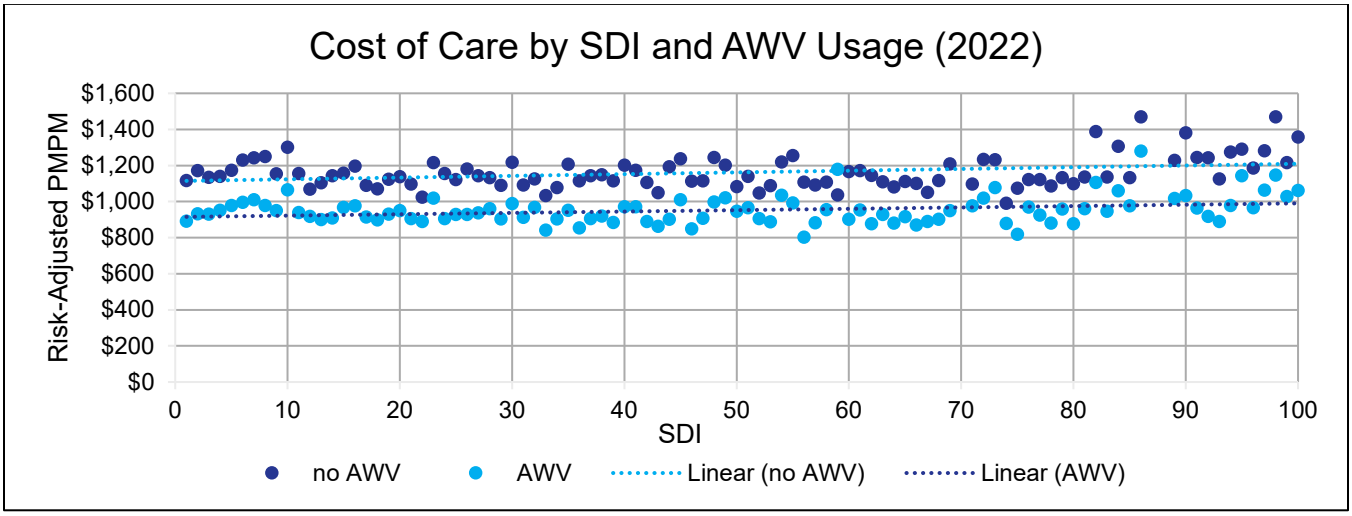
***How do these differences compare across different age bands?***




Among Medicare enrollees less than 65 years of age, AWV utilizers are 13% lower than non-utilizers in risk-adjusted total cost of care. Among those 65 and older, the cost differences between utilizers and non-utilizers increase with age.

***What is the relationship between total cost of care and SDI among AWV utilizers and non-utilizers?***

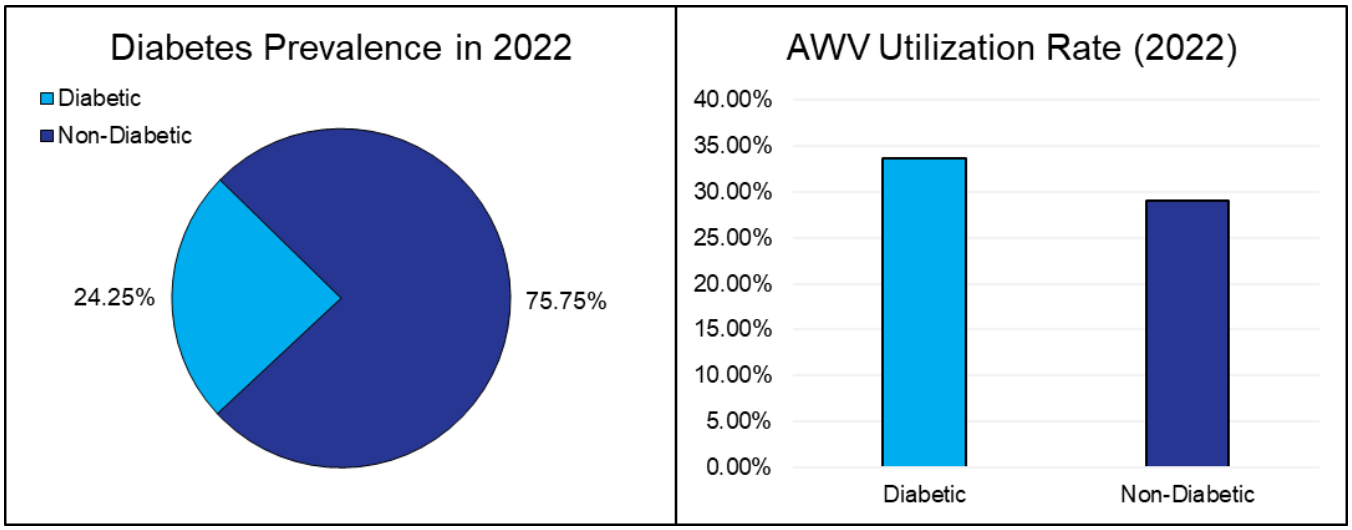
The relationship between total cost of care and SDI is not strong. However, AWV utilizers are consistently cheaper than non-utilizers across SDI scores.




