

Avoiding the Medicare Cliff

A Profile of Low-Income Older Adults

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Low-Income Older Adults and the Medicare Cliff

The COVID-19 pandemic starkly demonstrated inequities in the American health care system. For older adults, in particular, the pandemic had a severe impact; this is especially true for people of color and those with lower incomes. Equitable access to benefits is one way to address social determinants of health and aging. With this in mind, the National Council on Aging (NCOA) and its research partner, the Leading Age LTSS Center @UMASS Boston, set out to understand the transition from Medicaid to Medicare among low-income older adults.

As low-income older adults become eligible for Medicare due to age or disability, many face difficult choices regarding their health coverage. They may lose their Medicaid coverage, with its cost-sharing protections, and be unable to afford Medicare premiums and cost-sharing. Not all low-income older adults who are on Medicaid will be dually eligible for both Medicaid and Medicare. This research seeks to fill in gaps in knowledge about the transition from Medicaid to Medicare for low-income older adults. The analysis also sheds light on people who experience high out-of-pocket costs when they begin the Medicare program and transition from non-Medicaid insurance arrangements.

Background

Medicaid and Medicare are two fundamental health insurance programs. In 1965 **Medicaid** became a federal law as part of Title XIX of the Social Security Act, with coverage beginning in 1966. As a joint program between the federal and state governments, it provides health insurance for low-income Americans. In 2019, over 87 million Americans were **enrolled in Medicaid** with nearly 15 million of those people between the ages of 45-64, and approximately 8.5 million adults over the age of 65. In 1965, **Medicare** became a federal law, with coverage also beginning in 1966. It provides health insurance for adults over age 65, and younger adults with permanent disabilities, end-stage renal disease, or amyotrophic lateral sclerosis. In 2019, approximately 60 million adults were **enrolled in Medicare**.

In most states (39 Medicaid expansion states), older adults with incomes below 138% of the federal poverty line have **medical insurance** through Medicaid. Once these adults turn 65, if their income is below 135% of the federal poverty level, and they have low assets, they become dually eligible for both Medicare and Medicaid. For some older adults with higher assets (individual assets over \$8,400; couple's assets over \$12,000), once they turn 65 and become eligible for Medicare, they lose all their Medicaid benefits. These still low-income older adults often cannot afford additional coverage under Medicare. As they transition to Medicare, the coverage and benefits they had under Medicaid change, and they lose **Marketplace subsidies**. In these instances, they face what has been called the "Medicare Cliff."

Purpose

In this data brief, we present information to describe the individuals affected by the Medicare Cliff. Our purpose is to explore the differences between three distinct populations: **(1) older adults facing the Medicare Cliff, (2) individuals who are either partially or fully dually eligible for Medicare and Medicaid (Dual Eligibles) when they reach age 65, and (3) individuals who are enrolled only in Medicare.** We focus on their characteristics when they are eligible for the program and also track key health and financial measures over time to see how their status changes during retirement.

Method

We analyzed longitudinal data from the **Health and Retirement Study (HRS)** from 2012 to 2018 to assess individuals hitting the Medicare Cliff compared to those with dual eligibility and people enrolled exclusively in Medicare. The HRS is a nationally representative, panel study of middle-aged and older adults (50 years of age and older) in the U.S. The HRS contains longitudinal data (started in 1992 with ongoing interviews conducted every 2 years) with detailed information gathered on a variety of sociodemographic, health, economic, and lifestyle factors. The HRS has an oversample of Black and Hispanic individuals and is representative of community-dwelling individuals. (Although the data does include those who have moved into institutional settings during the course of the study, estimates related to these individuals are likely underrepresented.)

To be classified as an older adult facing the Medicare Cliff, an individual needed to meet one of two criteria: (1) they lost Medicaid eligibility when they became eligible for Medicare; or (2) their out-of-pocket medical cost (not including any insurance premiums) increased by at least \$100 after starting Medicare. The most recent sample characteristics (2018) were compared across three mutually exclusive groups of individuals who turned age 65 and became eligible for Medicare during 2014 to 2018: 804 individuals who had experienced the Medicare Cliff; 744 individuals who became dually eligible for Medicare and Medicaid; and 4,319 individuals who enrolled in Medicare.

