

July 2016 | Data Note

Medicare Spending at the End of Life: A Snapshot of Beneficiaries Who Died in 2014 and the Cost of Their Care

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Of the 2.6 million people who died in the U.S. in 2014,¹ 2.1 million, or eight out of 10, were people on Medicare,² making Medicare the largest insurer of medical care provided at the end of life. Spending on Medicare beneficiaries in their last year of life accounts for about 25% of total Medicare spending on beneficiaries age 65 or older.³ The fact that a disproportionate share of Medicare spending goes to beneficiaries at the end of life is not surprising given that many have serious illnesses or multiple chronic conditions and often use costly services, including inpatient hospitalizations, post-acute care, and hospice, in the year leading up to their death.

This data note provides a snapshot of Medicare beneficiaries who died at some point in 2014 and spending at the end of life. It examines Medicare per capita spending in 2014 and trends since 2000, both overall and by type of service, for beneficiaries in traditional Medicare who died at some point during the year (referred to here as “decedents”) compared to those who lived for the entire year (referred to here as “survivors”). The analysis includes beneficiaries who are under age 65 with disabilities, those who qualified for Medicare due to having end-stage renal disease, and those who are age 65 or older.⁴ The analysis of per capita spending excludes beneficiaries enrolled in Medicare Advantage because data on Medicare spending, overall and by type of service, are not available for these enrollees.⁵ The analysis is based on data from a 5% sample of Medicare claims for services covered under Parts A, B, and D for traditional Medicare beneficiaries from the Centers for Medicare & Medicaid Services (CMS) Chronic Conditions Data Warehouse (CCW) from 2000 to 2014.

Findings

WHAT ARE THE CHARACTERISTICS OF MEDICARE BENEFICIARIES WHO DIED AT SOME POINT IN 2014?

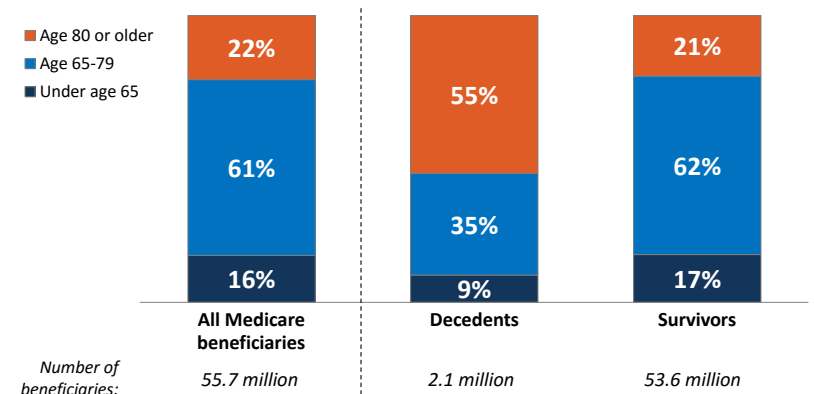
More than half of Medicare decedents were age 80 or older in 2014.

- Of the more than 2.1 million Medicare beneficiaries who died at some point in 2014—representing 4.0% of the total Medicare population that year—over half (55%) were age 80 or older, which is more than double their share of the Medicare population overall (22%) (**Figure 1**). Just over half (52%) of decedents were women

Figure 1

More than half of Medicare beneficiaries who died at some point in 2014 were age 80 or older

Distribution of Medicare beneficiaries overall, decedents, and survivors by age group, 2014



NOTE: Includes beneficiaries in Medicare Advantage. Estimates may not sum to 100% due to rounding.
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.

and eight out of 10 were non-Hispanic white (81%), roughly comparable to their shares of the overall Medicare population (54% and 77%, respectively).

- More than seven in 10 (72%, or 1.5 million) Medicare decedents were in traditional Medicare in 2014, and the remainder (28%, or 0.6 million) were enrolled in Medicare Advantage plans, reflecting overall enrollment patterns in traditional Medicare and Medicare Advantage.
- Diseases that were highly prevalent among decedents in traditional Medicare in 2014 include hypertension (67%), ischemic heart disease (53%), chronic kidney disease (51%), congestive heart failure (48%), Alzheimer's disease or dementia (43%), diabetes (38%), and cancer (17%). The prevalence of each of these conditions was higher among beneficiaries who died at some point in 2014 than among beneficiaries overall, in some cases substantially higher (**Table 1**). For example, more than 4 in 10 decedents had Alzheimer's or dementia, compared to only 9% of beneficiaries overall, and more than half of decedents had ischemic heart disease, compared to one fourth of beneficiaries overall.

HOW DOES MEDICARE PER CAPITA SPENDING DIFFER FOR DECEDENTS AND SURVIVORS IN 2014 AND OVER TIME?

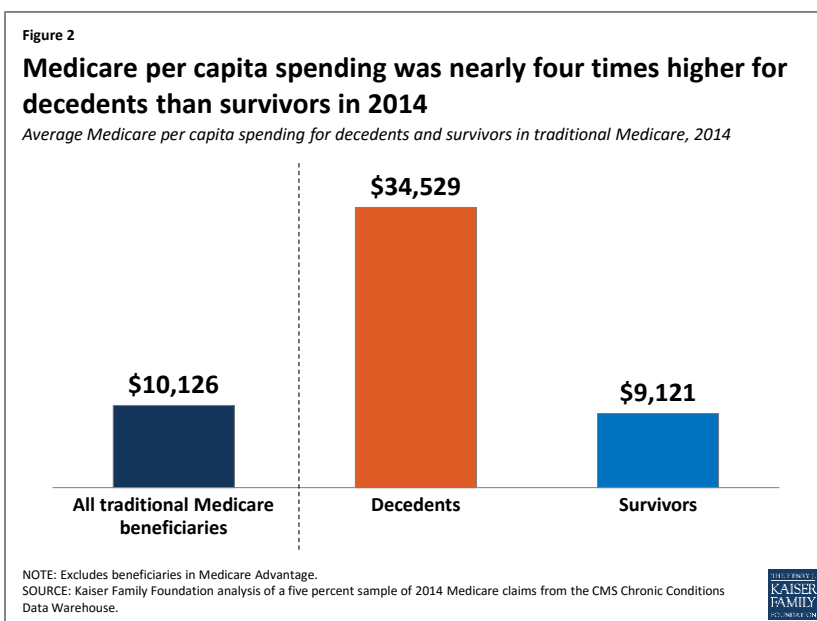
Average total Medicare per capita spending was nearly four times higher for beneficiaries in traditional Medicare who died at some point in 2014 than for those who lived the entire year.