## Impact of Annual Wellness Visits on Diabetic Medicare Enrollees

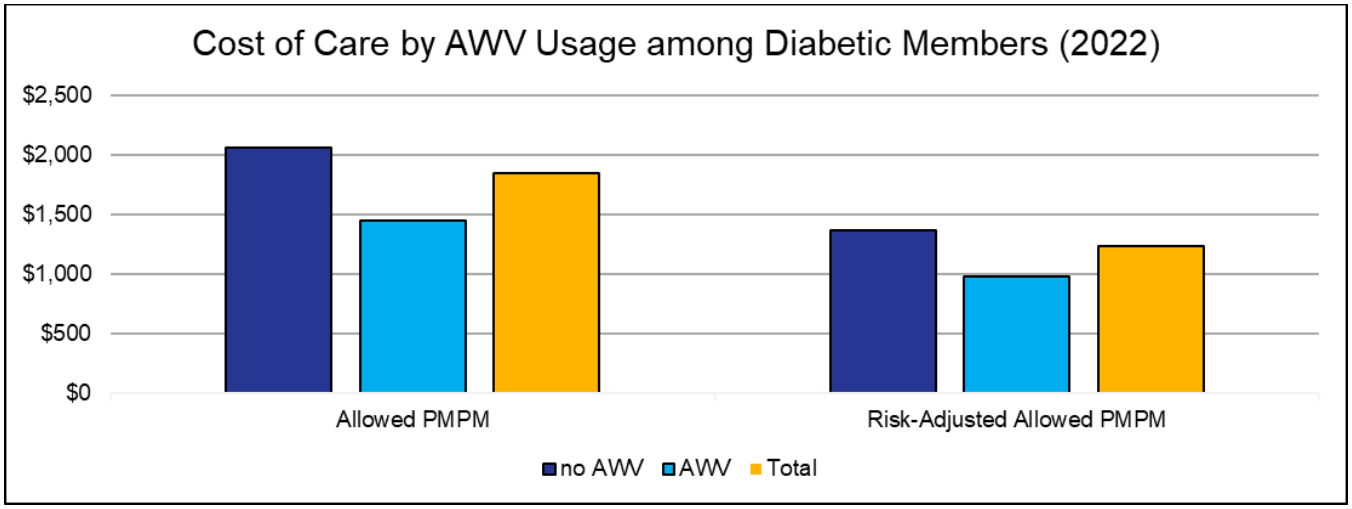
The above statistics certainly suggest that Annual Wellness Visit utilization is associated with lower total cost of care. How do those same measures compare when among individuals with diabetes? We investigate below.

***What is the prevalence of diabetes and how does AWV utilization rate differ between the diabetic and non-diabetic population?***