For the longitudinal portion of the study, out of the total individuals who comprised the Medicare Cliff sample (N=804), we focused on individuals who hit the Medicare Cliff in 2012 when they turned 65 (N=353), and then revisited these same people in 2014, 2016, and 2018 to understand how their circumstances changed over the years. For comparison purposes, we also followed the dual eligible beneficiaries (N=320) and Medicare beneficiaries (N=1,875) during the same time period of 2012 to 2018 (mutually exclusive groups). Finally, we analyzed a sample of individuals who experienced the Medicare Cliff in 2012, when they turned 65, and then eventually became dually eligible for Medicare and Medicaid from 2014 to 2018 (N=73). By examining participants who hit the Medicare Cliff 10 years ago, we have been able to study how their health and economics have changed over the past 10 years.

► 2018 profile of beneficiaries who hit the Medicare Cliff between 2014 and 2018

Sample characteristics (2018) revealed that the average Medicare Cliff individual was about 68 years old and more likely to be female (58%) (see Figure 1). Just over half of Medicare Cliff individuals were non-Hispanic White (52%), with the other half comprised of 27% non-Hispanic Black, 17% Hispanic, and 4% non-Hispanic other individuals. Nearly two-thirds were married and a little over half (54%) were retired, meaning they were reporting no income from earnings. In terms of health, 31% of Medicare Cliff individuals reported fair or poor health with an average of 2.6 chronic conditions and \$2,900 in median out-of-pocket medical costs. Financial characteristics showed that this group had a median household income of \$35,900 and median financial assets of \$4,800, with a total median net worth of over \$130,100.

► 2018 profile of beneficiaries who became dually eligible for Medicare and Medicaid between 2014 and 2018

Sample characteristics (2018) revealed that the average dual eligible individual was 69 years old and more likely to be female (64%) (See Figure 1). Over a third of dual eligible individuals were non-Hispanic Black (25%) with the other two-thirds comprised of 32% non-Hispanic White, 28% Hispanic, and 6% non-Hispanic other individuals. Almost two out of five were married (38%) and almost three-quarters (72%) were retired. In terms of health, 58% of dual eligible individuals reported fair or poor health with an average of 3.4 chronic conditions, and median out-of-pocket medical costs of \$0. Financial characteristics showed that this group had a median household income of \$14,320 and median financial assets of \$0 with a total median net worth of \$1,900.

► 2018 profile of beneficiaries who enrolled in Medicare between 2014 and 2018

Sample characteristics (2018) revealed that the average Medicare-only individual was 70 years old and more likely to be female (58%) (See Figure 1). Almost three-quarters of Medicare individuals were non-Hispanic White (71%) with the other quarter comprised of 17% non-Hispanic Black, 9% Hispanic, and 3% non-Hispanic other individuals. Over half were married (57%) and over three quarters (78%) were retired. In terms of health, 36% of Medicare individuals reported fair or poor health with an average of 2.8 chronic conditions and \$1,200 median out-of-pocket medical costs. Financial characteristics showed that this group had a median household income of \$48,850 and median financial assets of \$29,000 with a total median net worth of \$264,500. Note that median net worth includes the value of financial assets and home equity minus all debt.

► Selected differences in the 2018 beneficiary profiles (Appendix A)

There are a few interesting differences between these three groups. The Medicare Cliff sample is less diverse, healthier, and in a better financial position than the dually eligible sample. However, the Medicare Cliff sample is more diverse, in poorer health, and has fewer financial resources compared to the exclusively Medicare sample. The least likely group to be married are the dually eligible, with only 38% being married, compared to 65% of the Medicare Cliff individuals and 57% of the Medicare enrollees. Dually eligible are also most likely to live alone (39%) compared to 29% of Medicare enrollees and 21% of Medicare Cliff individuals. Interestingly, the Medicare Cliff sample is significantly less likely to be retired than both the dual eligible and the regular Medicare sample. This may reflect the fact that their increased out-of-pocket medical costs necessitated their staying in the labor force longer to afford these increased expenses. Dually eligible were most likely to rate their health as fair or poor (58%) and least likely to indicate that they would survive to 75+ (82%) or 80+ (45%). Finally, the Medicare Cliff sample has significantly higher out-of-pocket medical costs compared to dual eligible and Medicare enrollees. Overall, the Medicare Cliff sample most often fell between the Medicare and dual eligible samples on many demographic characteristic measurements.