- Average Medicare per capita spending on services covered under Parts A, B, and D for traditional Medicare beneficiaries who died at some point in 2014 was \$34,529—nearly four times higher than per capita spending for survivors (\$9,121) and more than three times higher than the average among all beneficiaries in traditional Medicare (\$10,126) (**Figure 2**).

- In 2014, beneficiaries who died at some point during the year accounted for 4% of all beneficiaries in traditional Medicare, but 13.5% of traditional Medicare spending. This amount is disproportionate to the decedent share of beneficiaries overall, but it accounts for a relatively small share of total spending that year. This estimate is lower than the 25% estimate cited earlier because it is based on Medicare spending for people who died at some point in a given calendar year (in this case, 2014), rather than the last 12 months of spending for people who died.⁶

The share of total traditional Medicare spending on beneficiaries who died at some point during the year has decreased over time.

- The share of total traditional Medicare spending on beneficiaries who died at some point during the year has dropped over time, from 18.6% in 2000 to 13.5% in 2014 (**Figure 3**). This drop is likely due to a combination of factors affecting total traditional Medicare spending over time and spending on decedents, including: growth in the number of Medicare beneficiaries overall, particularly in recent years as the baby boom generation ages on to Medicare, which means more younger, healthier beneficiaries, on average;



longer life expectancy, which means people are living longer and dying at older ages (as seen in a decline in the share of traditional Medicare beneficiaries who die at some point in a given year—from 4.9% in 2000 to 4.0% in 2014); lower average per capita spending on older decedents compared to younger decedents (as described further below); and slower growth in the rate of annual per capita spending for decedents than survivors (also described further below).

Between 2000 and 2014, the annual rate of growth in average Medicare per capita spending was lower among decedents than survivors.

- Average Medicare spending among decedents was 80% higher per person in 2014 (\$34,529) than in 2000 (\$19,130), while average spending among survivors more than doubled between 2000 and 2014, from \$4,322 to \$9,121 (**Figure 4**).
- Although average per capita spending was higher for decedents than survivors in each year between 2000 and 2014, the average annual rate of growth in spending over this time period was lower for decedents (4.3%) than for survivors (5.5%).

WHAT SERVICES ACCOUNT FOR THE DIFFERENCE IN MEDICARE PER CAPITA SPENDING BETWEEN DECEDENTS AND SURVIVORS?

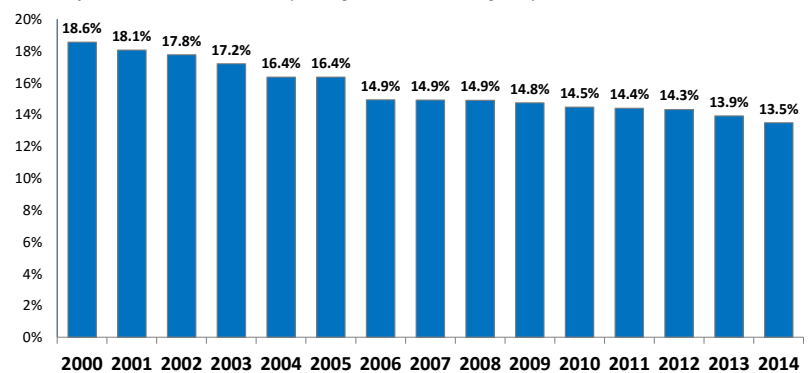
Higher Medicare per capita spending among decedents than survivors in traditional Medicare is primarily driven by much higher spending on inpatient hospital services.

- Spending on inpatient hospital services accounted for the largest amount of per capita Medicare spending by type of service among decedents in traditional Medicare in 2014 (**Figure 5; Table 2**), and was the primary reason for the

Figure 3

The share of total traditional Medicare spending on traditional Medicare beneficiaries who died at some point in the year has declined over time

Percent of total traditional Medicare spending on decedents in a given year, 2000-2014



NOTE: Excludes beneficiaries in Medicare Advantage.

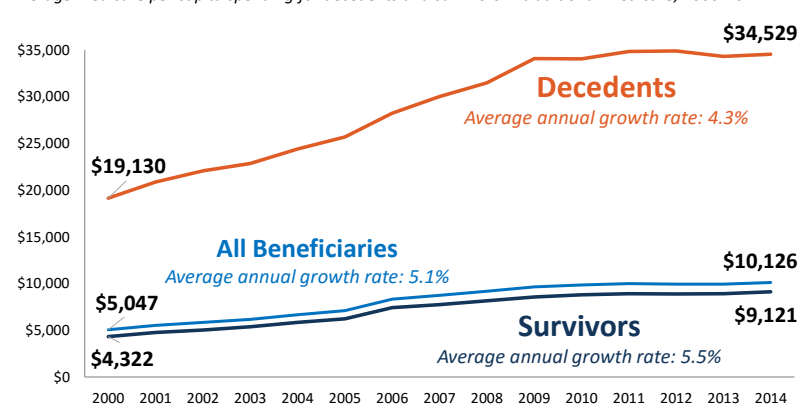
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.



Figure 4

Medicare per capita spending roughly doubled for both decedents and survivors between 2000 and 2014

Average Medicare per capita spending for decedents and survivors in traditional Medicare, 2000-2014



NOTE: Excludes beneficiaries in Medicare Advantage.

