PTAC Data Brief

Examination of Medicare FFS Beneficiaries that Account for the Top 10% of Medicare Spending

EXECUTIVE SUMMARY

Traditional Medicare (TM) spending among the high spenders is a topic of interest because it reflects the disproportionate nature of healthcare costs within the Medicare population.1-7 A small percentage of beneficiaries contribute to a disproportionate share of total spending, with the top 10% typically responsible for majority of overall Medicare expenditures.

This data brief builds on work that was done for the Physician-Focused Payment Model Technical Advisory Committee's (PTAC's) June 2024 theme-based discussion on " Addressing the Needs of Patients with Complex Chronic Conditions or Serious Illnesses in Population-Based Total Cost of Care (PB-TCOC) Models." It examines national trends in Medicare and out-of-pocket (OOP) spending patterns among the Medicare beneficiaries who make up the top 10% of spenders, their demographic and clinical characteristics, and the frequency with which beneficiaries move in and out of the high-spending category year-over-year. By analyzing these factors, we gain a better understanding of how costs are distributed within the Medicare system and the underlying drivers of these expenses. We focus on healthcare spending and patterns of growth within the top 10% of spenders, and trends before and after the COVID-19 PHE. More specifically, we find:

1. **A small share (10%) of all Traditional Medicare beneficiaries accounts for 57 percent of all Parts A & B Spending.** The other 90% of all Medicare FFS beneficiaries account for 43% of spending. Beneficiaries who were in the top 10% spending category have disproportionately higher mortality rates (18%) compared to 4% among all FFS beneficiaries. Dual eligible beneficiaries make up 25% of beneficiaries in the top 10% of spending, vs 14% among all FFS beneficiaries. Finally, a disproportionately higher share of beneficiaries in the to 10% of spending (40%) live in ZIP codes in the Top 15% tile Area Deprivation Index (ADI). Beneficiaries in the top 10% of spending have, on average, more than 8 chronic conditions compared to 3 chronic conditions in overall Medicare FFS beneficiaries. These trends remained unchanged between 2017 and 2023.

2. **Spending shifted from Part A to Part B for the Top 1% spenders. An increase in Part B spending was primarily due to Part B drug spending for the top spending categories.** For the top 1% of spenders, Part B drug spending share increased by 10 percentage points between 2017 and 2023. For the top 2-5% of spenders, Part B drug spending share increased by 2 percentage points. For the top 6-10% of spenders, Part B drug spending share increased by 1 percentage point.

3. **Roughly 40% of the top 10% of spenders remained in this category year-over-year.** Persistence in being high cost varied across groups. On average, among the top 5% spenders, 27-29% remain in the top 5%, another 12-13% move to the 6-10% spending category, while 58-60% moved out of the top 10% spending category altogether. For beneficiaries in the top 6-10% category, 15-16% remained in the top 6-10%, 12-14% moved to the top 1-5%, and 71-72% were no longer in the top decile of spending.

In summary, this analysis finds that 10% of Traditional Medicare (TM) beneficiaries account for roughly 60% of Parts A & B spending. These distributions remained unchanged during the COVID-19 PHE. These beneficiaries often have high mortality rates, multiple chronic conditions, and dual eligibility. Part B drug spending has increased notably among the top spenders, particularly among the top 1%. About 40% of high spenders stay in the top spending category year-over-year, while 60% move out of this category.

INTRODUCTION

With ongoing interest in Population-Based Total Cost of Care Models (PB-TCOC) and population health management, it is important to understand the characteristics of high spending beneficiaries. We use 100% Medicare Fee-for-Service (FFS) claims and enrollment data for all beneficiaries during 2017-2023 to examine the highest-cost population.

I. TRADITIONAL MEDICARE TOTAL ENROLLMENT AND SPENDING BETWEEN 2017-2023

In 2023, approximately 25.7 million Traditional Medicare (TM) beneficiaries were enrolled in Medicare with Part A and B coverage, marking a decrease of about 4.6 million from 2017. On average, TM enrollment declined by 3.2% annually from 2017 to 2023. Despite the decline in enrollment, total spending for Medicare Parts A & B (excluding Part D) increased from $405 billion in 2017 to $417 billion in 2023. The decline in TM enrollment reflects a growing shift towards Medicare Advantage plans and increased enrollment in Part A-only coverage.

Table 1: The number of Medicare Beneficiaries enrolled in Traditional Medicare (TM) with Parts A and B coverage declined from 30.3 million in 2017 to 25.7 million in 2023