Findings

► Longitudinal analysis of the three beneficiary groups (Appendix C)

For each HRS wave from 2012 to 2018, we determined the percentage of individuals who experienced the Medicare Cliff among those newly eligible for Medicare (65 and older). We observed very little change over time with an estimated 14% of individuals hitting the Medicare Cliff each wave year (13.9% in 2012, 13.7% in 2014, 14.0% in 2016, and 13.5% in 2018). This indicates that programmatic changes over time have done little to prevent individuals from hitting the Medicare Cliff, and this continues to be a vulnerable group. In fact, based on Medicare enrollment data showing approximately 2 million new Medicare enrollees in 2019 (65 and older), we estimate that 280,000 individuals experience the Medicare Cliff annually.

Next, we analyzed sample characteristics longitudinally to understand how these characteristics change over time and whether the patterns of change differ among the three beneficiary groups. Our first data point represents what people looked like when they became eligible for their group in 2012. Specifically, we looked at a baseline time period of 2010 to 2012 to identify the three types of beneficiaries and then followed each of these mutually exclusive groups for every HRS wave year through 2018.



Out-of-pocket medical costs: The Medicare Cliff sample has significantly higher out-of-pocket medical costs across the studied time period compared to the dually eligible and Medicare enrollees (see Figure 2). Medicare Cliff individuals saw their out-of-pocket medical costs rise significantly within two years of experiencing the cliff (from \$2,600 to \$3,100) and then slightly decrease over the subsequent four-year period to a median of \$2,800. This eventual decrease for Medicare individuals is due in part to the fact that about 20% of the Medicare Cliff sample became dual eligible over the studied time period. The dually eligible saw their comparatively low out-of-pocket expenses steadily fall from 2012 to 2018 (from a median of \$250 to \$0). Medicare enrollees also experienced a general decrease in out-of-pocket expenses from 2012 to 2018 (from \$1,568 to \$1,333).



Retirement: Retirement status varies across all three sample populations and our focus here is on individuals who report no earnings and full disengagement from the labor force. Thus, by definition, people who are partially working are not considered retired. The Medicare Cliff sample is significantly less likely to be retired than the dually eligible and regular Medicare samples. Notably, the Medicare Cliff sample is also the only beneficiary group that shows a pattern of retirement over time where individuals actually return to the workforce, as compared to the other two samples with a typical trajectory of having a greater number of retirees over time (see Figure 3). In 2012, 55% of Medicare Cliff individuals retired. In 2014, 57% were retired, and in 2016, the number decreased to 55% who were retired. In 2018, the number continued to decrease to 54%. In comparison, the dually eligible started with 61% retired in 2012, and this percentage steadily increased to 72% by 2018. Similarly, Medicare enrollees started with 59% retired in 2012, and this percentage steadily increased to 74% retired by 2018.

Findings



Net worth: The Medicare Cliff sample also experienced greater financial resource decline over time than the dual eligible and regular Medicare samples (see Figure 4). In 2012, Medicare Cliff individuals had a median net worth of \$125,000 which continually declined over time to \$114,900 in 2018. Although the dual eligible sample had an overall lower median net worth, they saw staggered growth from 2012 (\$1,000) to 2018 (\$2,000). The Medicare enrollees had the highest median net worth (i.e., financial assets and home value minus all debt), and saw it consistently grow from 2012 (\$182,000) to 2018 (\$249,999). Most of this growth reflects increasing home values rather than liquid financial assets.



Health status: The Medicare Cliff sample reports a substantial worsening of their health in the two years after hitting the cliff. In 2012, 34% of the Medicare Cliff sample reported their health as fair or poor. By 2018, the percentage had increased to 48% (see Figure 5). This experience differs from the dual eligible sample, who saw only a slight increase during those same years. The Medicare sample, although in better health, followed a similar trend as the Dual Eligible samples, seeing a slight worsening in reported health status.

