



Hospice Monitoring Report

April 2024

Analyses and findings within this report were calculated by Abt Global under the contract "Home Health Prospective Payment System (HH PPS) Hospice, Home Infusion Therapy (HIT), Home Intravenous Immune Globulin (IVIG) Items and Services and Inpatient Rehabilitation Facility Prospective Payment System (IRF PPS): Analysis Support and Monitoring" (GS-00F-252CA), funded by the Centers for Medicare & Medicaid Services, Department of Health and Human Services.



Hospice Monitoring Report

April 2024

Executive Summary

The Medicare Fee-for-Service (FFS) hospice benefit provides palliative services for pain and symptom management, as well as emotional and spiritual supportive services, to beneficiaries who are terminally ill with a prognosis of six months or less. Within this monitoring report we examine who is using the Medicare FFS hospice benefit and how it is being used. Specifically, we focus on hospice utilization from Federal Fiscal Years (FYs) 2019 – 2023.

This report summarizes:

- Utilization of beneficiaries who use hospice and what level of care they receive (Exhibits 1 through 2)
- Beneficiary deaths, discharges, and transfers from hospice (Exhibits 3 through 4)
- Beneficiaries' length of stay (LOS) in hospice (Exhibit 5)
- Medicare expenditures related to hospice use (Exhibit 6)
- Non-hospice Medicare expenditures for Medicare beneficiaries enrolled in hospice (Exhibits 7 through 8)
- The primary diagnostic category of beneficiaries using hospice (Exhibit 9)

Within this report, we find:

- Use of the hospice benefit, and the number of hospices providing hospice services, has grown over time.
- Routine Home Care (RHC) is overwhelmingly the most common level of care provided during hospice election.
- Roughly half of Medicare beneficiaries die while using hospice.
- The rate of live discharge has increased slightly from 2020 (16.0%) to 2023 (18.2%).
- The length of time people use hospice can range substantially, from roughly 20% using hospice for four days or less to roughly 15% using hospice for 181 or more days.
- The total amount of money that Medicare has spent on the hospice benefit has grown from \$20.5 billion in 2019 to \$25.0 billion in 2023.
- Total non-hospice payments have increased from FY 2019 through FY2023, in part due to the increased number of hospice users during this time.
- The diagnostic category with the largest percentage of beneficiaries is "Alzheimer's, Dementia, or Parkinson's" (24.1% in FY 2023) and the category with the lowest percentage is "Chronic Kidney Disease/End-Stage Renal Disease" (2.1% in FY 2023).

Overall Methodology

Data for analyses come from the CMS Chronic Conditions Warehouse Virtual Research Data Center (CCW VRDC), where 100% of hospice fee-for-service (FFS) claims were extracted on January 11, 2024. For this report, we examine data from Federal FYs 2019 - 2023. Because of when claims were acquired, results for the last half of 2023 may be incomplete. In addition to hospice claims, we also collect all Medicare FFS non-hospice Part A & B claims and Part D Prescription Drug Events (PDEs) for the same time period for those beneficiaries with a hospice claim. For dates of death of Medicare beneficiaries, we use information from the Medicare Enrollment Database. When possible, we make no exclusions to the data. Due to requirements of certain analyses, for Exhibits 4, 5, 7, 8, and 9, we make a small set of exclusions to hospice claims (roughly 0.5% of hospice claims per year) if claims are duplicates, have missing dates, or more than one hospice claim overlaps another from the same provider. We do not make any additional exclusions to the non-hospice Part A & B claims and Part D PDEs.

Hospice level of care is identified from the hospice claim using the following revenue codes:

- Routine Home Care (RHC): Revenue Code 0651
- Continuous Home Care (CHC): Revenue Code 0652
- Inpatient Respite Care (IRC): Revenue Code 0655
- General Inpatient Care (GIP): Revenue Code 0656

A beneficiary's lifetime LOS is calculated by first limiting the analysis to all beneficiaries whose final claim from FY2019 – FY2023 does not indicate they are still a hospice patient (i.e., a patient's last claim from FY2019 – FY2023 does not have a patient discharge status code equal to "30"). Then, we count the total number of days a beneficiary has used hospice since the date of their first hospice election (even if their first hospice election began before the start of FY2019).

