



ADVANCING HOME CARI THROUGH RESEARCH.

Home Care Chartbook 2022

Prepared by KNG Health Consulting, LLC

Sponsored by



The **Research Institute for Home Care** is a non-profit, national consortium of home care providers and organizations. The Institute invests in research and education about home health care and its ability to deliver quality, cost-effective, patient-centered care across the care continuum. The Institute is committed to conducting and sponsoring research and initiatives that demonstrate and enhance the value proposition that home care has to offer patients and the entire U.S. health care system.

Previously the Alliance for Home Health Quality & Innovation, the Institute has been providing critical research and data on home care for over a decade.

The Home Care Chartbook, published annually by the Institute, provides a broad overview of home health patients, the home health workforce, organizational trends, and the economic contribution of home health agencies. The Chartbook also provides data on 30-day rehospitalization rates.

It summarizes and analyzes statistics on home health from a range of government sources, including the Medicare Current Beneficiary Survey, Bureau of Labor Statistics, Medicare Cost Reports, Home Health Compare, and Medicare fee-for-service claims.

- 1. <u>Demographics of Home Health Users</u>
- 2. Clinical Profile of Home Health Users
- 3. Role of Home Health in Post-Acute Care Market
- 4. Organizational Trends in Home Health
- 5. Quality of Home Health Care
- 6. Economic Contributions of Home Health Agencies
- 7. Health Outcomes of Home Health Users
- 8. <u>Appendix</u>





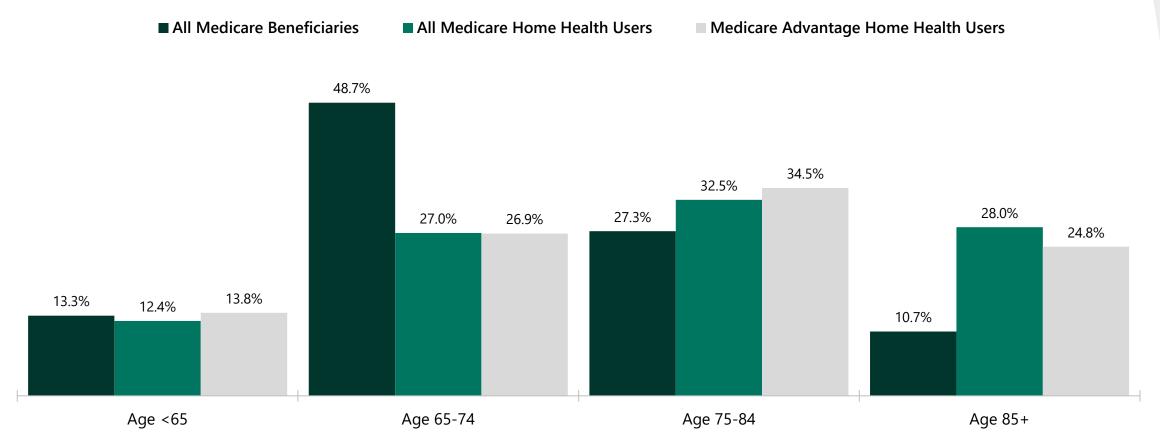
THROUGH RESEARCH.