In 2012, 5% of the Medicare Cliff sample reported that their health had become worse, and just two years later, that increased to 20% (see Figure 6). The dual eligible sample had more individuals who said their health had become worse (35% in 2012), but that number stayed relatively stable, dropping only slightly. Again, the Medicare enrollees had a similar experience as the dual eligible sample, staying relatively steady from 2012 to 2018.

There were also differences in the number of doctors' visits for each group. The Medicare Cliff sample had an average of 6 doctors visits in 2012. In two years, it spiked to 7.5 visits, and then decreased to 6.5 doctor visits (see Figure 7). The dual eligible sample started at 7 doctors visits a year in 2012, and that number fell to 6 visits per year by 2018. The Medicare enrollees had 5 doctor visits per year in 2012 and then increased to 6 visits per year by 2018.

There are a number of possible explanations for these trends and differences experienced by the Medicare Cliff sample. This group might experience high levels of stress when they lose Medicaid coverage. This could negatively impact their health. As their health insurance changes, they may also need to find new doctors. This would explain the initial increase in doctor visits. The change in insurance may also impact what medications are covered. To save money, Medicare Cliff individuals may stop taking medications. What is clear is that the data points to a relatively abrupt change in parameters in the immediate period after hitting the cliff, and that this is likely related to the additional financial pressure and related stress brought about by the change in insurance status.

► Medicare Cliff beneficiaries who become dual eligible (Appendix D)

Our findings showed that from 2010 to 2012, one out of every five Medicare Cliff individuals eventually became dual eligible beneficiaries by 2018. That is, they again become eligible for Medicaid over the period, after having lost Medicaid benefits when they first became eligible for Medicare. We further analyzed this group to look at changes in their characteristics on their way to becoming dually eligible. Of the Medicare Cliff sample who eventually become dual eligible beneficiaries, nearly 53% do so within two years of experiencing the Medicare Cliff and 70% within four years. Average out-of-pocket medical costs are very high at the time of experiencing the cliff for the Medicare Cliff sample who eventually becomes dually eligible—nearly double that of the Medicare Cliff sample who did not transition to dual eligibility, which was already significantly higher than the other beneficiary groups.

Their median out-of-pocket medical expenses started at \$3,094 in 2012, but significantly decrease from 2014 (\$2,404) to 2018 (\$480) (see Figure 8). This sharp decline in out-of-pocket medical expenses two years after experiencing the cliff for the Medicare Cliff sample who eventually become dually eligible is likely due to the fact that 52% of these individuals have already transitioned to becoming dually eligible at that point. This is in contrast to the out-of-pocket medical expenses for the Medicare Cliff sample (see Figure 9).

Another interesting finding is that longitudinal retirement patterns for the Medicare Cliff sample who eventually become dual eligible follow the retirement patterns of Medicare enrollees. The Medicare Cliff sample not transitioning to dual eligibility status does not follow a similar retirement pattern. In 2012, 43% are retired, and this percentage steadily increases to 70% by 2018 (see Figures 10 & 11).

Conclusions

The results of our analysis spotlight a number of key facts about those who experience the Medicare Cliff that call attention to the vulnerability of this group. Although individuals who hit the Medicare Cliff are healthier and in a better financial position than dually eligible individuals, they are demographically more similar to this group and substantially worse off than Medicare-only enrollees. Most notably, Medicare Cliff individuals have the highest out-of-pocket medical costs compared to the other beneficiary groups, while being in poorer health and having lower financial resources than Medicare-only enrollees. Despite being more physically and economically vulnerable than Medicare-only enrollees, Medicare Cliff individuals are less likely to retire and more likely to re-enter the workforce, a unique pattern when comparing the three beneficiary groups. This is in line with the longitudinal findings, which showed that Medicare Cliff individuals experienced a steeper decline in their financial situation between 2012 and 2018 compared to the other beneficiary groups.