Beneficiaries are assigned into the following diagnostic categories according to a beneficiaries' primary diagnosis:

- 1) Alzheimer's, Dementia, and Parkinson's,
- 2) Cancers,
- 3) Cardiac (e.g., Congestive Heart Failure (CHF)),
- 4) Respiratory (e.g., Chronic Obstructive Pulmonary Disease (COPD)),
- 5) Cerebral Vascular Accident (CVA)/Stroke,
- 6) Chronic Kidney Disease (CKD)/End-Stage Renal Disease (ESRD), and
- 7) Other.

We assign diagnoses into categories using the Agency for Healthcare Research and Quality (AHRQ)'s Clinical Classifications Software Refined (CCSR) v2023.1.

Exhibit 1. Overall Utilization of Hospice Services

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Unique Beneficiaries	1,615,276	1,696,135	1,763,410	1,760,040	1,773,559
Unique Hospices	4,811	5,016	5,290	5,760	6,340

Key Takeaways:

- The rate of new hospice growth has continued to increase each year since FY 2019.
- Despite the exponential growth in the number of hospices, the number of unique beneficiaries using hospice has remained mostly flat since FY 2021.

Exhibit 1 Methodology:

Exhibit 2a. Utilization of Hospice Days by Level of Care (Number of Days)

Level of Care	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Routine Home Care (RHC)	118,542,546	125,849,330	127,223,206	129,588,340	136,070,849
Continuous Home Care (CHC)	240,738	210,574	157,121	125,757	131,070
Inpatient Respite Care (IRC)	390,576	295,651	304,554	350,384	402,766
General Inpatient Care (GIP)	1,398,797	1,278,630	1,246,994	1,170,715	1,170,715
Total Hospice Days	120,572,657	127,634,185	128,931,875	131,235,196	137,767,654

Exhibit 3b. Utilization of Hospice Days by Level of Care (Percentage of Days by Year)

Level of Care	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Routine Home Care (RHC)	98.3%	98.6%	98.7%	98.7%	98.8%
Continuous Home Care (CHC)	0.2%	0.2%	0.1%	0.1%	0.1%
Inpatient Respite Care (IRC)	0.3%	0.2%	0.2%	0.3%	0.3%
General Inpatient Care (GIP)	1.2%	1.0%	1.0%	0.9%	0.8%

Source: Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Key Takeaways:

- Routine Home Care (RHC) is overwhelmingly the most frequently billed level of care.
- The percentage of days being billed as RHC has increased slightly from FY 2019 through FY 2023.
- The percentage of days billed to other levels of care (CHC, IRC, and GIP) has either stayed flat or
 fallen slightly between FY 2019 and FY 2023. This has occurred despite those three levels of care
 being rebased and therefore being paid higher amounts starting in FY 2020.

Exhibit 2 Methodology:

Exhibit 4a. Deaths Inside and Outside of Hospice

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Total Deaths of All Medicare Beneficiaries	2,326,927	2,578,732	2,807,431	2,699,886	2,535,296
Total Deaths of Medicare Beneficiaries Electing Hospice	1,208,810	1,290,266	1,339,210	1,320,444	1,307,792
Percentage of Death in Hospice	51.9%	50.0%	47.7%	48.9%	51.6%

Source: For dates of death of Medicare beneficiaries (FFS+MA), we use information from the Medicare Enrollment Database.

Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Exhibit 3b. Mortality Rate of Medicare Beneficiaries Electing Hospice

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Unique Beneficiaries Electing	1,615,276	1,696,135	1,763,410	1,760,040	1,773,559
Hospice					
Total Deaths of Medicare	1,208,810	1,290,266	1,339,210	1,320,444	1,307,792
Beneficiaries Electing Hospice					
Mortality Rate	74,836	76,070	75,944	75,024	73,738
(per 100,000 persons)	7 1,000	, 0,0,0	, 5,5 . 1	75,021	,5,,50

Source: For dates of death of Medicare beneficiaries (FFS+MA), we use information from the Medicare Enrollment Database. Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Key Takeaways:

- Roughly 50% of Medicare decedents die while under a hospice election.
- The percentage of deaths that occur while under a hospice election decreased during the COVID-19 PHE and has rebounded to pre-pandemic levels.
- The mortality rate of beneficiaries electing hospice slightly increased in FY 2020 and decreased in FY 2023

Exhibit 3 Methodology:

Exhibit 5a. Overall Hospice Live Discharge Rate

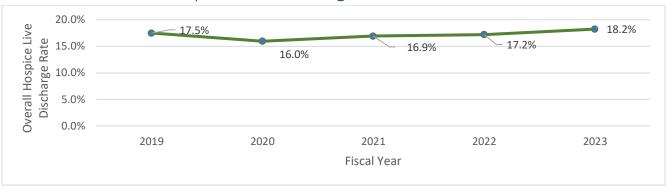


Exhibit 6b. Total Live Discharges, Reason for Live Discharge, and Transfers

Reason for Discharge or Transfer	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
For Cause	3,606	3,628	4,226	4,637	5,626
Revoke	84,703	78,469	86,289	84,402	87,729
No Longer Terminally Ill	83,993	79,448	87,106	86,867	88,175
Moved out of the Service Area	24,240	24,275	30,373	34,286	38,772
Transferred Hospice	29,149	29,307	31,167	31,099	33,121
Total	225,691	215,127	239,161	241,291	253,423

Source: Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Exhibit 7c. Percentage (by year) of Live Discharges, Reason for Live Discharge, and Transfers

Reason for Discharge or Transfer	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
For Cause	1.6%	1.7%	1.8%	1.9%	2.2%
Revoke	37.5%	36.5%	36.1%	35.0%	34.6%
No Longer Terminally Ill	37.2%	36.9%	36.4%	36.0%	34.8%
Moved out of the Service Area	10.7%	11.3%	12.7%	14.2%	15.3%
Transferred Hospice	12.9%	13.6%	13.0%	12.9%	13.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Key Takeaways:

- The overall percentage of live discharge fell from FY2019 through FY2021 and then has increased through FY2023.
- The number of live discharges and transfers has increased slightly from FY2019 through FY2023.
- The percentages of live discharge by reason for discharge or transfers has mostly stayed consistent over time. There has been a slight increase in the live discharge percentage because of beneficiaries moving out of the service area from FY 2019 through FY2023. During that same time period, there have been slight decreases in the percentage of beneficiaries who have revoked the benefit or who are no longer terminally ill.

Exhibit 4 Methodology:

All hospice claims list a discharge status code. We exclude claims if they listed status code 30, indicating a continuing patient. Discharges ending in death had a discharge status code of 40, 41, or 42. Any claims not already excluded or that indicated a discharge resulting from death were considered live discharges. Refer to the Overall Methodology section of this report for additional details.

Exhibit 8a. Number of Beneficiaries by Hospice Lifetime Length of Stay (LOS) Category

Hospice Lifetime LOS	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1-4 days	258,520	278,630	308,325	296,315	286,043
5-10 days	215,971	230,224	242,581	235,454	231,980
11–30 days	239,535	251,736	260,376	260,328	260,337
31-60 days	134,732	139,355	143,098	146,339	150,163
61-90 days	71,859	73,757	76,367	78,926	83,627
90-180 days	114,455	119,101	121,276	126,256	136,438
181+ days	174,929	194,279	197,932	203,011	225,453

Source: Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Exhibit 9b. Percentage (by year) of Beneficiaries by Hospice Lifetime Length of Stay (LOS) Category

Hospice Lifetime LOS	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1-4 days	21.4%	21.6%	22.8%	22.0%	20.8%
5-10 days	17.8%	17.9%	18.0%	17.5%	16.9%
11–30 days	19.8%	19.6%	19.3%	19.3%	18.9%
31-60 days	11.1%	10.8%	10.6%	10.9%	10.9%
61-90 days	5.9%	5.7%	5.7%	5.9%	6.1%
90-180 days	9.5%	9.3%	9.0%	9.4%	9.9%
181+ days	14.5%	15.1%	14.7%	15.1%	16.4%

Source: Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Key Takeaways:

- Slightly over 20% of hospices users in the sample have a lifetime length of stay in hospice of between 1 and 4 days.
- In any given year, between 57% and 60% of beneficiaries in the sample have a lifetime length of stay of between 1 and 30 days.
- The percentages of beneficiaries in each length of stay category has remained similar from FY2019 through FY2022.