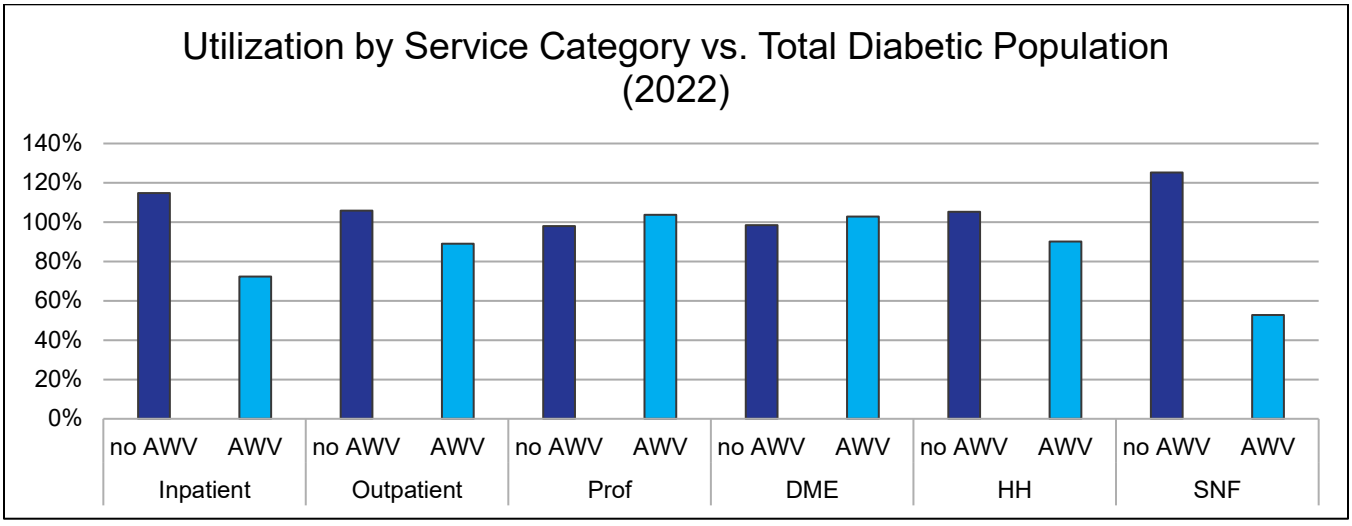
In 2022, the rate of diabetes among Medicare FFS was 24%. This population utilized their AWVs at a rate of 34%, compared to 29% for non-diabetics.

***What is the difference in total cost of care for AWV utilizers and non-utilizers among the diabetic population?***




The PMPM cost difference between AWV utilizers and non-utilizers is larger for the diabetic population than the total population for raw and risk-adjusted totals. Utilizers are 30% cheaper than non-utilizers on a raw total PMPM basis and 28% cheaper on a risk-adjusted basis.

***How does the distribution of service category utilization change among diabetic members, based on whether they have utilized their AWV?***

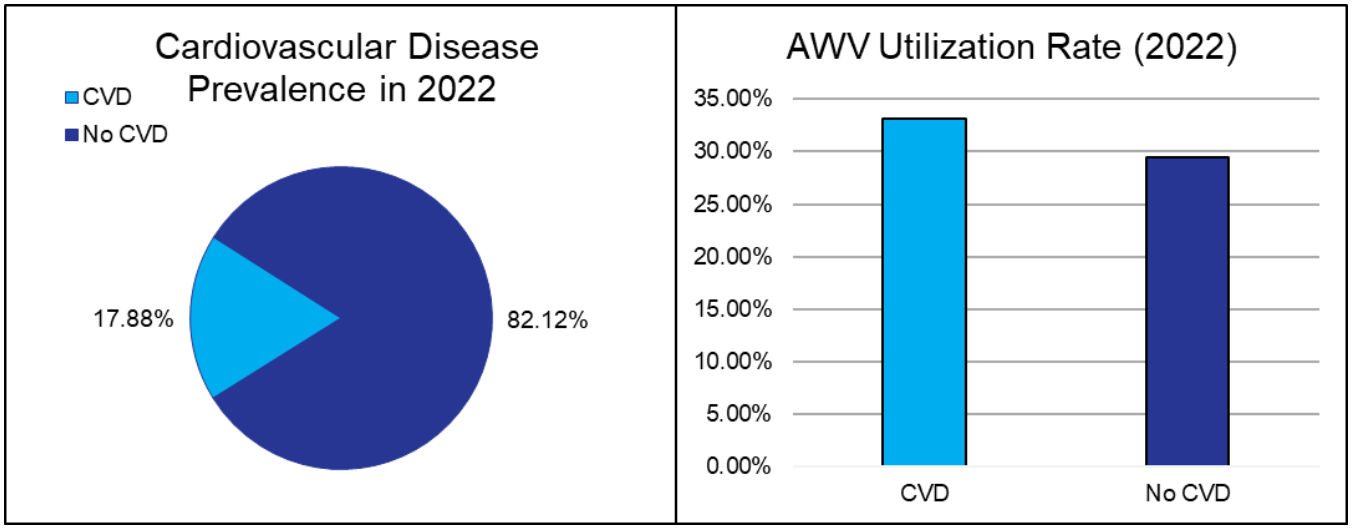



When compared to the total diabetic population, diabetic individuals who utilized their AWVs in 2022 utilized less Inpatient, Outpatient, Home Health, and Skilled Nursing Facility services compared to their non-utilizing counterparts.