Demographics of Home Health Users

Sponsored by



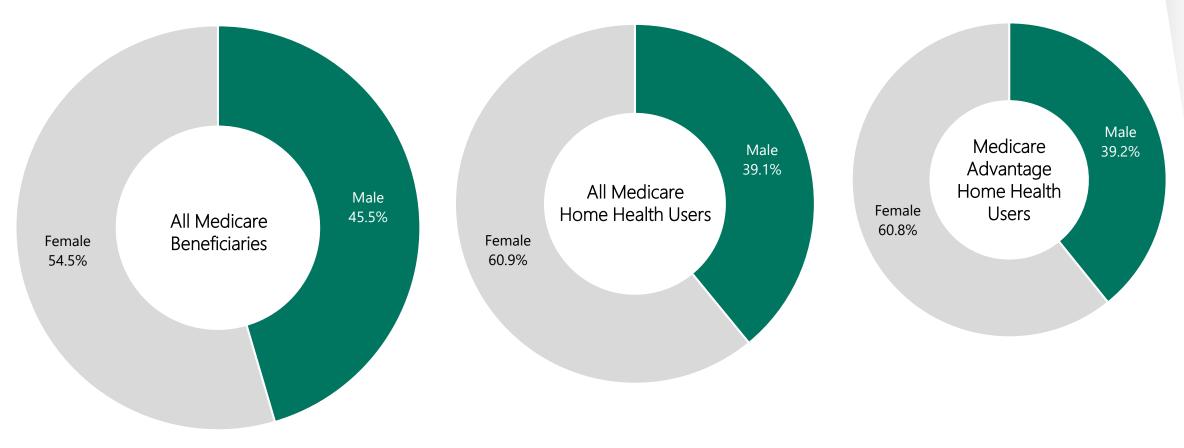
Chart 1.1: Age Distribution of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020. Totals may not sum to 100 percent due to rounding.

Chart 1.2: Gender Distribution of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage

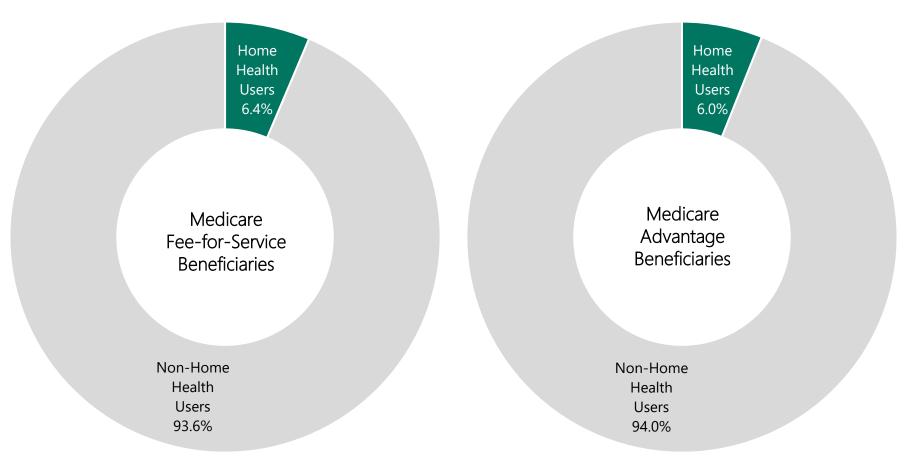
Demographics of Home Health Users



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020. Totals may not sum to 100 percent due to rounding.

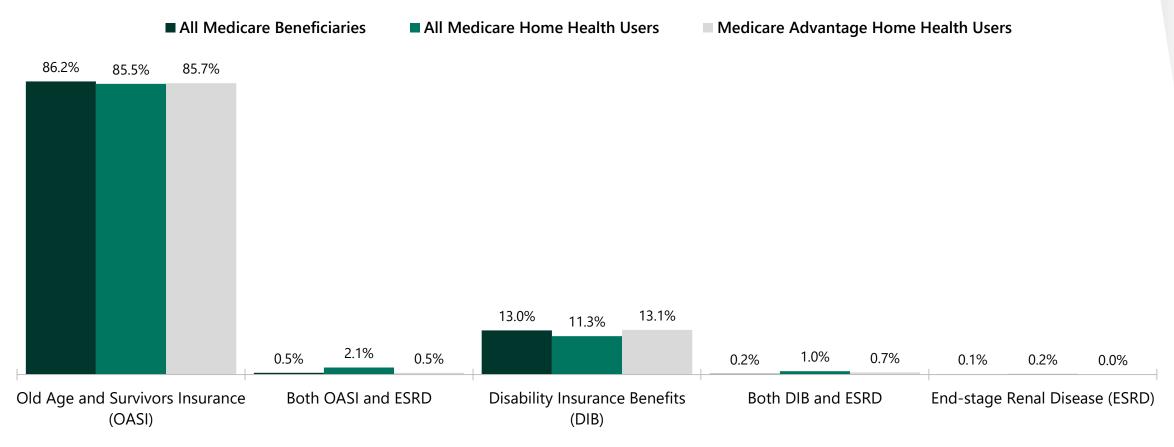
Chart 1.3: Distribution of Home Health Users in Medicare Fee-For-Service and Medicare Advantage

Demographics of Home Health Users



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020. Totals may not sum to 100 percent due to rounding.