Exhibit 5 Methodology:

Only beneficiaries whose last day of hospice was not associated with a discharge status code of "30" were assigned to the fiscal year of their last day of hospice ("30" indicates they remained in hospice). All days of hospice from their first hospice election (even if it occurred before FY 2019) were counted towards lifetime length of stay. Refer to the Overall Methodology section of this report for additional details.

Exhibit 10. Medicare Hospice Expenditures

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Total Hospice Payments	\$20,492,314,518	\$22,099,365,373	\$23,034,467,018	\$23,454,108,667	\$25,017,330,322
Unique Beneficiaries	1,615,276	1,696,135	1,763,410	1,760,040	1,773,559
Days of Hospice	120,572,657	127,634,185	128,931,875	131,235,196	137,767,654
Average Payments per Beneficiary	\$12,686.57	\$13,029.25	\$13,062.46	\$13,325.90	\$14,105.72
Average Payments per Day	\$170	\$173	\$179	\$179	\$182

Key Takeaways:

- The number of beneficiaries using hospice has increased from FY 2019 through FY2023. As a result, the number of days of hospice and total hospice payments has also increased during the same time period.
- Average payments per day and average payments per beneficiaries have increased from FY 2019 through FY 2023.

Exhibit 6 Methodology:

Hospice payments only include payments on Medicare hospice claims. Refer to the Overall Methodology section of this report for additional details.

Exhibit 11. Medicare Non-Hospice Spending for Medicare Hospice Users

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Total Payments for Non-Hospice Medicare Part A & B Spending while Beneficiaries Elect Hospice	\$684,957,765	\$789,729,847	\$912,436,995	\$944,432,435	\$1,227,701,910
Total Payments for Non-Hospice Medicare Part D Drug Spending while Beneficiaries Elect Hospice	\$493,207,549	\$552,928,046	\$581,408,434	\$626,192,937	\$724,814,870

Key Takeaways:

• Total non-hospice payments have increased from FY 2019 through FY2023, in part due to the increased number of hospice users during this time.

Exhibit 7 Methodology:

For Part A & B spending, payments are based on estimated total non-hospice Medicare utilization payments per hospice service day, excluding utilization on hospice admission or live discharge days. Only Medicare paid amounts are included. The Medicare paid amounts were equally apportioned across the length of each claim and only the days that overlapped a hospice election (not including hospice admission or live discharge days) were counted.

For Part D spending, The Medicare paid amounts were assigned to hospice days based on the service date on the Part D prescription drug event (PDE). Only service dates that fell within a hospice election and were not hospice admission or live discharge days were counted. The Medicare paid amount includes the low-income cost-sharing subsidy and covered drug plan paid amount on Part D PDEs.

Exhibit 12. Per Beneficiary Medicare Non-Hospice Spending (Parts A & B) for Medicare Beneficiaries who Elect Hospice

	FY 2019	FY 2020	FY 2021	FY 2022	FY2023	
Unique Hospice Beneficiaries	1.6 million	1.7 million	1.8 million	1.8 million	1.8 million	
Number of Hospice	119.0	126.0	127.6	130.3	137.1	
Days	million	million	million	million	million	
Percent Beneficiaries						
with Non-Hospice	48.0%	46.4%	46.9%	46.1%	45.5%	
Utilization						
Total Hospice Claim	\$20.1 billion	\$21.7 billion	\$22.6 billion	\$23.1 billion	\$24.7 billion	
Payments	\$20.1 01111011	φ21.7 UIIIIUII	\$22.0 01111011	\$23.1 UIIIIUII	\$24.7 01111011	
Total Non-Hospice	\$685.0	\$789.7	\$912.4	\$944.4	\$1,227.7	
Payments (Parts A &	million	million	million	million	million	
B)	IIIIIIIOII	IIIIIIIIIII	IIIIIIIIIII	IIIIIIIOII	IIIIIIIIIII	
Average Daily Hospice	\$169.08	\$171.83	\$177.32	\$177.39	\$180.25	
Payments	\$109.00	φ1/1.65	\$177.32	\$177.39	\$160.25	
Average Daily Non-						
Hospice Payments	\$5.76	\$6.27	\$7.15	\$7.25	\$8.96	
(Parts A & B)						