# Impact of Annual Wellness Visits on Medicare Enrollees with Cardiovascular Disease

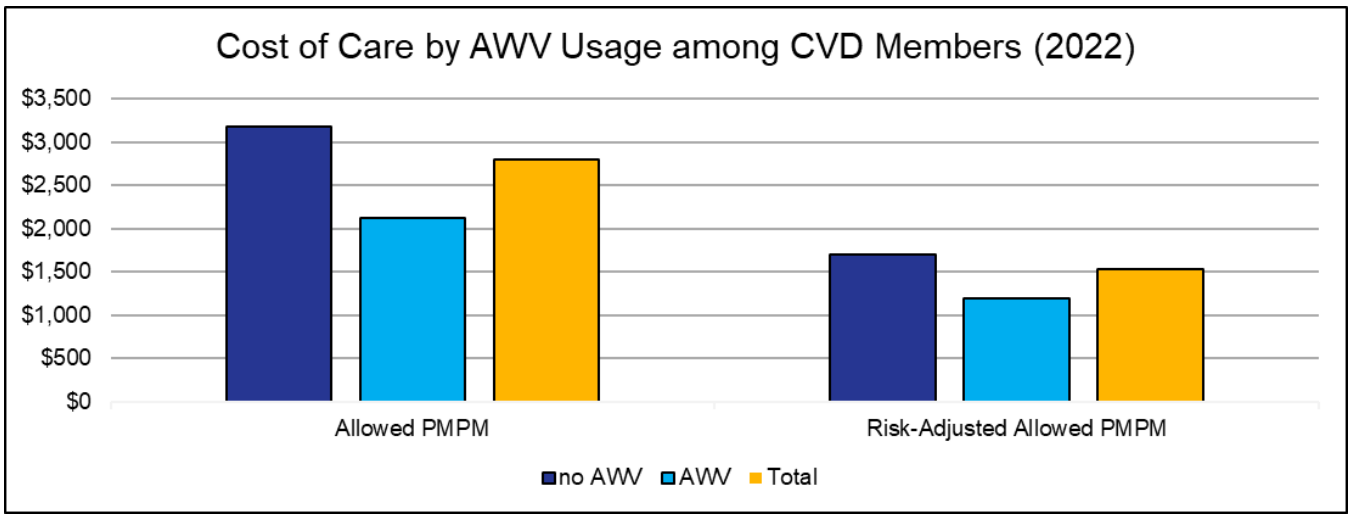
The differences in cost and utilization between diabetic AWV utilizers and non-utilizers is clear. Do these differences carry over to individuals with Cardiovascular Disease?