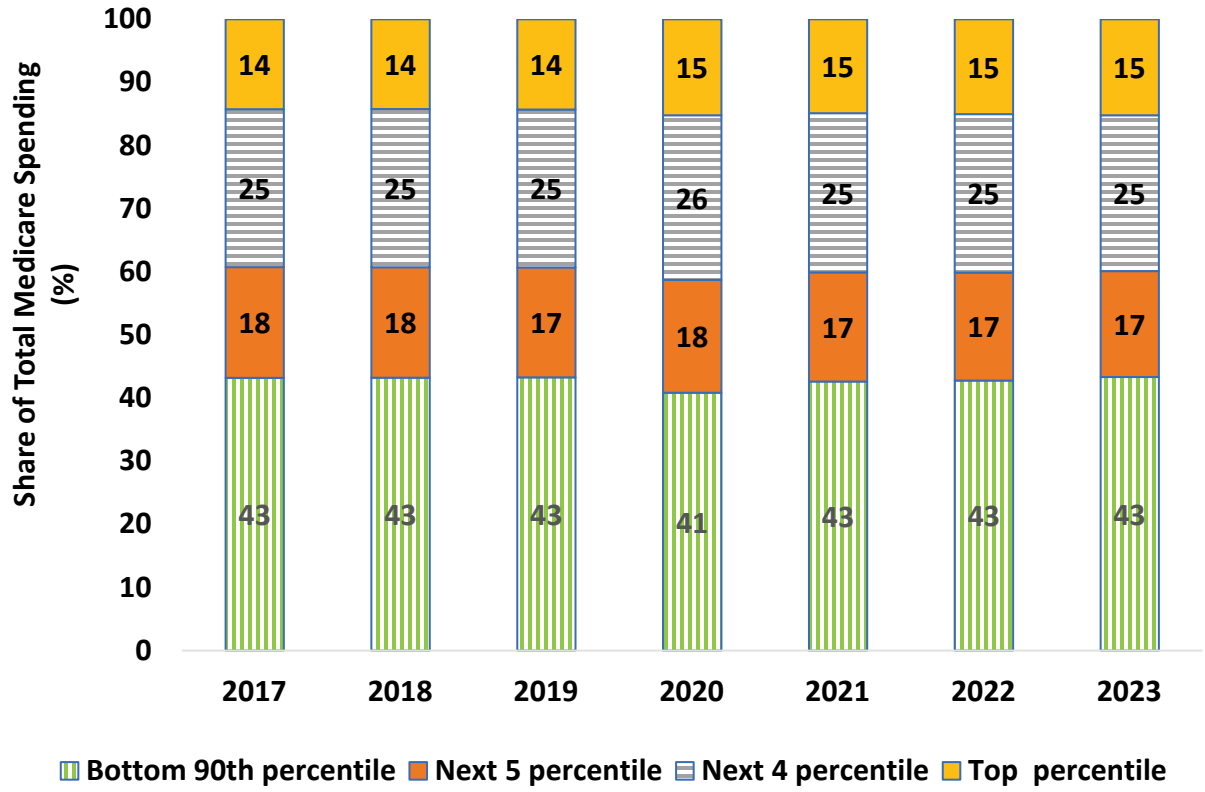
Year	Total Spending (Nominal dollars)	Total Spending ($2023 dollars)	Number of Beneficiaries
2017	$405,903,671,107	$504,605,665,387	30,352,220
2018	$416,153,516,371	$504,985,967,496	30,090,758
2019	$428,587,470,691	$510,718,038,012	29,865,402
2020	$402,930,081,611	$474,392,565,173	29,034,638
2021	$416,578,393,879	$468,381,684,926	28,148,487
2022	$412,484,270,878	$429,395,139,517	26,900,325
2023	$417,299,144,811	$417,299,144,811	25,722,198

NOTES: Includes Medicare FFS beneficiaries enrolled in Parts A and B for all 12-months or until death.
SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims. Consumer Price Index (CPI) from BLS used to convert nominal dollars to $2023.

II. DISPROPORTIONATE TRADITIONAL MEDICARE SPENDING: THE IMPACT OF HIGH-COST BENEFICIARIES

A large portion of Medicare FFS spending is concentrated among the highest spenders. In 2023, the top 1% of beneficiaries accounted for 15% of total Medicare Parts A and B spending, a share that remained stable since 2017. The next 4% of beneficiaries contributed 25% of spending, while the following 5% accounted for 17% of spending. Altogether, the top 10% of beneficiaries were responsible for 57% of total spending, whereas the bottom 90% accounted for only 43%, a pattern that also remained consistent during this period. The concentration of Medicare FFS spending among the highest spenders underscores the skewed distribution of healthcare costs within the Medicare population and the need for targeted cost-containment policies.

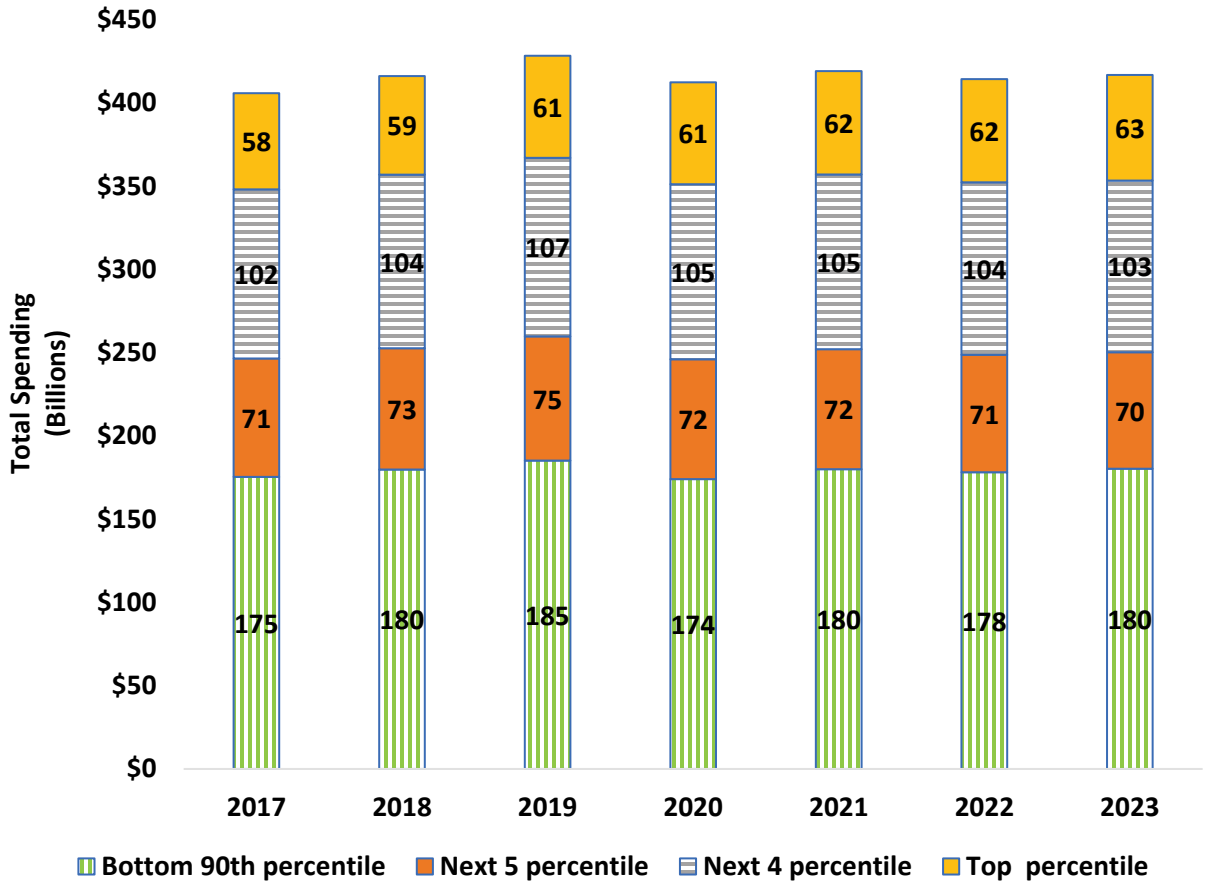
Figure 1: A small share of Medicare Fee-for-Service (FFS) beneficiaries, comprising just 10% of the total, accounted for 57% of all Medicare FFS Part A and Part B spending.



SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims.

In 2017, the top 10% of Medicare beneficiaries spent $231 billion, while the bottom 90% spent $175 billion. Spending by the top 10% remained relatively stable over time, increasing slightly from $231 billion in 2017 to $236 billion in 2023. During the peak of the COVID-19 public health emergency (PHE) in 2020, the top 10% still accounted for $238 billion in spending. There was a significant disruption in outpatient healthcare utilization during the peak of COVID-19 PHE, as well as increased hospitalizations and healthcare visits related to COVID-19 infections.

Figure 2: The top 10% of beneficiaries spent $236 billion in 2023, and the bottom 90% spent $180 billion.



SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims.

- **Top 5% of Spenders:** Average per beneficiary spending was approximately $129,000 in 2023, up from $105,000 in 2017.
- **Top 6-10% of Spenders:** Beneficiaries in this category averaged $54,000 in spending in 2023.
- **Bottom 90% of Spenders:** Average spending was $7,800, much lower.
- **Top 5% vs. Bottom 90%:** Beneficiaries in the top 5% spent nearly 17 times as much as those in the bottom 90%.
- **Top 6-10% vs. Bottom 90%:** Beneficiaries in the top 6-10% spent nearly 7 times as much as those in the bottom 90%.

Table 2: Top 5% beneficiaries on average spent $129,000 in 2023 compared to $7,800 in the bottom 90th percentile

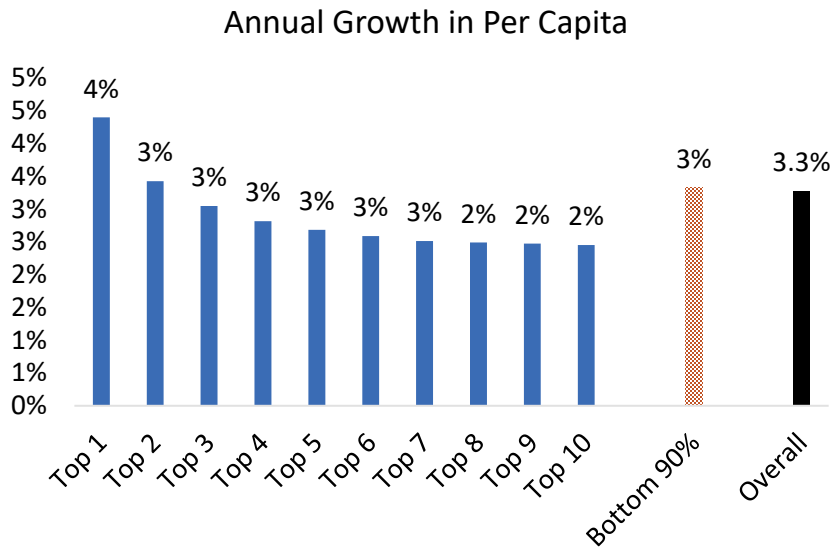
Year	Top 1-5 percentile	Top 6-10 percentile	Bottom 90th percentile	Overall
2017	$104,997	$46,888	$6,421	$13,373
2018	$108,633	$48,431	$6,641	$13,830
2019	$112,854	$49,954	$6,900	$14,351
2020	$114,576	$49,570	$6,300	$13,878
2021	$118,654	$51,219	$7,006	$14,799
2022	$123,046	$52,442	$7,288	$15,334
2023	$129,448	$54,405	$7,812	$16,223

SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims.

III. ANNUAL GROWTH IN MEDICARE SPENDING

- Per capita Parts A and B spending for the top 1% of Medicare spenders grew at an annual rate of 4% between 2017 and 2023. Those in the top 2-7% saw 3% average annual growth, while beneficiaries in the top 8-10% experienced an annual growth rate of 2%.

Figure 4: Top 1% beneficiaries had 4% annual growth in per capita spending between 2017 and 2023