Longitudinal observations not only showed a steady annual increase of those experiencing the Medicare Cliff over the last decade, but also showed that nearly a quarter of these individuals eventually become dually eligible (half of whom do so within two years of hitting the cliff). This may be related to the fact that like many individuals over age 65, they come to require some level of long-term services and supports as they age. For many, this necessitates spending down income and assets until Medicaid eligibility thresholds are reached. In fact, changes over time in the characteristics of the Medicare Cliff individuals who eventually become dually eligible more closely follow those who became dual eligible right away than those who remain eligible for Medicare-only, or typical Medicare beneficiaries. The overall findings indicate that Medicare Cliff individuals could significantly benefit by receiving assistance through the social safety net of Medicaid.

When these individuals do not get this assistance, they may be forced back into the labor force to make ends meet. It also leads to greater rates of dual eligibility because they are unable to afford care. This may also lead them to forego care, contributing to their reporting worsening health outcomes. Ultimately, these outcomes become expensive for society. Thus, when making proposed changes to Medicare and Medicaid, advocates and policymakers need to keep in mind how these changes will impact not just the dual eligible individuals and typical Medicare beneficiaries, but also on Medicare Cliff individuals.



About NCOA

The National Council on Aging (NCOA) is the national voice for every person's right to age well. We believe that how we age should not be determined by gender, color, sexuality, income, or zip code. Working with thousands of national and local partners, we provide resources, tools, best practices, and advocacy to ensure every person can age with health and financial security. Founded in 1950, we are the oldest national organization focused on older adults. Learn more at www.ncoa.org and [@NCOAging](https://twitter.com/NCOAging).



About the LeadingAge LTSS Center @ UMass Boston

The LeadingAge LTSS Center @UMass Boston conducts research to help our nation address the challenges and seize the opportunities associated with a growing older population. Established in 2017, the LTSS Center is the first organization of its kind to combine the resources of a major research university with the expertise and experience of applied researchers working with providers of long-term services and supports (LTSS). Learn more at www.ltsscenter.org.

Appendix A: Sample Characteristics by Type of Beneficiary (2018)

Sample Characteristics (2018)	Medicare Cliff (N=804)	Medicare Cliff (N=804)	Medicare Cliff (N=804)
Age (Mean)	67.8	68.8	70.4
Gender			
Female	57.5%	64.1%	58.4%
Male	42.5%	35.9%	41.6%
Race/Ethnicity			
Non-Hispanic White	52.3%*	31.9%	71.1%
Non-Hispanic Black	26.8%*	34.7%*	16.8%*
Non-Hispanic Other	3.7%*	5.8%*	2.7%*
Hispanic	17.2%*	27.6%*	9.4%*
Education Years (Mean)	13.8*	11.0*	13.3*
Married	65.0%	37.6%*	56.7%
Live Alone	20.5%*	38.6%*	29.3%*
Rural Residence	23.1%*	22.1%*	26.7%
Retired	53.7%	72.1%	77.5%*
Financial Measures			
Household Income (Mean)	\$59,752	\$23,774	\$69,706
<i>Median</i>	\$34,900*	\$14,320*	\$48,850*
Total Financial Assets (Mean)	\$271,649*	\$19,586*	\$328,774*
<i>Median</i>	\$4,800*	\$0*	\$29,000*
Net Value Primary Residence (Mean)	\$166,265*	\$46,237*	\$194,086*
<i>Median</i>	\$71,000*	\$0*	\$110,000*
Net Wealth (Mean)	\$558,218*	\$87,801*	\$679,417*
<i>Median</i>	\$130,100*	\$1,900*	\$264,500*
Below Federal Poverty Level	14.8%*	42.6%*	8.1%*
Out-of-Pocket Medical Costs	\$3,852*	\$1,970*	\$3,142*
<i>Median</i>	\$2,900*	\$0*	\$1,200*
Health Measures			
Fair/Poor Health	30.6%	57.8%	35.7%
Chronic Conditions (Mean)	2.6*	3.4*	2.8*
ADLs (Mean)	0.3	1.2*	0.5
IADLs (Mean)	0.7	2.1*	0.9
Cognitive Impairment	1.2%	4.2%*	1.6%
Survival Probability 75+ (Mean)	82.8%	81.9%*	93.6%
Survival Probability 80+ (Mean)	51.3%*	44.5%*	60.5%*