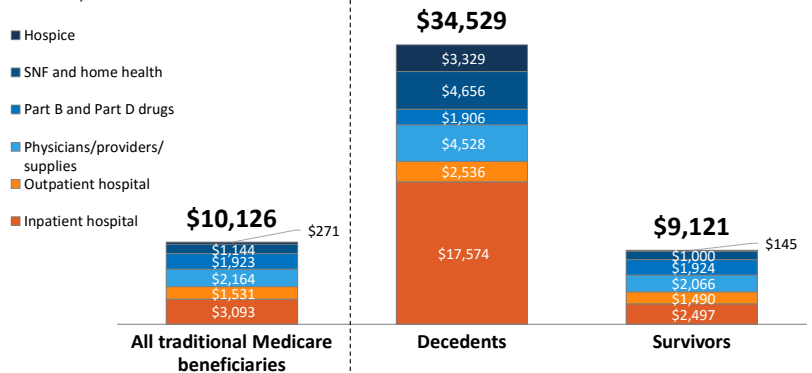
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2000-2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.



Figure 5

Spending on inpatient hospital services was 7 times higher among decedents than survivors in 2014

Average Medicare per capita spending by type of service for decedents and survivors in traditional Medicare, 2014



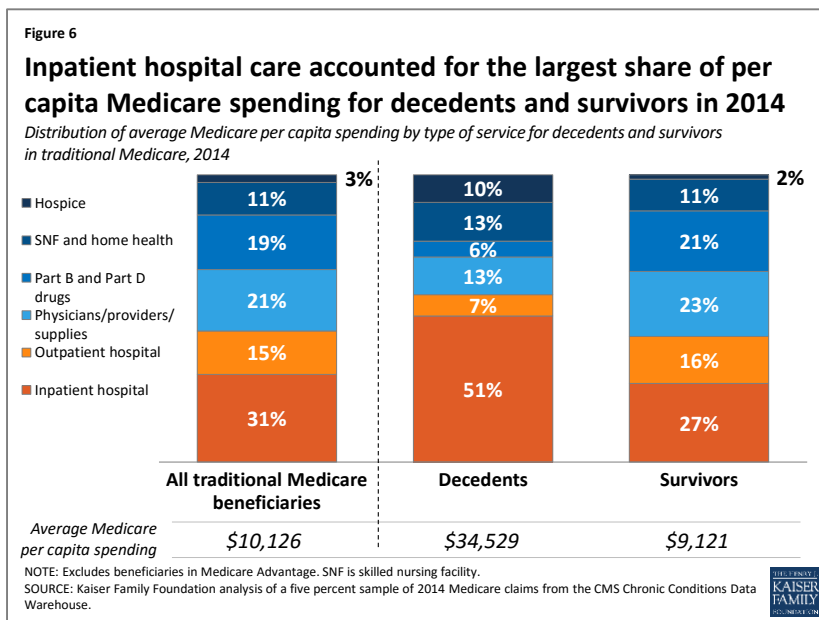
NOTE: Excludes beneficiaries in Medicare Advantage. SNF is skilled nursing facility.

SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.



substantial difference in spending between decedents and survivors. Per capita inpatient hospital spending among decedents was \$17,574 in 2014, on average, seven times higher than among survivors (\$2,497). Decedents also incurred much higher spending on post-acute care (skilled nursing facility (SNF) and home health services) and hospice care than survivors in 2014.

- Inpatient hospital services accounted for the largest share of average Medicare per capita spending by type of service for traditional Medicare beneficiaries overall in 2014 (31%), but the share of per capita spending on inpatient hospital services was particularly large for decedents, accounting for just over half (51%) of total spending in 2014 (**Figure 6**).

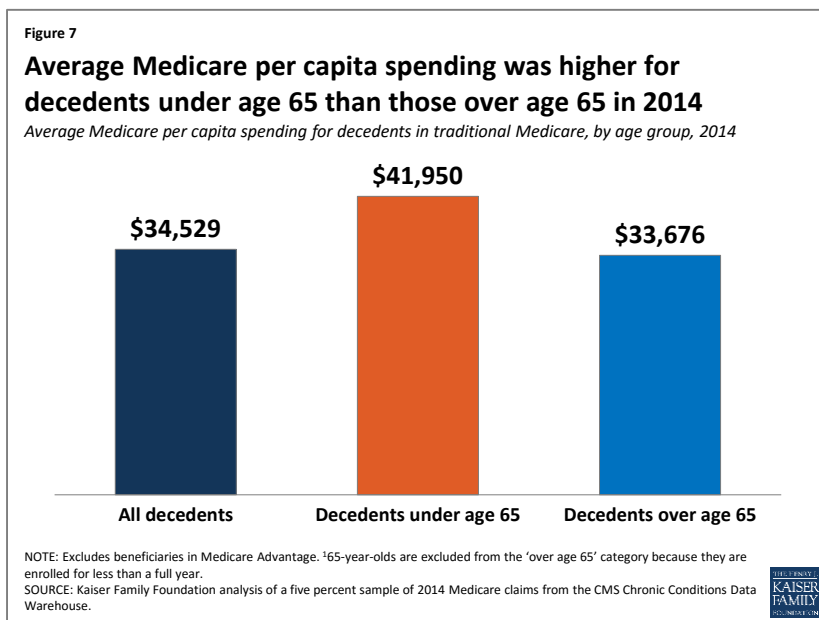


- For decedents, the next largest service categories were physicians, providers, and supplies combined and post-acute care (skilled nursing facilities and home health services), at 13% each, followed by hospice care (10%). For surviving beneficiaries in traditional Medicare, inpatient hospital services accounted for 27% of total per capita Medicare spending in 2014, followed closely by spending on physicians/providers/supplies (23%) and Part B and Part D prescription drugs (21%).

HOW DOES MEDICARE PER CAPITA SPENDING DIFFER FOR DECEDENTS UNDER AND OVER AGE 65, AND WHAT ACCOUNTS FOR THE DIFFERENCE IN SPENDING?