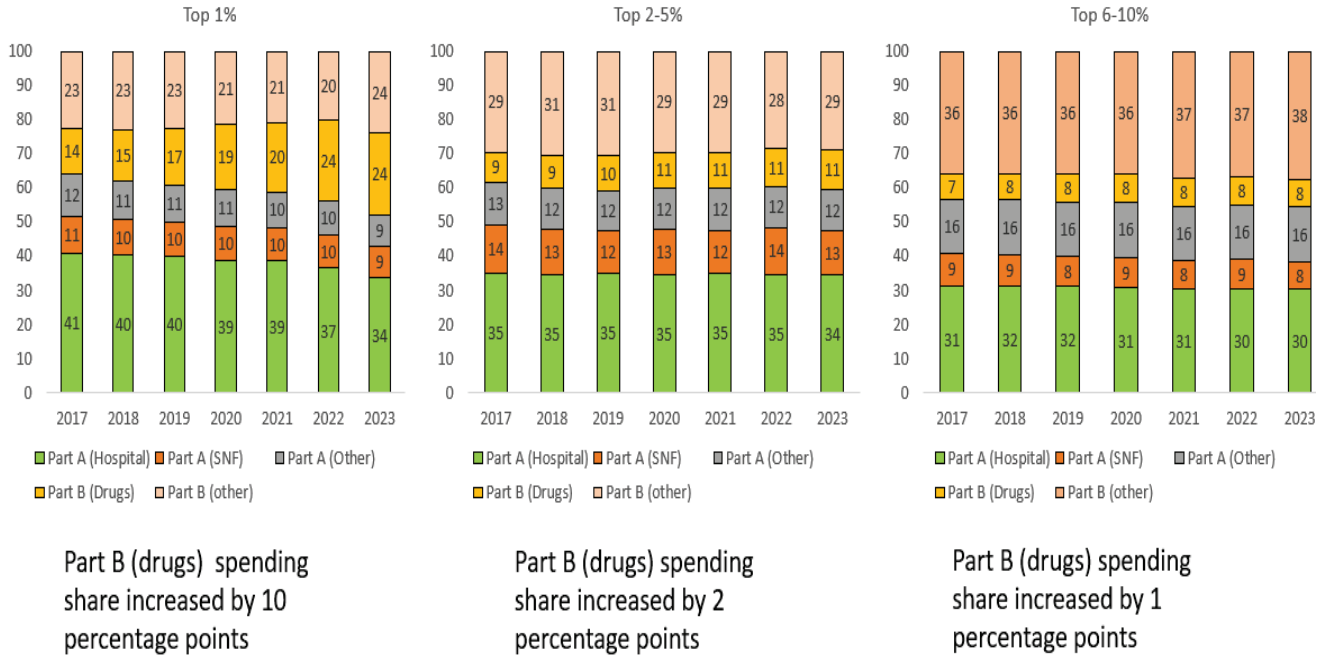


SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims

IV. MEDICARE SPENDING BY SERVICES AMONG TOP SPENDERS

Among the highest-cost Medicare Fee-for-Service (FFS) beneficiaries, there has been a notable shift in spending patterns, particularly in the distribution between Part A and Part B services. For the top 1% of spenders, spending has increasingly moved away from inpatient services (Part A) toward outpatient services (Part B), with a significant rise in expenditures on Part B drugs. Specifically, the share of spending on Part B drugs for this group increased by 10 percentage points. A similar but less pronounced trend is observed among other high-cost beneficiaries. Among those in the top 2-5% of spenders, the share of spending on Part B drugs rose by 2 percentage points, while for those in the top 6-10%, it increased by 1 percentage point. These shifts indicate a growing reliance on outpatient drug therapies among Medicare's highest-cost beneficiaries, which may have implications for future cost containment strategies and policy considerations.

Figure 5: For the Top 1% of Spenders – Part B drug spending share increased by 10 percentage points between 2017 and 2023.

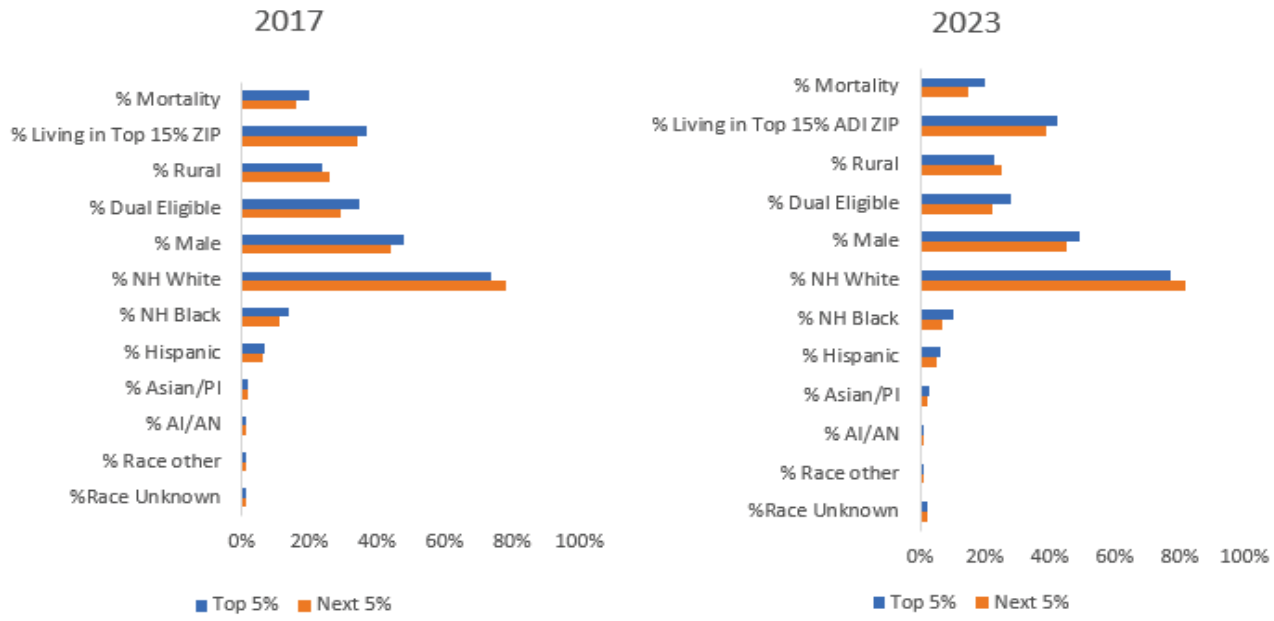


SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims

- For the top 1% spenders, there was a shift from Part A spending to Part B.
- For the top 1% of spenders, the share of spending on Part B drugs increased by 10 percentage points.
- For the top 2-5% of spenders, the share of spending on Part B drugs increased by 2 percentage points.
- For the top 6-10% of spenders, the share of spending on Part B drugs increased by 1 percentage point.

V. TRADITIONAL MEDICARE BENEFICIARY CHARACTERISTICS FOR TOP 10% SPENDERS

Figure 6: Beneficiaries in the top 10% of spending had high mortality rates, lived in areas with high ADI and were more likely to be dual-eligible.



SOURCE: Medicare Claims and Enrollment data. ADI data at 5-digit zip code level.

- **Mortality Rate:** Higher mortality rate for beneficiaries in top spending categories: 20% in top 5% and 16% in top 6-10% compared to 4% overall in Medicare FFS.
- **Area Deprivation Index (ADI):** Disproportionately high (40%) percent of beneficiaries in the top 10% spending category live the top 15% highest ADI zip codes.
- **Duals:** Disproportionately high share of dual eligible (30%) beneficiaries compared to 14% overall in Medicare FFS.