***What is the prevalence of CVD and how does AWV utilization rate differ between the CVD and non-CVD population?***



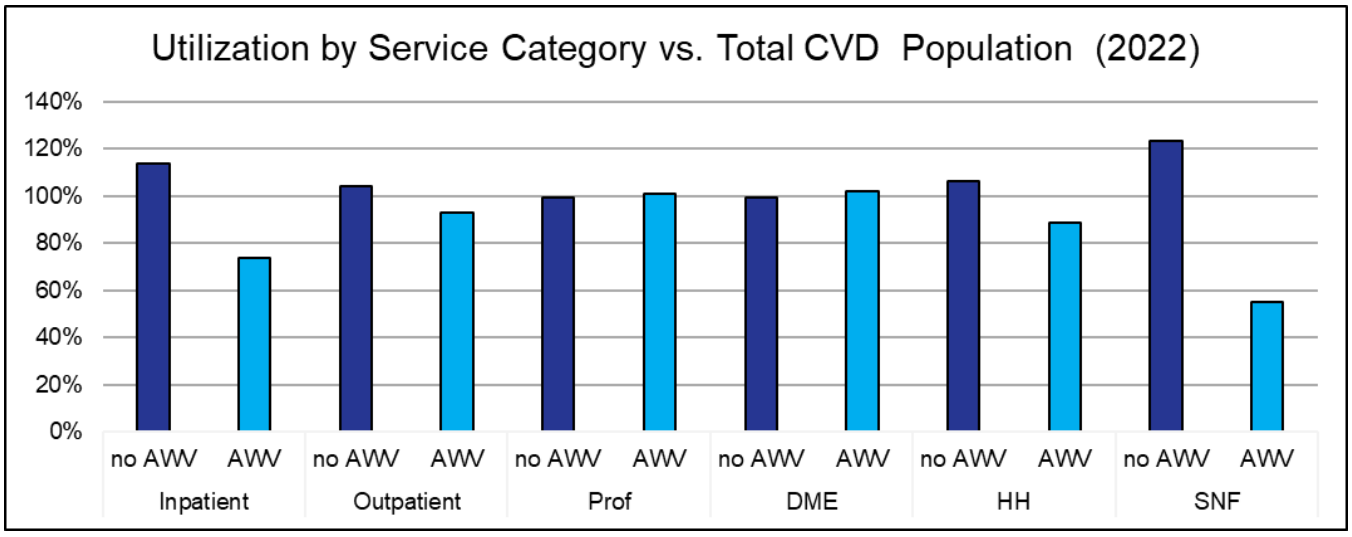

In 2022, 18% of Medicare FFS enrollees had cardiovascular disease. These individuals utilized AWVs at a rate of 33%, compared to 29% for individuals without cardiovascular disease.

***What is the difference in total cost of care for AWV utilizers and non-utilizers among those with cardiovascular disease?***



Members with cardiovascular disease have greater costs than diabetic members on both a raw and risk-adjusted basis. The cost difference between AWV utilizers and non-utilizers is also larger for CVD members. Utilizers are 33% cheaper than non-utilizers on a raw total PMPM basis and 30% cheaper on a risk-adjusted basis.

***How does the distribution of service category utilization change among members with cardiovascular disease, based on whether they have utilized their AWV?***




The impact of AWV utilization on service category mix for CVD individual is similar to that of diabetic individuals. CVD individuals who utilized their AWVs in 2022 utilized less Inpatient, Outpatient, Home Health, and Skilled Nursing Facility services and more Professional and DME services compared to their non-utilizing counterparts.

## Conclusion

Utilization of annual wellness visits is associated with lower total cost of care. On average, AWV utilizers cost $200 allowed PMPM lower than non-utilizers among traditional Medicare FFS enrollees in 2022. This disparity is larger for duals, members living in higher SDI areas, members with diabetes and members with cardiovascular disease. While AWV usage rate is on the rise, as of 2022 only 40% of the Medicare FFS population completed their AWV. Lower AWV utilization rates among individuals in higher SDI areas indicate potential socioeconomic barriers to access. In a follow-up study, Wakely will be analyzing the longitudinal aspects of AWVs on Medicare FFS costs and further investigate the relationship between annual wellness visits and social determinants of health.

# Appendix

**Table 1: Utilization Rate by Year**

| Year | Utilization Rate |
|---|---|
| 2016 | 18.87% |
| 2017 | 21.95% |
| 2018 | 24.49% |
| 2019 | 26.76% |
| 2020 | 26.12% |
| 2021 | 29.46% |
| 2022 | 30.13% |

**Table 2: Utilization Rate by Age Band**

| Age | Utilization Rate |
|---|---|
| less than 65 | 15.35% |
| between 65 and 74 | 30.20% |
| between 75 and 84 | 37.40% |
| 85 and older | 29.70% |

**Table 3: Utilization Rate by Age Band and Gender (2022)**

| Age | Gender | Utilization Rate |
|---|---|---|
| less than 65 | Male | 13.91% |
| | Female | 16.99% |
| between 65 and 74 | Male | 27.69% |
| | Female | 32.40% |
| between 75 and 84 | Male | 35.77% |
| | Female | 38.68% |
| 85 and older | Male | 29.83% |
| | Female | 29.62% |
| Total | Male | 27.84% |
| | Female | 32.05% |

**Table 4: Utilization Rate by Dual Status and Year**

| Year | Dual Status | Utilization Rate |
|---|---|---|
| 2016 | Dual | 11.88% |
| | non-Dual | 20.81% |
| 2017 | Dual | 13.86% |
| | non-Dual | 24.18% |
| 2018 | Dual | 15.39% |
| | non-Dual | 26.93% |
| 2019 | Dual | 16.44% |
| | non-Dual | 29.38% |
| 2020 | Dual | 15.31% |
| | non-Dual | 28.68% |
| 2021 | Dual | 16.98% |
| | non-Dual | 32.32% |
| 2022 | Dual | 16.95% |
| | non-Dual | 33.07% |

**Table 5: Cost of Care by AWV Usage (2022)**

| AWV Status | Allowed PMPM | Risk-Adjusted Allowed PMPM |
|---|---|---|
| no AWV | $1,254 | $1,166 |
| AWV | $1,044 | $949 |

**Table 6: Cost of Care by Dual and AWV Usage (2022)**

| Dual | AWV Status | Risk-Adjusted Allowed PMPM |
|---|---|---|
| Dual | no AWV | $1,278 |
| | AWV | $998 |
| non-Dual | no AWV | $1,126 |
| | AWV | $941 |