*significant t-test difference $p < 0.05$

All dollar values adjusted to 2021 U.S. dollar values

Abbreviations: ADLs (Activities of Daily Living Limitations), IADLs (Instrumental Activities of Daily Living Limitations)

Appendix B: Sample Characteristics at Medicare Eligibility by Type of Beneficiary (2014 to 2018)

Sample Characteristics at Medicare Eligibility (2014 to 2018) (N=4,165)	Medicare Cliff (N=804)	Dually Eligible (N=744)	Medicare (N=4,319)
Age (Mean)	65.0	65.1	65.3
Gender			
Female	57.5%	59.2%*	57.4%
Male	42.5%	40.8%*	42.6%
Race/Ethnicity			
Non-Hispanic White	52.3%*	21.8%*	62.9%*
Non-Hispanic Black	26.8%*	40.2%*	19.9%*
Non-Hispanic Other	3.7%*	5.4%*	3.3%*
Hispanic	17.2%*	32.6%*	13.9%*
Education Years (Mean)	13.8	11.0*	13.7
Married	63.8%*	43.0%*	67.3%*
Live Alone	21.6%*	31.6%*	19.4%*
Rural Residence	23.1%*	18.7%*	25.5%*
Retired	52.2%*	58.2%*	55.0%*
Financial Measures			
Household Income (Mean)	\$58,765*	\$26,100*	\$84,235*
<i>Median</i>	\$42,220*	\$14,514*	\$52,673*
Total Financial Assets (Mean)	\$239,620*	\$4,295*	\$385,305*
<i>Median</i>	\$5,239*	\$0*	\$20,000*
Net Value Primary Residence (Mean)	\$154,955*	\$37,350*	\$164,412*
<i>Median</i>	\$77,000*	\$0*	\$100,000*
Net Wealth (Mean)	\$520,506*	\$61,501*	\$613,622*
<i>Median</i>	\$131,700*	\$1,600*	\$205,500*
Below Federal Poverty Level	16.5%*	46.5%*	8.2%*
Out-of-Pocket Medical Costs	\$3,853*	\$1,247*	\$2,475*
<i>Median</i>	\$2,880*	\$0*	\$1,082*
Health Measures			
Fair/Poor Health	33.5%*	57.0%*	24.6%*
Chronic Conditions (Mean)	2.6*	3.0*	2.2*
ADLs (Mean)	0.3	0.8*	0.2
IADLs (Mean)	0.7*	1.7*	0.4*
Cognitive Impairment	1.0%	1.9%	0.8%
Survival Probability 75+ (Mean)	81.8%*	78.1%*	91.6%*
Survival Probability 80+ (Mean)	51.1%*	46.8%*	63.5%*

*significant t-test difference $p < 0.05$

All dollar values adjusted to 2021 U.S. dollar values

Abbreviations: ADLs (Activities of Daily Living Limitations), IADLs (Instrumental Activities of Daily Living Limitations)

Appendix C: Longitudinal Sample Characteristics by Type of Beneficiary from 2012 to 2018: Medicare Cliff, Dually Eligible, and Regular Medicare