Key Takeaways:

- Every fiscal year, almost half of all Medicare beneficiaries that elect hospice also utilize non-hospice services billed to Medicare during their election, which totaled \$1.2 billion in FY2023
- In FY2023, the average daily payment for non-hospice utilization during hospice election was \$8.96, approximately 5% of the average per-day hospice payment, \$180.25.

Exhibit 8 Methodology:

Using hospice claims, we cross-referenced hospice election dates (excluding admission and live discharge "boundary" days) against all other non-hospice claims' dates of service: the inpatient, skilled nursing, home health, DME (durable medical equipment), outpatient, and the carrier/physician supply files. We matched non-hospice claims to hospice election periods based on the from date (start date) of a claim. After identifying overlapping non-hospice claims, we equally apportioned the Medicare paid amounts across the length of each claim, and when totaling (apportioned) payments, only counted the days that overlapped a hospice election (again, we did not include hospice admission or live discharge days).

We counted hospice beneficiaries uniquely in each fiscal year (i.e., those individuals with multiple elections due to live discharges and returns were only counted once in total for all fiscal years in which they elected hospice). Average daily payments are based on the total number of hospice service days in the fiscal year for all beneficiaries (even those without any non-hospice utilization). Non-hospice payments include all hospice users (even hospice users that do not have non-hospice payments).

Exhibit 13a. Number of Beneficiaries by Principal Diagnosis Category

Principal Diagnosis Category	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Alzheimer's, Dementia, or Parkinson's	379,975	408,307	418,095	428,245	438,307
Cancers	405,022	410,276	412,700	407,547	411,180
Cardiac (e.g., Congestive Heart Failure (CHF))	308,012	315,551	324,639	329,121	343,550
Respiratory (e.g., Chronic Obstructive Pulmonary Disease (COPD))	175,613	179,425	183,135	182,216	183,455
Cerebral Vascular Accident (CVA)/Stroke	161,342	172,736	180,860	186,166	190,854
Chronic Kidney Disease (CKD)/End-Stage Renal Disease (ESRD)	37,000	38,565	39,441	38,765	37,637
Other	174,973	199,787	240,408	228,163	213,970

Exhibit 14b. Percentage (by year) of Beneficiaries by Principal Diagnosis Category

Principal Diagnosis Category	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Alzheimer's, Dementia, or Parkinson's	23.1%	23.7%	23.2%	23.8%	24.1%
Cancers	24.7%	23.8%	22.9%	22.6%	22.6%
Cardiac (e.g., Congestive Heart Failure (CHF))	18.8%	18.3%	18.0%	18.3%	18.9%
Respiratory (e.g., Chronic Obstructive Pulmonary Disease (COPD))	10.7%	10.4%	10.2%	10.1%	10.1%
Cerebral Vascular Accident (CVA)/Stroke	9.8%	10.0%	10.1%	10.3%	10.5%
Chronic Kidney Disease (CKD)/End-Stage Renal Disease (ESRD)	2.3%	2.2%	2.2%	2.2%	2.1%
Other	10.7%	11.6%	13.4%	12.7%	11.8%

Source: Analyses of Medicare FFS hospice claims (Accessed from CCW VRDC on January 11, 2024)

Key Takeaways:

- "Alzheimer's, Dementia, or Parkinson's" is the diagnostic category with the most beneficiaries.
- Chronic Kidney Disease (CKD)/End-Stage Renal Disease (ESRD) is the diagnostic category with the fewest beneficiaries.
- The percentage of beneficiaries within each diagnostic category remains fairly constant from FY 2019 through FY 2023.

Exhibit 9 Methodology:

The frequencies and percentages shown represent beneficiaries that had at least one hospice claim with a principal diagnosis that matches the diagnostic category. Beneficiaries could be represented multiple times in the results if they had multiple hospice claims with different diagnostic categories during a particular fiscal year.