**Table 7: Cost of Care by Age and AWV Usage (2022)**

| Age | AWV Status | Risk-Adjusted Allowed PMPM |
|---|---|---|
| less than 65 | no AWV | $1,271 |
| | AWV | $1,103 |
| between 65 and 74 | no AWV | $1,115 |
| | AWV | $984 |
| between 75 and 84 | no AWV | $1,161 |
| | AWV | $918 |
| 85 and older | no AWV | $1,207 |
| | AWV | $854 |

**Table 8: Diabetes Prevalence (2022)**

| Diabetes Status | Prevalence |
|---|---|
| Diabetic | 24.25% |
| Non-Diabetic | 75.75% |

**Table 9: AWV Utilization Rate (2022)**

| Diabetic Status | AWV Utilization Rate |
|---|---|
| Diabetic | 33.60% |
| Non-Diabetic | 29.02% |

**Table 10: Cost of Care by AWV Usage among Diabetic Members (2022)**

| AWV Status | Allowed PMPM | Risk-Adjusted Allowed PMPM |
|---|---|---|
| no AWV | $2,057 | $1,364 |
| AWV | $1,449 | $982 |
| Total | $1,842 | $1,231 |

**Table 11: Utilization by Service Category vs. Total Diabetic Population (2022)**

| Service Category | AWV Status | Utilization Rate |
|---|---|---|
| Inpatient | no AWV | 115% |
| | AWV | 72% |
| Outpatient | no AWV | 106% |
| | AWV | 89% |
| Professional | no AWV | 98% |
| | AWV | 104% |
| DME | no AWV | 98% |
| | AWV | 103% |
| HH | no AWV | 105% |
| | AWV | 90% |
| SNF | no AWV | 125% |
| | AWV | 53% |

**Table 12: Cardiovascular Disease Prevalence (2022)**

| CVD Status | Prevalence |
|---|---|
| CVD | 17.88% |
| No CVD | 82.12% |

**Table 13: AWV Utilization Rate (2022)**

| CVD Status | AWV Utilization Rate |
|---|---|
| CVD | 33.15% |
| No CVD | 29.47% |

**Table 14: Cost of Care by AWV Usage among CVD Members (2022)**

| AWV Status | Allowed PMPM | Risk-Adjusted Allowed PMPM |
|---|---|---|
| no AWV | $3,170 | $1,703 |
| AWV | $2,124 | $1,188 |
| Total | $2,802 | $1,526 |

**Table 15: Utilization by Service Category vs. Total CVD Population (2022)**

| Service Category | AWV Status | Utilization Rate |
|---|---|---|
| Inpatient | no AWV | 114% |
| | AWV | 73% |
| Outpatient | no AWV | 104% |
| | AWV | 93% |
| Professional | no AWV | 99% |
| | AWV | 101% |
| DME | no AWV | 99% |
| | AWV | 102% |
| HH | no AWV | 106% |
| | AWV | 88% |
| SNF | no AWV | 123% |
| | AWV | 55% |

Please contact Ben Cruz at ben.cruz@wakely.com with any questions or to follow up on any of the concepts presented here.

## OUR STORY

**Five decades.** Wakely began in 1969 and eventually evolved into several successful divisions. In 1999, the actuarial arm became the current-day Wakely Consulting Group, LLC, which specializes in providing actuarial expertise in the healthcare industry. Today, there are few healthcare topics our actuaries cannot tackle.

**Wakely is now a subsidiary of Health Management Associates.** HMA is an independent, national research and consulting firm specializing in publicly funded healthcare and human services policy, programs, financing, and evaluation. We serve government, public and private providers, health systems, health plans, community-based organizations, institutional investors, foundations, and associations. Every client matters. Every client gets our best. With more than 20 offices and over 400 multidisciplinary consultants coast to coast, our expertise, our services, and our team are always within client reach.

**Broad healthcare knowledge.** Wakely is experienced in all facets of the healthcare industry, from carriers to providers to governmental agencies. Our employees excel at providing solutions to parties across the spectrum.

**Your advocate.** Our actuarial experts and policy analysts continually monitor and analyze potential changes to inform our clients' strategies – and propel their success.

**Our Vision:** To partner with clients to drive business growth, accelerate success, and propel the health care industry forward.

**Our Mission:** We empower our unique team to serve as trusted advisors with a foundation of robust data, advanced analytics, and a comprehensive understanding of the health care industry.

Learn more about Wakely Consulting Group at www.wakely.com