Sample Characteristics	Experienced Medicare Cliff 2010 to 2012 (N=353)				Became Dually Eligible 2010 to 2012 (N=320)				Began Medicare 2010 to 2012			
	Baseline 2012	2014	2016	2018	Baseline 2012	2014	2016	2018	Baseline 2012	2014	2016	2018
% Dual Eligible	0.0%*	15.1%*	17.0%*	20.7%*	100%	100%	99.7%	99.4%	0.0%	6.5%	7.8%	8.9%
Age (Mean)	65.1*	67.0*	69.1*	71.0*	65.8*	67.7*	69.8*	71.7*	65.4*	67.5*	69.5*	71.4*
Female	54.4%	---	---	---	65.4%	---	---	---	55.4%	---	---	---
Male	45.6%	---	---	---	34.6%	---	---	---	44.6%	---	---	---
Non-Hispanic White	59.2%	---	---	---	34.5%	---	---	---	69.8%	---	---	---
Non-Hispanic Black	26.9%	---	---	---	34.1%	---	---	---	20.2%	---	---	---
Non-Hispanic Other	2.5%	---	---	---	3.9%	---	---	---	2.5%	---	---	---
Hispanic	11.4%	---	---	---	27.5%	---	---	---	7.5%	---	---	---
Education Years (Mean)	13.2	13.2	13.2	13.2	10.9	10.9	11.0	11.0	13.4	13.6	13.6	13.6
Married	64.9%*	63.5%	60.6%*	57.2%*	37.5%*	38.6%	36.4%	34.9%*	70.9%*	68.2%*	66.9%*	67.2%*
Live Alone	17.8%*	18.3%	19.5%*	22.6%*	32.3%*	31.5%	33.7%*	36.7%*	16.2%*	18.4%*	20.3%*	21.2%*
Rural Residence	22.1%	22.7%	21.0%	20.4%	22.7%*	20.9%	19.5%*	19.1%	26.2%	26.1%	25.8%	25.0%
Retired	54.5%*	56.9%*	55.1%*	53.8%*	60.8%*	62.2%*	68.8%*	71.6%*	58.5%*	63.0%*	68.2%*	73.6%*
Household Income (Mean)	\$63,452*	\$62,566	\$60,465*	\$57,962*	\$18,446	\$20,197	\$20,078	\$19,713	\$70,016*	\$76,789	\$76,339	\$76,101
<i>Median</i>	\$42,000*	\$37,380*	\$36,120*	\$34,362*	\$12,600	\$12,200	\$12,100	\$12,000	\$50,400	\$49,248	\$48,660	\$48,392
Total Financial Assets (Mean)	\$140,505*	\$116,227*	\$113,046*	\$106,330*	\$5,745	\$5,034	\$4,850	\$4,534	\$235,242*	\$265,749	\$262,552	\$259,734
<i>Median</i>	\$15,000*	\$11,000*	\$5,000*	\$4,200	\$0	\$0	\$0	\$0	\$25,000*	\$38,000	\$37,100	\$35,000
Net Value Primary Residence (Mean)	\$121,182*	\$120,841	\$118,181*	\$117,282*	\$27,781*	\$36,972	\$35,607	\$39,851*	\$128,078*	\$137,895	\$158,041	\$176,723*
<i>Median</i>	\$70,000*	\$70,000	\$60,500*	\$60,000*	\$0	\$0	\$0	\$0	\$85,000*	\$100,000	\$100,000	\$110,000*
Net Wealth (Mean)	\$384,747*	\$361,416*	\$310,300*	\$306,995*	\$43,783*	\$47,021	\$46,291	\$49,653*	\$496,526*	\$545,565	\$556,394	\$598,834*
<i>Median</i>	\$125,000*	\$119,000*	\$116,000*	\$114,900*	\$1,000*	\$1,700	\$1,500	\$2,000*	\$182,000*	\$222,000	\$230,000	\$249,999*
Below Federal Poverty Level	13.0%*	14.3%	15.0%	16.2%*	47.8%*	47.1%	48.9%	52.3%*	6.8%*	7.2%	7.4%	7.3%*
Out-of-Pocket Medical Costs	\$3,891*	\$4,149*	\$3,833*	\$3,668*	\$2,441	\$2,346	\$2,086	\$1,996	\$2,733	\$2,604	\$2,723	\$2,653
<i>Median</i>	\$2,600*	\$3,100*	\$2,900*	\$2,800*	\$250	\$72	\$0	\$0	\$1,568	\$1,410	\$1,500	\$1,333
Fair/Poor Self-Reported Health	34.4%*	34.9%	40.6%*	47.7%*	58.9%*	59.4%	62.3%*	63.1%*	26.3%	26.8%	27.7%	27.9%
Chronic Conditions (Mean)	2.4*	2.6	2.8	3.1*	3.0*	3.1	3.3	3.5*	2.0*	2.2	2.5*	2.7*
ADLs (Mean)	0.3*	0.3	0.4	0.5*	1.2*	1.2	1.4	1.5*	0.3	0.3	0.4	0.4
IADLs (Mean)	0.6*	0.6	0.8	0.9*	2.3*	2.4	2.7	3.0*	0.5*	0.6	0.7	0.9*
Cognitive Impairment	2.8%*	3.4%	3.5%	3.7%*	4.8%*	5.4%	5.8%*	6.0%*	1.1%	1.1%	1.3%	1.5%
Survival Probability 75+ (Mean)	82.5%	82.3%	83.1%	83.7%	76.8%*	79.4%	81.1%*	83.8%*	85.6%*	87.6%	89.8%*	90.1%*
Survival Probability 80+ (Mean)	57.8%*	57.1%	56.3%	52.8%*	42.5%	41.3%	41.1%	41.0%	61.5%*	61.3%	59.7%	57.3%*