Medicare per capita spending was higher for decedents under age 65 in 2014 than for those over age 65.

- Among decedents in traditional Medicare in 2014 who were younger than age 65, Medicare per capita spending was \$41,950, on average (**Figure 7**). This amount is 25% more than average per capita spending among decedents over age 65 in 2014 (\$33,676).
- The fact that Medicare per capita spending is higher for decedents under age 65 than those over age 65 is related to the fact that a larger share of traditional Medicare beneficiaries under age 65 who died at some point in 2014 is dually eligible for Medicare and Medicaid than of decedents who are over age 65, and their Medicare per capita spending is significantly higher, on average, than dually eligible beneficiaries over age 65. Among dually eligible decedents in 2014, average



Medicare per capita spending among those under age 65 was \$51,997, compared to \$36,037 among those over age 65.

- In terms of Medicare spending by type of service, higher per capita spending among decedents under age 65 than among those over age 65 was driven by higher spending on inpatient hospital services (\$24,515 versus \$16,701, respectively), along with higher spending on outpatient hospital, physician/providers/supplies, and Part B/D prescription drugs (Figure 8). By contrast, among decedents over age 65, spending was higher on post-acute care and hospice care.

HOW DOES MEDICARE PER CAPITA SPENDING DIFFER AMONG DECEDENTS OVER AGE 65?

Per capita Medicare spending generally declines with age among decedents in traditional Medicare who are over age 65.

- Among decedents over age 65, Medicare per capita spending was highest for those in their early 70s and then declined with each year of age in 2014 (Figure 9). Among survivors over age 65, the opposite pattern occurred, with spending rising steadily with each year of age in 2014.

WHAT SERVICES ACCOUNT FOR THE DIFFERENCE IN SPENDING BY AGE AMONG DECEDENTS OVER AGE 65?

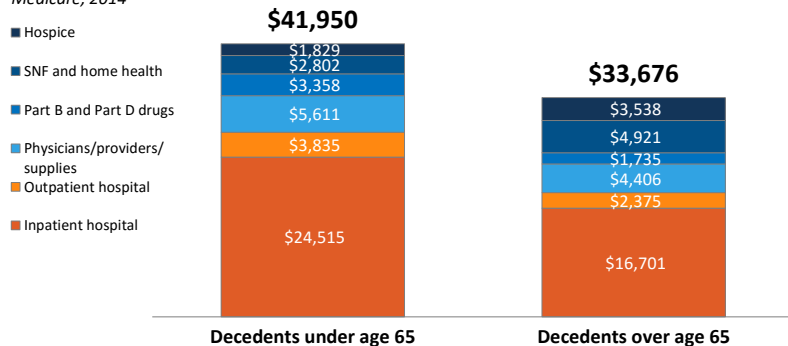
The decline in Medicare per capita spending by age for decedents over age 65 in 2014 was mainly due to lower inpatient hospital spending.

- Per capita Medicare spending on inpatient hospital services decreased steadily with age among decedents in 2014 (Figure 10; Table 3), declining from more than \$20,000 for decedents in their late sixties and seventies to around \$10,000 or less

Figure 8

Higher spending among decedents under age 65 than those over age 65 in 2014 was primarily due to higher spending on inpatient hospital services

Average Medicare per capita spending by type of service for decedents and survivors in traditional Medicare, 2014



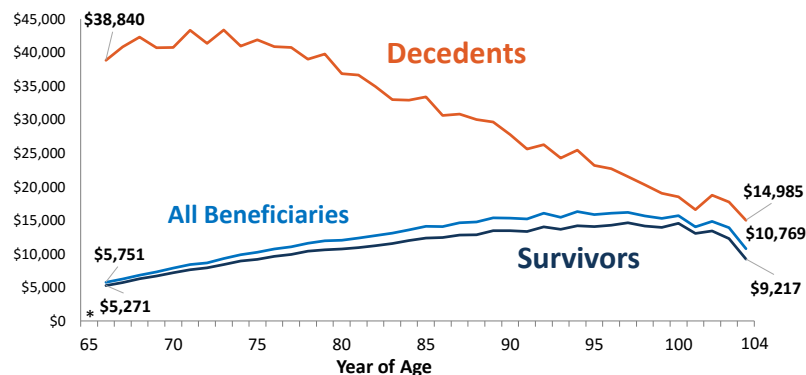
NOTE: Excludes beneficiaries in Medicare Advantage. SNF is skilled nursing facility. 65-year-olds are excluded from the 'over age 65' category because they are enrolled for less than a full year.
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.



Figure 9

Medicare per capita spending for decedents over age 65 declined with age in 2014, while spending for survivors increased

Average Medicare per capita spending for decedents and survivors in traditional Medicare over age 65, by year of age, 2014



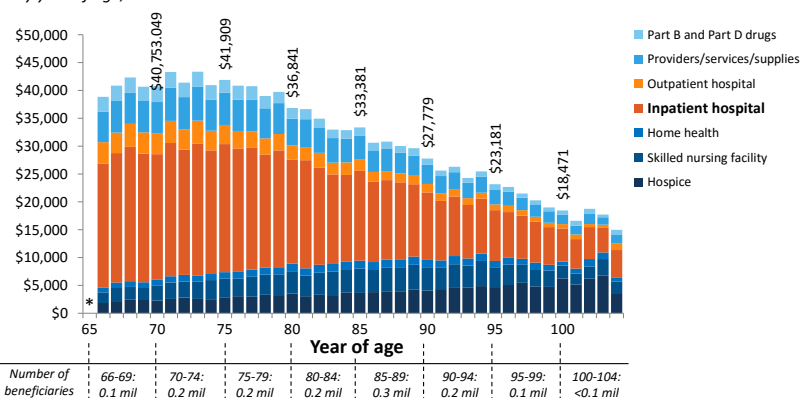
NOTE: Excludes beneficiaries in Medicare Advantage. *65-year-olds are excluded because they are enrolled for less than a full year.
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.