Table 3: Significantly higher disease burden with average 8 chronic conditions for Top 10% spenders

Year	Top 1 %Tile	2nd %Tile	3rd %Tile	4th %Tile	5th %Tile	6th %Tile	7th %Tile	8th %Tile	9th %Tile	10th %Tile	Top 1-5 %Tile	6-10 %Tile
2017	8.8	8.5	8.2	7.9	7.6	7.3	7.0	6.8	6.8	6.7	8.2	6.9
2018	8.8	8.5	8.2	7.9	7.6	7.3	7.0	6.9	6.8	6.7	8.2	6.9
2019	8.8	8.5	8.2	7.9	7.6	7.4	7.1	6.9	6.9	6.7	8.2	7.0
2020	8.5	8.3	8.1	7.8	7.5	7.2	6.9	6.7	6.7	6.6	8.0	6.8
2021	8.5	8.4	8.1	7.8	7.5	7.3	6.9	6.8	6.8	6.7	8.1	6.9
2022	8.7	8.7	8.4	8.1	7.7	7.5	7.1	7.0	6.9	6.8	8.3	7.1
2023	8.8	8.8	8.5	8.2	7.8	7.6	7.2	7.0	7.0	6.9	8.4	7.2

SOURCE: Medicare Claims, Chronic Condition Warehouse (CCW) and Enrollment data. Excludes Part D spending.

- Chronic Conditions: In 2017 and 2023, on average, beneficiaries in the top 5% of spending had more than 8 chronic conditions as compared to roughly 3 for beneficiaries overall in Medicare FFS.

Table 4: Association of Spending and HCC Risk scores

Average Medicare Spending (Part AB)

Year	Top 1 %tile	2nd %tile	3rd %tile	4th %tile	5th %tile	6th %tile	7th %tile	8th %tile	9th %tile	10th %tile	Bottom 90th	Overall
2017	$190,492	$110,326	$87,072	$73,344	$63,750	$56,534	$50,928	$46,278	$42,167	$38,533	$6,421	$13,373
2018	$196,657	$114,283	$90,219	$75,972	$66,034	$58,525	$52,632	$47,774	$43,506	$39,720	$6,641	$13,830
2019	$205,041	$118,952	$93,549	$78,557	$68,173	$60,367	$54,249	$49,256	$44,892	$41,005	$6,900	$14,351
2020	$211,035	$120,589	$94,243	$78,813	$68,200	$60,228	$54,029	$48,906	$44,360	$40,326	$6,300	$13,878
2021	$220,291	$124,579	$97,098	$81,118	$70,187	$62,025	$55,723	$50,552	$45,941	$41,856	$7,006	$14,799
2022	$230,235	$129,174	$100,258	$83,490	$72,071	$63,588	$57,035	$51,711	$47,012	$42,861	$7,288	$15,334
2023	$246,610	$135,026	$104,255	$86,627	$74,722	$65,902	$59,102	$53,635	$48,826	$44,561	$7,812	$16,223

HCC Risk Score

Year	Top 1 %tile	2nd %tile	3rd %tile	4th %tile	5th %tile	6th %tile	7th %tile	8th %tile	9th %tile	10th %tile	Bottom 90th	Overall
2017	3.9	3.0	2.7	2.5	2.4	2.3	2.1	2.0	1.9	1.7	0.9	1.1
2018	4.0	3.2	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.7	0.9	1.1
2019	4.0	3.2	2.9	2.6	2.4	2.3	2.1	2.0	1.9	1.8	0.9	1.1
2020	4.0	3.2	2.9	2.6	2.5	2.3	2.2	2.1	2.0	1.8	1.0	1.1
2021	3.6	3.0	2.6	2.4	2.3	2.2	2.0	1.9	1.8	1.7	0.9	1.0
2022	3.6	3.0	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.7	0.9	1.1
2023	3.6	3.0	2.7	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.0	1.1

- The average Medicare (Part AB) spending among the Top 1% of beneficiaries was $214,337 between 2017 and 2023, and the average HCC risk score was 3.8
- The average Medicare (Part AB) spending among the Top 5% of beneficiaries was $116,000 between 2017 and 2023, and the average HCC risk score was 2.9.
- The average Medicare (Part AB) spending among the Top 10% of beneficiaries was $83,223 between 2017 and 2023, and the average HCC risk score was 2.5.
- The average Medicare (Part AB) spending among the Bottom 90% of beneficiaries was $6,910, and the average (between 2017 and 2023 and the average HCC risk score of 0.9.
- The average Medicare (Part AB) spending among all beneficiaries was $14,541, and the average between 2017 and 2023 and the average HCC risk score of 1.1.

VI. PREVALENCE OF DIFFERENT COMMORBID CONDITIONS AMONG THE TOP 10% AND BOTTOM 90% SPENDERS

Chronic conditions are a key factor driving Medicare spending, particularly among the highest-cost beneficiaries, such as the top 1%, 5%, and 6-10% spenders. There are certain medical conditions that are highly prevalent among the top 10% spenders. These conditions include heart disease, chronic kidney disease, Alzheimer's disease and dementia, stroke, and transient ischemic attacks (TIA), and lung cancer. Among the top 5% and top 6-10% spenders, these conditions are prevalent consistently over time. Between 2017 and 2023, the prevalence of Alzheimer's/dementia, arthritis, and lung cancer grew at a higher rate among the top 10% spenders. The last two columns display the ratio of prevalence for individual comorbid conditions in the top 5% compared to the bottom 90th percentile. For instance, in 2023, hip fracture was 23 times more prevalent in the top 5% than in the bottom 90th percentile.