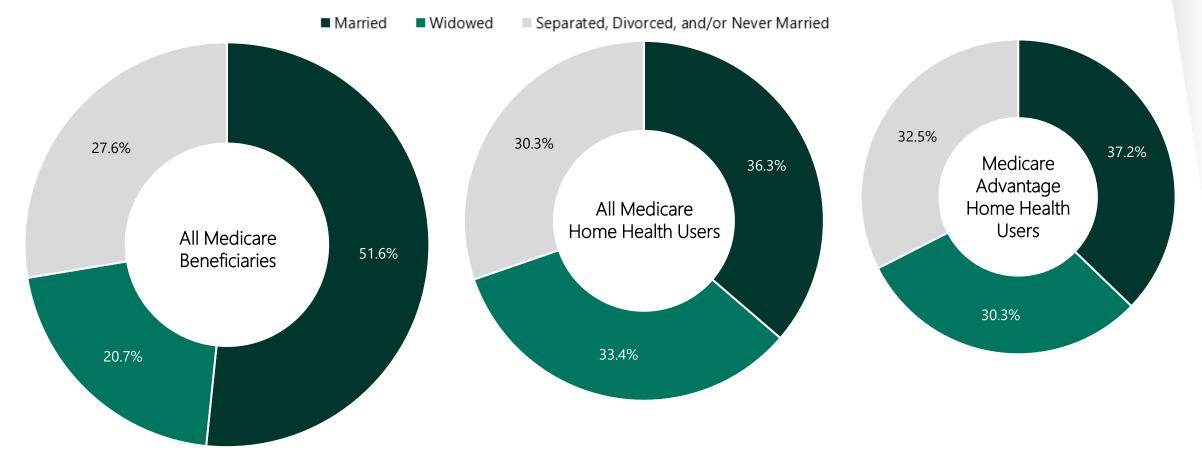
Chart 1.4: Reason for Medicare Enrollment of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

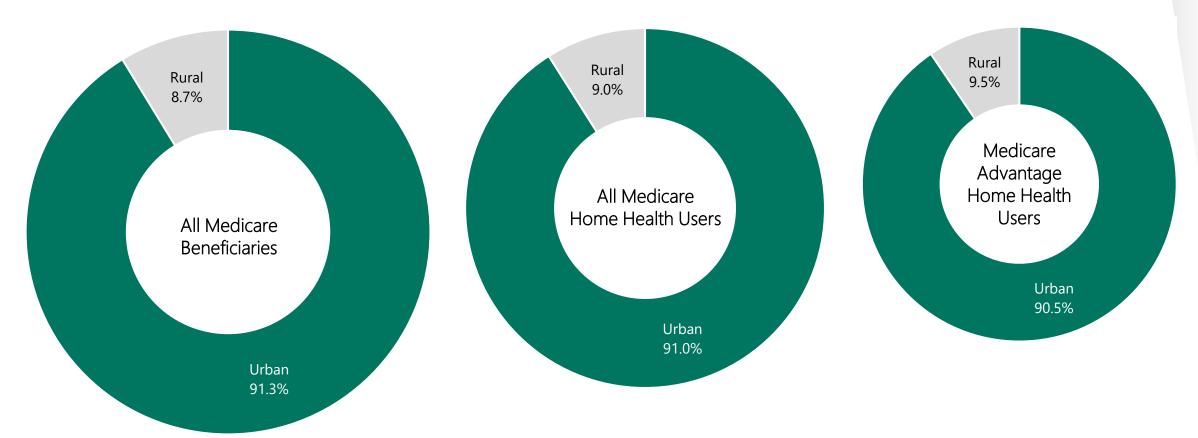
Chart 1.5: Marital Status of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Chart 1.6: Rural Status of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