Figure 10

Medicare spending declined with age for decedents over age 65 in 2014, mainly due to lower inpatient hospital spending

Average Medicare per capita spending by type of service for decedents in traditional Medicare over age 65, by year of age, 2014

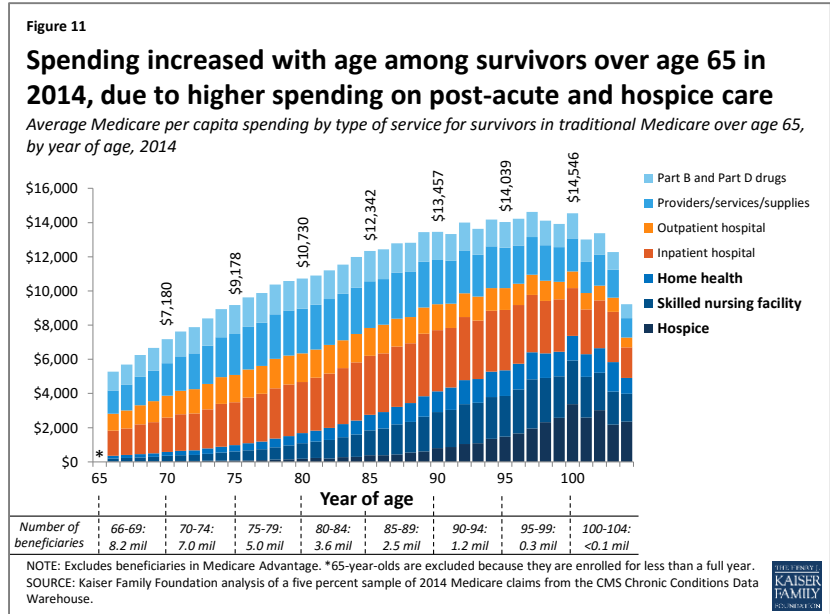


NOTE: Excludes beneficiaries in Medicare Advantage. *65-year-olds are excluded because they are enrolled for less than a full year.
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.



among decedents older than age 90. In contrast, per capita spending for hospice services increased with age among decedents, from around \$2,000 to \$5,000 or more between the ages of 66 and 100. Spending on post-acute care (SNF and home health) also increased with advancing age.

- In contrast, spending increased with each year of age among survivors over age 65 in 2014, primarily due to increasing spending on post-acute and hospice care (**Figure 11; Table 4**). Inpatient hospital care was the costliest type of service for survivors in traditional Medicare up to the early nineties, after which age spending on post-acute care was the largest amount.



Discussion

Much attention has been focused lately on end-of-life care, the services patients receive at the end of life, and Medicare spending on these services. This analysis contributes a number of important findings to the discussion surrounding these issues.

Our analysis shows that Medicare per capita spending for beneficiaries in traditional Medicare who died at some point in 2014 was substantially higher than for those who lived the entire year, as might be expected. It also shows that Medicare per capita spending among beneficiaries over age 65 who die in a given year declines steadily with age. Per capita spending for inpatient services is lower among decedents in their eighties, nineties, and older than for decedents in their late sixties and seventies, while spending is higher for hospice care among older decedents. These results suggest that providers, patients, and their families may be inclined to be more aggressive in treating younger seniors compared to older seniors, perhaps because there is a greater expectation for positive outcomes among those with a longer life expectancy, even those who are seriously ill.

In addition, we find that total spending on people who die in a given year accounts for a relatively small and declining share of traditional Medicare spending. This reduction is likely due to a combination of factors, including: growth in the number of traditional Medicare beneficiaries overall as the baby boom generation ages on to Medicare, which means a younger, healthier beneficiary population, on average; gains in life expectancy, which means beneficiaries are living longer and dying at older ages; lower average per capita spending on older decedents compared to younger decedents; slower growth in the rate of annual per capita spending for decedents than survivors, and a slight decline between 2000 and 2014 in the share of beneficiaries in traditional Medicare who died at some point in each year.

This analysis focuses exclusively on beneficiaries in traditional Medicare, excluding the roughly one in three beneficiaries who are enrolled in Medicare Advantage plans,⁷ because comparable spending data for Medicare Advantage enrollees are not available. With research showing significant differences in certain demographic

and health status characteristics between decedents in traditional Medicare and in Medicare Advantage,⁸ it is possible that spending and service use patterns may differ as well. While the majority of Medicare beneficiaries who died at some point in 2014 were in traditional Medicare, the inclusion of Medicare Advantage enrollees would provide a better understanding of whether and how the experiences of traditional Medicare and Medicare Advantage beneficiaries differ at the end of life.

Decisions pertaining to end-of-life care are among the most difficult for patients, families, and health care providers. The recent change in Medicare payment policy to reimburse physicians for conversations about advance care planning with their patients⁹ could bring about changes that better align services delivered with patient preferences and that also potentially reduce the costs associated with care at the end of life.

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Anthony Damico is an independent consultant.

Table 1: Prevalence of Selected Conditions Among Traditional Medicare Beneficiaries, 2014

Condition	All traditional Medicare beneficiaries	Decedents	Survivors
Hypertension	50%	67%	49%
Ischemic Heart disease	25%	53%	23%
Chronic Kidney Disease	15%	51%	14%
Anemia	20%	50%	19%
Congestive Heart Failure	12%	48%	11%
Alzheimer's Disease/Dementia	9%	43%	8%
Diabetes	24%	38%	24%
Rheumatoid Arthritis/Osteoarthritis	27%	35%	26%
Chronic Obstructive Pulmonary Disease	10%	29%	9%
Depression	15%	27%	14%
Any Cancer	7%	17%	7%
Stroke/Transient Ischemic Attack	3%	11%	3%

NOTE: Excludes beneficiaries in Medicare Advantage.

SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.