Table 5: Prevalence of Chronic Conditions Among the Top 5%, Top 6-10%, and the Bottom 90% Medicare Spenders

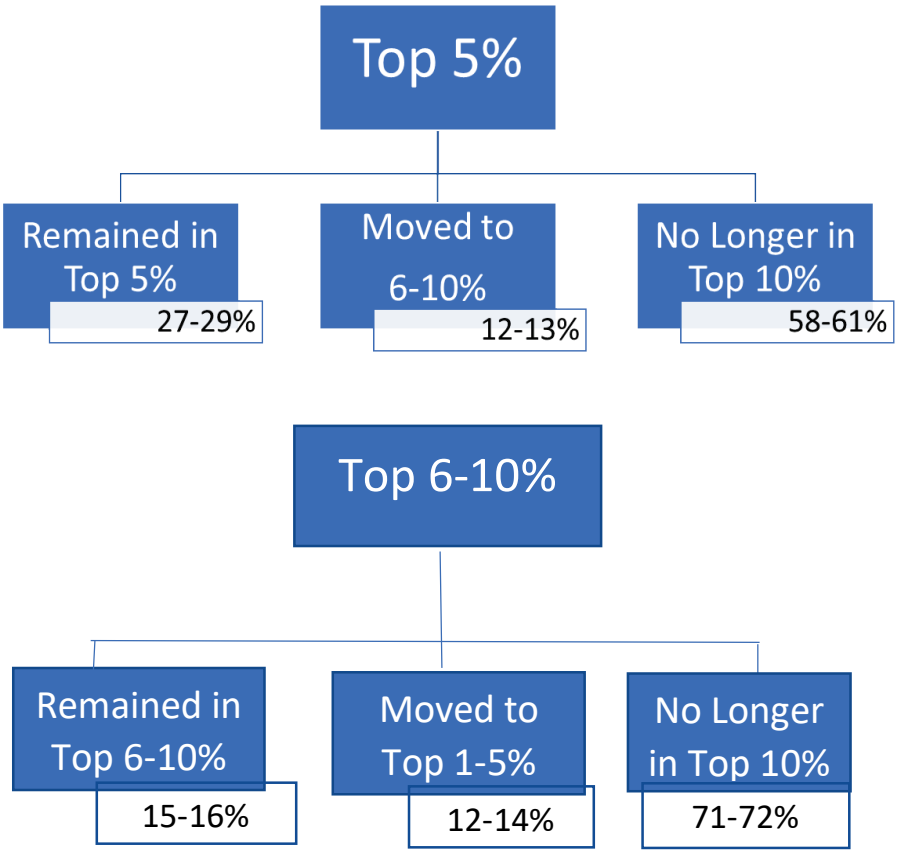
	Top 5%		Top 6-10%		Bottom 90th		Top 5% tile vs Bottom 90th% tile	
	2017	2023	2017	2023	2017	2023	2017	2023
Hip Fracture	3.9%	5.2%	4.9%	4.9%	0.2%	0.2%	16.6	23.2
AMI	3.4%	5.1%	4.3%	4.5%	0.5%	0.5%	7.2	10.4
Cancer (Lung)	3.1%	4.1%	3.8%	3.7%	0.8%	0.8%	4.0	5.1
Stroke_TIA	8.9%	12.2%	11.1%	11.0%	3.0%	2.8%	2.9	4.3
Cancer (Colorectal)	2.8%	3.5%	3.4%	3.2%	1.0%	0.9%	2.7	3.7
CHF	30.4%	42.6%	38.0%	40.4%	11.1%	11.9%	2.7	3.6
Alzh_Dementia	21.8%	31.4%	27.3%	31.4%	8.9%	9.2%	2.4	3.4
COP	23.5%	27.5%	29.4%	24.7%	10.4%	8.4%	2.3	3.3
Alzheimer's	8.3%	9.4%	10.4%	9.4%	3.6%	2.9%	2.3	3.2
Anemia	46.9%	62.0%	58.6%	58.1%	18.9%	19.6%	2.5	3.2
Atrial_fib	16.6%	23.9%	20.7%	23.0%	7.5%	7.9%	2.2	3.0
Cancer (Endometrial)	0.8%	1.0%	1.0%	1.0%	0.3%	0.4%	2.5	2.8
Asthma	8.7%	11.6%	10.9%	11.0%	4.9%	4.8%	1.8	2.4
Chronic kidney	41.6%	58.8%	51.9%	57.3%	20.9%	25.4%	2.0	2.3
Depression	29.0%	39.1%	36.3%	37.2%	17.0%	18.1%	1.7	2.2
Ischemic Heart Disease	40.6%	55.5%	50.7%	54.4%	24.6%	26.7%	1.6	2.1
Hyperlasia of Prostate	11.2%	17.4%	14.0%	17.4%	7.2%	8.8%	1.6	2.0
Cancer (Breast)	4.8%	6.3%	6.0%	6.4%	3.1%	3.6%	1.5	1.8
Osteoporosis	10.1%	14.5%	12.7%	14.8%	6.3%	8.6%	1.6	1.7
Cancer (Prostate)	4.6%	6.6%	5.7%	6.7%	3.2%	3.8%	1.4	1.7
Arthritis	41.3%	56.3%	51.7%	57.2%	32.0%	36.1%	1.3	1.6
Diabetes	31.2%	42.0%	39.0%	40.6%	25.5%	25.8%	1.2	1.6
Hypothyroidism	20.0%	26.7%	24.9%	26.5%	15.9%	16.9%	1.3	1.6
Hypertension	67.1%	85.3%	83.9%	84.1%	59.4%	58.5%	1.1	1.5
Hyperlipidemia	51.8%	72.0%	64.8%	72.1%	49.3%	54.9%	1.1	1.3
Glaucoma	7.4%	9.3%	9.2%	9.5%	10.3%	10.4%	0.7	0.9
Cataract	12.6%	15.5%	15.7%	15.4%	19.3%	18.9%	0.7	0.8

SOURCE: Medicare Claims, CCW and Enrollment data. Excludes Part D spending.

VII. SWITCHING AMONG TOP SPENDERS

Individuals who are disproportionately high cost each year may not be persistently high cost over time. Understanding the variation of persistence in high-cost status can help development of payment models targeting those who can benefit from improved care coordination and population health management.

Figure 9: Roughly 40% of high spenders remain in the Top10% spending category year-over-year.



- Roughly 40% of high spenders remain in the top 10% of spending year-over-year.
- For beneficiaries in the top 5%, roughly 27% remain in the top 5%, another 13% move to the 6-10% spending category, while the majority (60%) moved out of the top 10% of spending.
- For beneficiaries in the top 6-10% of spending, 15-16% remained in the top 6-10%, while 12-14% moved to the top 1-5% of spending. 71-72% were no longer in the top decile of spending.