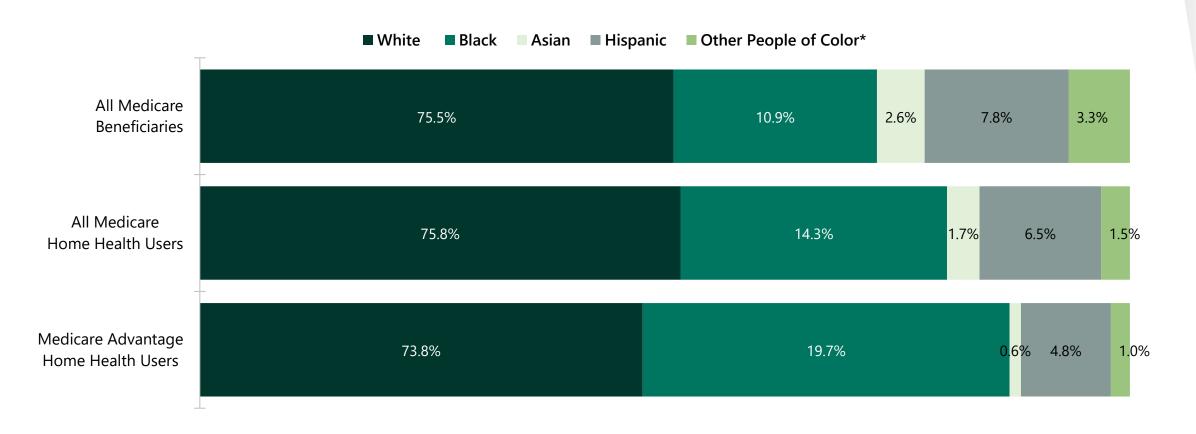
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Rural is defined as a "small town" or "rural" area.

Chart 1.7: Race of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage

Research Institute for Home Care Chartbook / 12



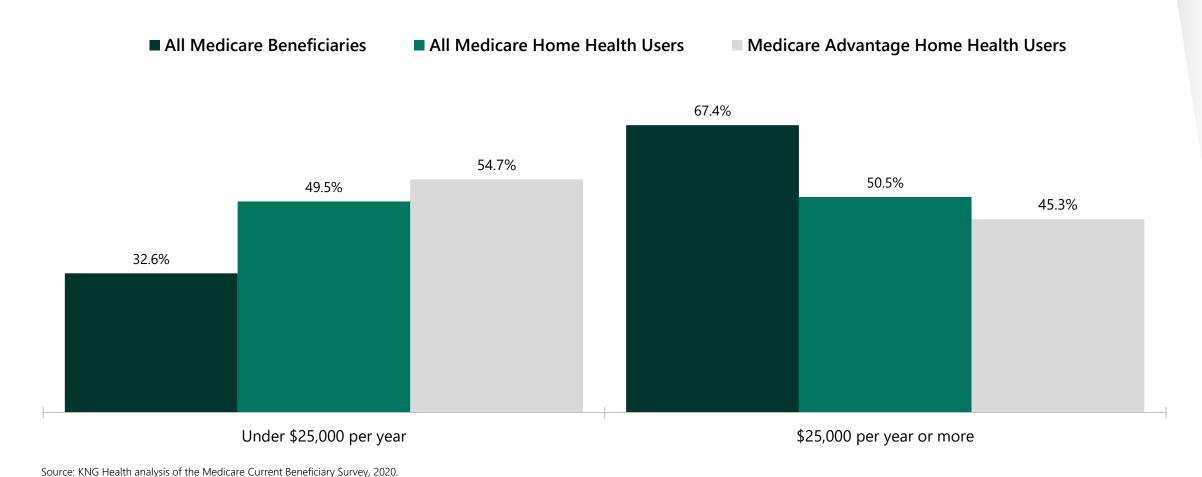
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

^{*}Other People of Color includes American Indian, Alaska Native, Pacific Islander, Other, and More than one race.