*significant t-test difference $p < 0.05$

All dollar values adjusted to 2021 U.S. dollar values

Abbreviations: ADLs (Activities of Daily Living Limitations), IADLs (Instrumental Activities of Daily Living Limitations)

Appendix D: Sample Characteristics for Individuals who Experienced Medicare Cliff (2010 to 2012) and Became Dually Eligible (2014 to 2018)

Sample Characteristics (N=73)	At Medicare Cliff			
	2012	2014	2016	2018
% Dual Eligible	0.0%*	52.8%*	70.3%*	100.0%*
Age (Mean)	65.2*	67.2*	69.3*	71.3*
Gender				
Female	64.9%	-	-	-
Male	35.1%	-	-	-
Race/Ethnicity				
Non-Hispanic White	13.5%	-	-	-
Non-Hispanic Black	51.4%	-	-	-
Non-Hispanic Other	2.7%	-	-	-
Hispanic	32.4%	-	-	-
Education Years (Mean)	11.1	11.1	11.1	11.1
Married	51.4%*	48.6%*	40.5%*	38.5%*
Live Alone	24.3%*	25.0%*	32.4%*	35.1%*
Rural Residence	24.3%	21.6%	21.6%	20.4%
Retired	43.2%*	58.2%*	65.1%*	69.6%*
Financial Measures				
Household Income (Mean)	\$20,584*	\$19,645*	\$17,613*	\$18,469*
<i>Median</i>	\$16,370*	\$14,928*	\$14,480*	\$15,000*
Total Financial Assets (Mean)	\$4,666	\$3,638*	\$3,666*	\$4,112
<i>Median</i>	\$0	\$0	\$0	\$0
Net Value Primary Residence (Mean)	\$51,486*	\$54,833*	\$47,648*	\$67,636*
<i>Median</i>	\$0	\$0	\$0	\$0
Net Wealth (Mean)	\$71,822*	\$64,175*	\$61,787	\$80,673*
<i>Median</i>	\$5,000*	\$4,600*	\$4,000	\$10,700*
Below Federal Poverty Level	37.8%*	45.9%*	48.6%*	44.4%*
Out-of-Pocket Medical Costs	\$6,750*	\$3,817*	\$3,133*	\$2,058*
<i>Median</i>	\$3,094*	\$2,404*	\$1,900*	\$480*
Health Measures				
Fair/Poor Health	41.8%*	48.7%*	54.1%*	46.9%*
Chronic Conditions (Mean)	3.0*	3.3	3.5*	3.7*
ADLs (Mean)	0.4*	0.5	0.7*	0.7*
IADLs (Mean)	0.7*	0.8	1.3*	1.4*
Cognitive Impairment	2.7%*	3.4%	3.8%*	4.3%*
Survival Probability 75+ (Mean)	75.1%*	80.5%*	81.4%*	86.6%*
Survival Probability 80+ (Mean)	43.4%*	43.2%	42.1%	45.5%*

*significant t-test difference $p < 0.05$

All dollar values adjusted to 2021 U.S. dollar values

Abbreviations: ADLs (Activities of Daily Living Limitations), IADLs (Instrumental Activities of Daily Living Limitations)