Table 6: Characteristics of beneficiaries in Top 5%

Category	Next 5% (2023)		
	Remained in Top 5%	Moved to 6-10%	No Longer in the Top 10%
Average Age	72.8	75.8	76.9
Average No. of Chronic conditions	8.5	8.0	6.7
% Mortality	21%	24%	21%
% Living in Top 15% ADI zipcode	44%	41%	41%
% Dual Eligible	34%	31%	26%
% Male	50%	46%	47%
% NH White	73%	77%	81%
% NH Black	13%	10%	7%
% Hispanic	7%	6%	5%
% Asian/PI	3%	3%	3%
% Other race	1%	1%	1%
% AI/AN	1%	1%	1%
% Race unknown	2%	2%	2%
% Urban	80%	77%	75%

Category	Next 5% (2023)		
	Remained in Top 6-10%	Moved to 1-5%	No Longer in the Top 10%
Average Age	76.6	75.2	77.4
Average No. of Chronic conditions	6.8	8.8	6.02
% Mortality	15%	20%	14%
% Living in Top 15% ADI zipcode	38%	41%	39%
% Dual Eligible	25%	29%	20%
% Male	41%	47%	44%
% NH White	80%	77%	85%
% NH Black	9%	11%	6%
% Hispanic	6%	6%	4%
% Asian/PI	2%	3%	2%
% Other race	1%	1%	1%
% AI/AN	1%	1%	1%
% Race unknown	2%	2%	2%
% Urban	76%	78%	74%

- **Characteristics:** Beneficiaries who remain high cost are more likely to be dual-eligible, have more chronic conditions, are more likely to be non-Hispanic Black, and are more likely to live in urban areas.

DISCUSSION

Medicare spending in the FFS population is extremely concentrated. A small group (10%) of Medicare FFS beneficiaries accounts for 57% of all Parts A & B spending, while the other 90% accounts for 43%. The top 10% spenders have high mortality rates (20%), are more likely to be non-White, dual-eligible, and have an average of more than eight chronic conditions. Part B spending increases are largely driven by drug spending, with the top 1% seeing a 10-percentage point rise in Part B drug spending between 2017 and 2023. About 40% of high spenders remain in the top 10% year-over-year.

These individuals often suffer from multiple chronic conditions, requiring frequent hospitalizations and long-term care, which drive up costs. Addressing these issues involves implementing more coordinated care models, managing chronic diseases effectively, and reducing unnecessary hospitalizations to better control spending in this high-cost group. Other difficulties include managing end-of-life care, addressing behavioral and social determinants of health, aligning provider incentives, and ensuring the sustainability of cost-saving interventions. Effective solutions require integrated care, improved coordination, and payment reforms.

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APPENDIX

This study includes calendar year 2017-2023 data for Medicare fee-for-service beneficiaries continuously enrolled in Medicare Parts A and B, allowing death in each study year. The total spending is calculated using both Medicare program spending and beneficiary out-of-pocket spending.

Exhibit 1: Average Per Capita Spending by percentile

Average Per Capita Spending (Medicare+ OPP)

Year	Top 1 percentile	2nd percentile	3rd percentile	4th percentile	5th percentile	6th percentile	7th percentile	8th percentile	9th percentile	10th percentile	Bottom 90th percentile	Overall
2017	$190,492	$110,326	$87,072	$73,343	$63,750	$56,534	$50,928	$46,278	$42,167	$38,533	$6,421	$13,373
2018	$196,657	$114,283	$90,219	$75,972	$66,034	$58,525	$52,632	$47,774	$43,506	$39,720	$6,641	$13,830
2019	$205,041	$118,952	$93,548	$78,557	$68,173	$60,367	$54,249	$49,256	$44,892	$41,005	$6,900	$14,351
2020	$211,035	$120,589	$94,243	$78,813	$68,200	$60,228	$54,029	$48,906	$44,360	$40,326	$6,300	$13,878
2021	$220,291	$124,579	$97,098	$81,118	$70,187	$62,025	$55,723	$50,552	$45,941	$41,856	$7,006	$14,799
2022	$230,235	$129,174	$100,258	$83,490	$72,071	$63,588	$57,035	$51,711	$47,012	$42,861	$7,288	$15,334
2023	$246,610	$135,026	$104,255	$86,627	$74,722	$65,902	$59,102	$53,635	$48,826	$44,561	$7,812	$16,223
Annual Growth	**4.40%**	**3.42%**	**3.05%**	**2.81%**	**2.68%**	**2.59%**	**2.51%**	**2.49%**	**2.47%**	**2.45%**	**3.32%**	**3.27%**