Chart 1.8: Income Distribution of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage

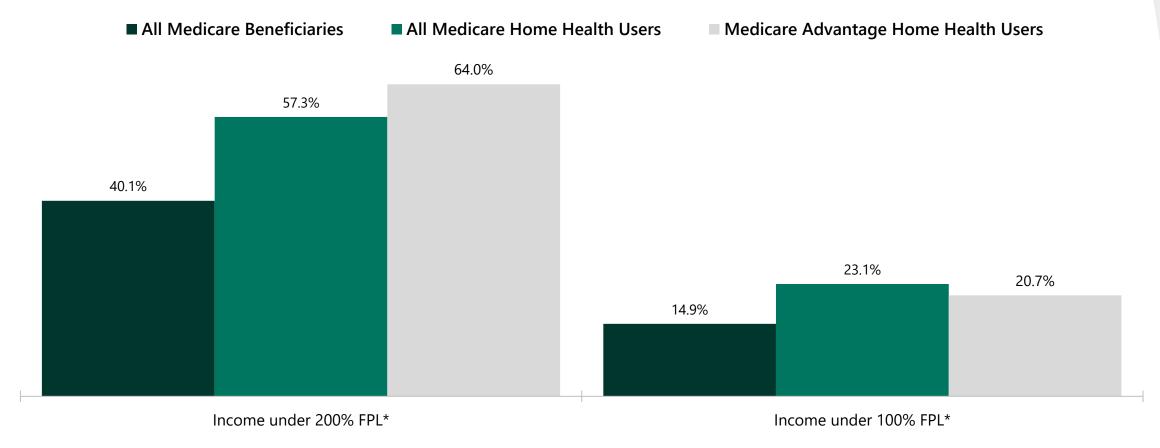
Demographics of Home Health Users



Totals may not sum to 100 percent due to rounding.

Chart 1.9: Income Distribution by Federal Poverty Level (FPL) of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage

Demographics of Home Health Users

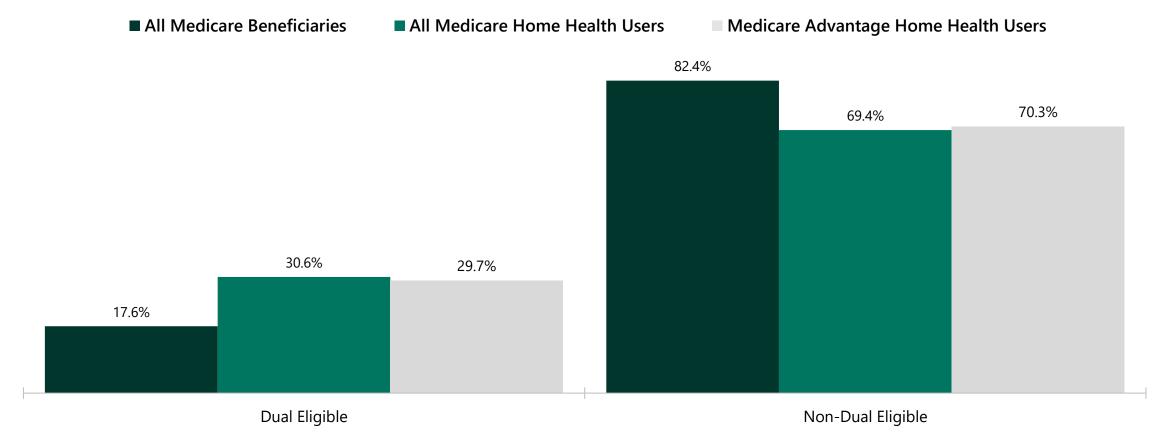


Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

*In 2020, 100% of FPL for a household of 1 was \$12,760, a household of 2 was \$17,240, a household of 3 was \$21,720, and a household of 4 was \$26,200. As a result, 200% of FPL was double each amount. Note: All Medicare Home Health Users includes both traditional Medicare and Medicare Advantage Home Health Users.