Table 2: Amount and Distribution of Average Medicare Per Capita Spending Overall and by Type of Service for Traditional Medicare Beneficiaries, 2014

Type of service	Part of Medicare covering service	All traditional Medicare beneficiaries		Decedents		Survivors	
		Amount	Percent of total	Amount	Percent of total	Amount	Percent of total
Total		\$10,126	100.0%	\$34,529	100.0%	\$9,121	100.0%
Part D drugs	D	1,590	15.7	1,352	3.9	1,600	17.5
Acute inpatient hospital	A	2,691	26.6	15,586	45.1	2,160	23.7
Outpatient hospital	A	1,531	15.1	2,536	7.3	1,490	16.3
Other inpatient hospital	A	402	4.0	1,988	5.8	337	3.7
Evaluation & management	B	446	4.4	2,026	5.9	381	4.2
Other Part B procedures	B	477	4.7	636	1.8	470	5.2
Skilled nursing facility	A	702	6.9	3,425	9.9	589	6.5
Physician office services	B	390	3.9	277	0.8	395	4.3
Home health	A or B ¹	443	4.4	1,231	3.6	410	4.5
Part B drugs	B	333	3.3	554	1.6	324	3.5
Tests	B	236	2.3	211	0.6	237	2.6
Durable medical equipment	B	143	1.4	190	0.6	141	1.6
Other Part B services	B	166	1.6	764	2.2	141	1.5
Imaging	B	157	1.6	264	0.8	153	1.7
Hospice	A	271	2.7	3,329	9.6	145	1.6
Dialysis	B	21	0.2	57	0.2	20	0.2
Anesthesia	B	51	0.5	81	0.2	50	0.5
Ambulatory surgery center	B	77	0.8	21	0.1	79	0.9

NOTE: Excludes beneficiaries in Medicare Advantage. Percentages may not sum to 100% due to rounding.

¹Home health services can be covered under Part A or Part B depending on whether or not the services follow a hospital stay.

SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.

Table 3: Amount and Distribution of Average Medicare Per Capita Spending Overall and by Type of Service for Decedents in Traditional Medicare Over Age 65, by Age, 2014

AGE	TOTAL PER CAPITA		Inpatient hospital		Outpatient hospital		Part B providers/ services/ supplies		Part B and Part D prescription drugs		Skilled nursing facility		Hospice		Home health	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
All >65	\$33,676	100%	\$16,701	49.6%	\$2,375	7.1%	\$4,406	13.1%	\$1,735	5.2%	\$3,641	10.8%	\$3,538	10.5%	\$1,280	3.8%
66	38,840	100	22,289	57.4	3,842	9.9	5,493	14.1	2,614	6.7	1,907	4.9	1,849	4.8	846	2.2
67	40,843	100	23,265	57.0	3,701	9.1	5,657	13.9	2,734	6.7	2,375	5.8	2,158	5.3	954	2.3
68	42,314	100	24,111	57.0	4,130	9.8	5,607	13.3	2,696	6.4	2,321	5.5	2,412	5.7	1,038	2.5
69	40,692	100	23,101	56.8	3,797	9.3	5,751	14.1	2,473	6.1	2,160	5.3	2,385	5.9	1,024	2.5
70	40,753	100	22,557	55.3	3,772	9.3	5,599	13.7	2,817	6.9	2,631	6.5	2,281	5.6	1,096	2.7
71	43,316	100	23,942	55.3	3,942	9.1	5,941	13.7	2,856	6.6	2,950	6.8	2,550	5.9	1,135	2.6
72	41,381	100	22,520	54.4	3,664	8.9	5,757	13.9	2,587	6.3	2,901	7.0	2,789	6.7	1,162	2.8
73	43,353	100	23,652	54.6	4,124	9.5	6,133	14.1	2,655	6.1	3,091	7.1	2,547	5.9	1,150	2.7
74	40,939	100	22,079	53.9	3,548	8.7	5,592	13.7	2,568	6.3	3,432	8.4	2,515	6.1	1,206	2.9
75	41,909	100	22,994	54.9	3,432	8.2	5,791	13.8	2,332	5.6	3,334	8.0	2,856	6.8	1,171	2.8
76	40,882	100	22,034	53.9	3,149	7.7	5,649	13.8	2,522	6.2	3,173	7.8	3,028	7.4	1,327	3.2
77	40,758	100	21,851	53.6	3,007	7.4	5,660	13.9	2,426	6.0	3,575	8.8	2,956	7.3	1,282	3.1
78	39,014	100	20,223	51.8	2,960	7.6	5,395	13.8	2,219	5.7	3,672	9.4	3,278	8.4	1,268	3.3
79	39,760	100	20,954	52.7	2,976	7.5	5,526	13.9	2,031	5.1	3,758	9.5	3,222	8.1	1,293	3.3
80	36,841	100	18,710	50.8	2,572	7.0	4,800	13.0	1,896	5.1	3,858	10.5	3,549	9.6	1,456	4.0
81	36,640	100	19,396	52.9	2,393	6.5	4,986	13.6	1,806	4.9	3,642	9.9	3,073	8.4	1,344	3.7
82	34,938	100	17,408	49.8	2,694	7.7	4,552	13.0	1,591	4.6	3,962	11.3	3,300	9.4	1,431	4.1
83	32,969	100	16,081	48.8	2,144	6.5	4,372	13.3	1,542	4.7	4,199	12.7	3,263	9.9	1,368	4.1
84	32,880	100	15,595	47.4	2,269	6.9	4,252	12.9	1,526	4.6	4,168	12.7	3,724	11.3	1,347	4.1
85	33,381	100	16,105	48.2	2,009	6.0	4,304	12.9	1,523	4.6	4,399	13.2	3,620	10.8	1,422	4.3
86	30,634	100	14,388	47.0	1,759	5.7	3,885	12.7	1,407	4.6	4,123	13.5	3,789	12.4	1,285	4.2
87	30,831	100	14,249	46.2	1,644	5.3	3,935	12.8	1,365	4.4	4,204	13.6	3,940	12.8	1,495	4.9
88	30,009	100	13,841	46.1	1,627	5.4	3,701	12.3	1,167	3.9	4,393	14.6	3,839	12.8	1,440	4.8
89	29,655	100	12,998	43.8	1,496	5.0	3,612	12.2	1,387	4.7	4,437	15.0	4,274	14.4	1,451	4.9
90	27,779	100	12,030	43.3	1,500	5.4	3,454	12.4	1,118	4.0	4,199	15.1	4,064	14.6	1,415	5.1
91	25,592	100	10,717	41.9	1,307	5.1	3,136	12.3	963	3.8	3,799	14.8	4,329	16.9	1,341	5.2
92	26,276	100	10,740	40.9	1,220	4.6	3,118	11.9	961	3.7	4,151	15.8	4,662	17.7	1,424	5.4
93	24,270	100	9,627	39.7	1,213	5.0	2,774	11.4	835	3.4	3,960	16.3	4,568	18.8	1,293	5.3
94	25,443	100	9,867	38.8	1,091	4.3	2,883	11.3	922	3.6	4,503	17.7	4,864	19.1	1,313	5.2
95	23,181	100	9,129	39.4	1,046	4.5	2,691	11.6	940	4.1	3,690	15.9	4,538	19.6	1,147	4.9
96	22,668	100	8,107	35.8	1,123	5.0	2,548	11.2	855	3.8	3,652	16.1	5,068	22.4	1,317	5.8
97	21,491	100	7,768	36.1	1,000	4.7	2,223	10.3	750	3.5	3,192	14.9	5,475	25.5	1,083	5.0
98	20,259	100	7,344	36.2	893	4.4	2,130	10.5	814	4.0	3,091	15.3	4,816	23.8	1,170	5.8
99	19,011	100	6,740	35.5	771	4.1	2,107	11.1	684	3.6	2,930	15.4	4,739	24.9	1,041	5.5
100	18,471	100	5,926	32.1	813	4.4	1,688	9.1	773	4.2	2,279	12.3	6,247	33.8	745	4.0
101	16,564	100	5,288	31.9	825	5.0	1,604	9.7	842	5.1	1,958	11.8	5,163	31.2	885	5.3
102	18,739	100	5,714	30.5	570	3.0	1,876	10.0	841	4.5	2,203	11.8	6,188	33.0	1,348	7.2
103	17,714	100	4,488	25.3	516	2.9	1,338	7.6	467	2.6	3,015	17.0	6,727	38.0	1,163	6.6
104	14,985	100	4,932	32.9	1,206	8.0	1,469	9.8	961	6.4	2,243	15.0	3,438	22.9	736	4.9