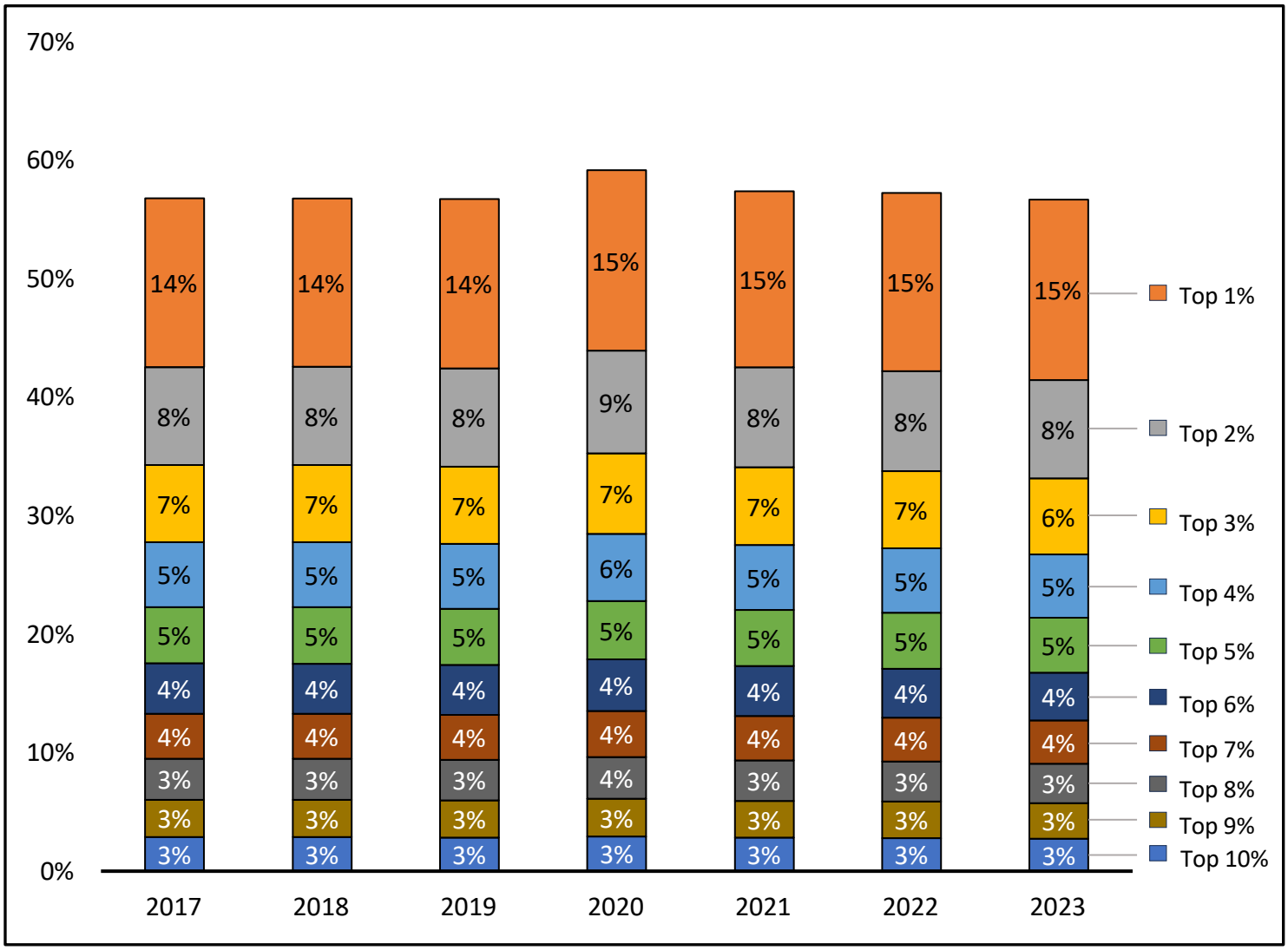
SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims.

Exhibit 2: Total Spending by percentile

Total Spending (Medicare+ OPP) - *Billions*

Year	Top 1 percentile	2nd percentile	3rd percentile	4th percentile	5th percentile	6th percentile	7th percentile	8th percentile	9th percentile	10th percentile	Bottom 90th percentile	Total Spending
2017	$57.8	$33.5	$26.4	$22.3	$19.3	$17.2	$15.5	$14.0	$12.8	$11.7	$175.4	$405.9
2018	$59.2	$34.4	$27.1	$22.9	$19.9	$17.6	$15.8	$14.4	$13.1	$12.0	$179.8	$416.2
2019	$61.2	$35.5	$27.9	$23.5	$20.4	$18.0	$16.2	$14.7	$13.4	$12.2	$185.5	$428.6
2020	$61.3	$35.0	$27.4	$22.9	$19.8	$17.5	$15.7	$14.2	$12.9	$11.7	$164.6	$402.9
2021	$62.0	$35.1	$27.3	$22.8	$19.8	$17.5	$15.7	$14.2	$12.9	$11.8	$177.5	$416.6
2022	$61.9	$34.7	$27.0	$22.5	$19.4	$17.1	$15.3	$13.9	$12.6	$11.5	$176.5	$412.5
2023	$63.4	$34.7	$26.8	$22.3	$19.2	$17.0	$15.2	$13.8	$12.6	$11.5	$180.8	$417.3
Annual Growth	**1.56%**	**0.61%**	**0.24%**	**0.02%**	**-0.11%**	**-0.20%**	**-0.28%**	**-0.30%**	**-0.31%**	**-0.34%**	**0.51%**	**0.46%**

Exhibit 3: Share of Medicare FFS Beneficiaries in Top Spending Categories Each Year, CYs 2017-2023: Top 10 percentile



SOURCE: Medicare Claims and Enrollment data. Excludes Part D spending. The spending categories include Inpatient, SNF, Outpatient, Physician, Home Health, Hospice and DME claims.

Exhibit 4: Characteristics of Switchers in the Top 5% of Spending

	Top 5% (2017)			Next 5% (2017)		
Category	**Unchanged**	**Changed**	**No Longer in Top Decile**	**Unchanged**	**Changed**	**No Longer in Top Decile**
Average Age	69.93	73.78	75.85	74.21	72.09	76.09
% Male	49.11%	45.53%	46.18%	41.89%	47.60%	43.05%
% NH White	66.86%	74.57%	81.30%	74.79%	70.26%	8S.52%
% NH Black	19.27%	13.80%	9.18%	13.66%	17.15%	7.90%
%Race other	0.78%	0.73%	0.67%	0.67%	0.72%	0.61%
% Asian	2.47%	2.18%	2.08%	2.06%	2.35%	1,74%
% Hispanic	8.73%	7.06%	5.24%	7.17%	7.74%	4.68%
% AN/AI	0.90%	0.87%	0.67%	0.86%	0.93%	0.62%
% Race unknown	0.99%	0.80%	0.86%	0.79%	0.84%	0.92%
% Dual	43.10%	36.72%	30.30%	31.80%	37.22%	25.00%
% Non-Dual	56.90%	63.28%	69.70%	68.20%	62.78%	75.00%
% Urban	78.89%	76.23%	74.14%	74.74%	76.41%	72.83%
% Rural	21.11%	23.77%	25.86%	25.26%	23.59%	27.17%
% Top 15% ADI	38.61%	35.98%	37.29%	33.41%	35.54%	34.81%
% Mortality	21.07%	23.79%	21.62%	14.58%	18.40%	14.00%
Average CC	8.69	7.8	6.56	6.7	8.5	5.91