NOTE: Excludes beneficiaries in Medicare Advantage. 65-year-olds are excluded from the analysis of spending by year of age because they are enrolled for less than a full year. Percentages may not sum to 100% due to rounding.

SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.

Table 4: Amount and Distribution of Average Medicare Per Capita Spending Overall and by Type of Service for Survivors in Traditional Medicare Over Age 65, by Age, 2014

AGE	TOTAL PER CAPITA		Inpatient hospital		Outpatient hospital		Part B providers/ services/ supplies		Part B and Part D prescription drugs		Skilled nursing facility		Hospice		Home health	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
All >65	\$8,839	100%	\$2,441	27.6%	\$1,404	15.9%	\$2,154	24.4%	\$1,509	17.1%	\$691	7.8%	\$179	2.0%	\$461	5.2%
66	5,271	100	1,472	27.9	986	18.7	1,368	26.0	1,092	20.7	183	3.5	19	0.4	151	2.9
67	5,694	100	1,551	27.2	1,052	18.5	1,509	26.5	1,174	20.6	210	3.7	26	0.5	172	3.0
68	6,257	100	1,738	27.8	1,128	18.0	1,655	26.5	1,282	20.5	239	3.8	27	0.4	188	3.0
69	6,676	100	1,824	27.3	1,232	18.5	1,778	26.6	1,338	20.0	268	4.0	30	0.4	206	3.1
70	7,180	100	2,003	27.9	1,277	17.8	1,903	26.5	1,412	19.7	311	4.3	40	0.6	235	3.3
71	7,632	100	2,142	28.1	1,374	18.0	2,021	26.5	1,453	19.0	330	4.3	51	0.7	260	3.4
72	7,889	100	2,150	27.2	1,422	18.0	2,098	26.6	1,536	19.5	352	4.5	51	0.7	280	3.6
73	8,398	100	2,292	27.3	1,488	17.7	2,228	26.5	1,607	19.1	396	4.7	72	0.9	314	3.7
74	8,933	100	2,509	28.1	1,569	17.6	2,327	26.1	1,640	18.4	472	5.3	76	0.8	340	3.8
75	9,178	100	2,517	27.4	1,599	17.4	2,390	26.0	1,693	18.5	521	5.7	84	0.9	372	4.1
76	9,627	100	2,667	27.7	1,644	17.1	2,492	25.9	1,728	18.0	588	6.1	90	0.9	416	4.3
77	9,886	100	2,796	28.3	1,631	16.5	2,536	25.6	1,742	17.6	642	6.5	101	1.0	439	4.4
78	10,370	100	2,947	28.4	1,722	16.6	2,603	25.1	1,738	16.8	724	7.0	128	1.2	508	4.9
79	10,579	100	3,021	28.6	1,697	16.0	2,624	24.8	1,728	16.3	810	7.7	147	1.4	552	5.2
80	10,730	100	2,986	27.8	1,678	15.6	2,618	24.4	1,764	16.4	920	8.6	178	1.7	587	5.5
81	10,909	100	3,099	28.4	1,636	15.0	2,622	24.0	1,720	15.8	967	8.9	226	2.1	640	5.9
82	11,201	100	3,181	28.4	1,673	14.9	2,677	23.9	1,680	15.0	1,088	9.7	199	1.8	704	6.3
83	11,540	100	3,286	28.5	1,635	14.2	2,711	23.5	1,706	14.8	1,164	10.1	272	2.4	766	6.6
84	11,983	100	3,391	28.3	1,673	14.0	2,717	22.7	1,780	14.9	1,303	10.9	299	2.5	821	6.9
85	12,342	100	3,449	27.9	1,639	13.3	2,731	22.1	1,770	14.3	1,460	11.8	390	3.2	902	7.3
86	12,434	100	3,425	27.5	1,676	13.5	2,677	21.5	1,735	14.0	1,564	12.6	390	3.1	967	7.8
87	12,793	100	3,518	27.5	1,634	12.8	2,706	21.2	1,710	13.4	1,758	13.7	430	3.4	1,036	8.1
88	12,818	100	3,488	27.2	1,538	12.0	2,669	20.8	1,678	13.1	1,781	13.9	551	4.3	1,112	8.7
89	13,446	100	3,668	27.3	1,534	11.4	2,685	20.0	1,722	12.8	2,023	15.0	613	4.6	1,201	8.9
90	13,457	100	3,588	26.7	1,507	11.2	2,592	19.3	1,645	12.2	2,113	15.7	808	6.0	1,205	9.0
91	13,335	100	3,481	26.1	1,425	10.7	2,505	18.8	1,576	11.8	2,166	16.2	871	6.5	1,311	9.8
92	13,999	100	3,701	26.4	1,390	9.9	2,510	17.9	1,621	11.6	2,334	16.7	1,037	7.4	1,406	10.0
93	13,640	100	3,419	25.1	1,414	10.4	2,443	17.9	1,524	11.2	2,365	17.3	1,093	8.0	1,381	10.1
94	14,173	100	3,557	25.1	1,327	9.4	2,436	17.2	1,567	11.1	2,447	17.3	1,341	9.5	1,497	10.6
95	14,039	100	3,526	25.1	1,284	9.1	2,370	16.9	1,502	10.7	2,382	17.0	1,473	10.5	1,503	10.7
96	14,232	100	3,444	24.2	1,242	8.7	2,239	15.7	1,572	11.0	2,575	18.1	1,661	11.7	1,498	10.5
97	14,620	100	3,349	22.9	1,178	8.1	2,206	15.1	1,470	10.1	2,881	19.7	1,957	13.4	1,579	10.8
98	14,114	100	3,064	21.7	1,195	8.5	2,067	14.6	1,442	10.2	2,591	18.4	2,319	16.4	1,436	10.2
99	13,929	100	3,065	22.0	1,038	7.5	2,015	14.5	1,371	9.8	2,434	17.5	2,578	18.5	1,428	10.3
100	14,546	100	2,791	19.2	976	6.7	1,940	13.3	1,470	10.1	2,563	17.6	3,377	23.2	1,429	9.8
101	13,018	100	2,625	20.2	952	7.3	1,831	14.1	1,313	10.1	2,378	18.3	2,593	19.9	1,327	10.2
102	13,386	100	2,790	20.8	864	6.5	1,816	13.6	1,259	9.4	2,192	16.4	3,024	22.6	1,442	10.8
103	12,273	100	2,938	23.9	833	6.8	1,630	13.3	1,028	8.4	1,935	15.8	2,182	17.8	1,728	14.1
104	9,217	100	1,780	19.3	582	6.3	1,139	12.4	801	8.7	1,632	17.7	2,350	25.5	935	10.1

NOTE: Excludes beneficiaries in Medicare Advantage. 65-year-olds are excluded from the analysis of spending by year of age because they are enrolled for less than a full year.

SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the CMS Chronic Conditions Data Warehouse.

Endnotes

¹ National Center for Health Statistics, *Health, United States, 2015: With Special Feature on Racial and Ethnic Health Disparities*, 2016, Table 19: “Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2014,” available at <http://www.cdc.gov/nchs/data/hus/hus15.pdf#019>.

² Kaiser Family Foundation analysis of a five percent sample of 2014 Medicare claims from the Centers for Medicare & Medicaid Services’ Chronic Conditions Data Warehouse.

³ Gerald F. Riley and James D. Lubitz, “Long-Term Trends in Medicare Payments in the Last Year of Life,” *Health Services Research* April 2010; 45(2):565-576.

⁴ We exclude beneficiaries who are exactly age 65 from the analysis of spending by year of age and spending comparisons between beneficiaries under age 65 and over age 65 because many are enrolled for less than a full year, resulting in less than an entire year of Medicare spending data.

⁵ Medicare spending for Medicare Advantage enrollees takes the form of monthly capitation payments which are not based on actual service utilization.

⁶ We are unable to examine spending data that spans the last 12 months of life for decedents in our analysis because we are unable to disaggregate spending data for a given beneficiary for periods of time less than one calendar year. Had we been able to calculate Medicare spending for a 12-month period for both survivors and dependents, the difference in per capita spending between decedents and survivors and the estimate of spending on decedents as a share of total Medicare spending would have been larger.

⁷ Gretchen Jacobson, Giselle Casillas, Anthony Damico, Tricia Neuman, and Marsha Gold, “Medicare Advantage 2016 Spotlight: Enrollment Market Update,” Kaiser Family Foundation, May 2016, available at <http://kff.org/medicare/issue-brief/medicare-advantage-2016-spotlight-enrollment-market-update/>.

⁸ Elena Byhoff, John A. Harris, and John Z. Ayanian, “Characteristics of Decedents in Medicare Advantage and Traditional Medicare,” Research Letter, *JAMA Internal Medicine* June 2016; Published online ahead of print: E1-3.

⁹ For more information, see “10 FAQs: Medicare’s Role in End-of-Life Care,” Kaiser Family Foundation, November 2015, available at <http://kff.org/medicare/fact-sheet/10-faqs-medicares-role-in-end-of-life-care/>.