Chart 1.10: Dual Eligibility Status of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage

Demographics of Home Health Users



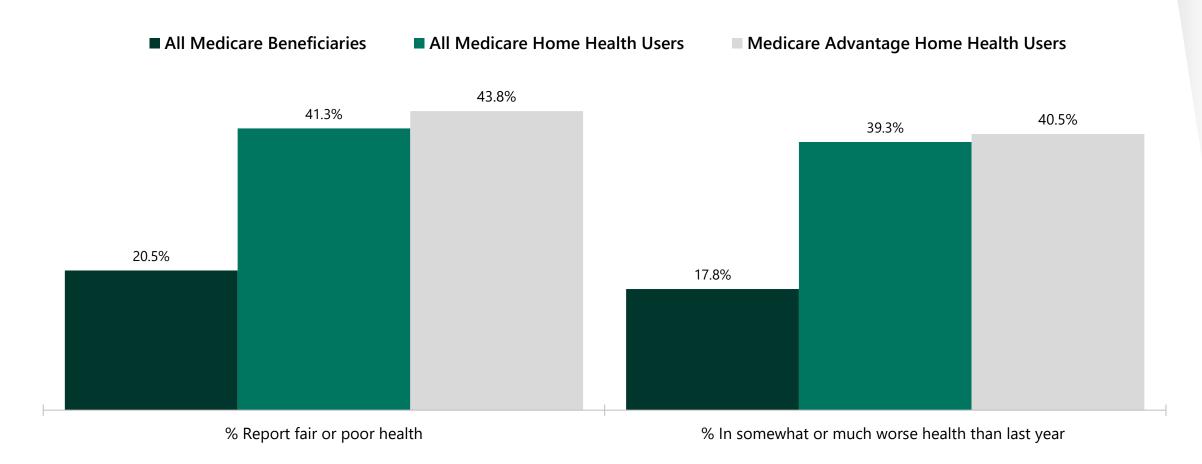
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Chart 1.11: Share of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage, by Measures of General Health Status

Demographics of Home Health Users

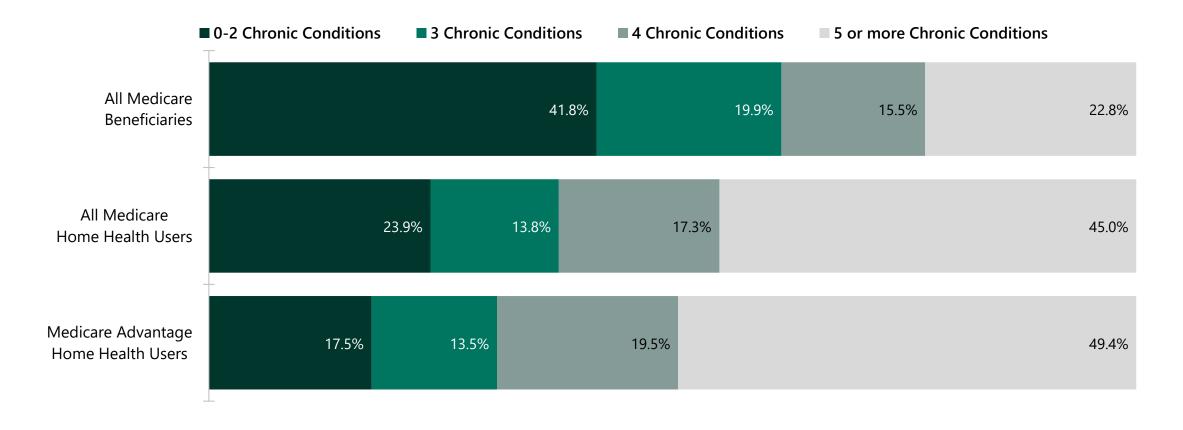


Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Note: All Medicare Home Health Users includes both traditional Medicare and Medicare Advantage Home Health Users.

Chart 1.12: Share of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage, by Number of Chronic Conditions

Demographics of Home Health Users

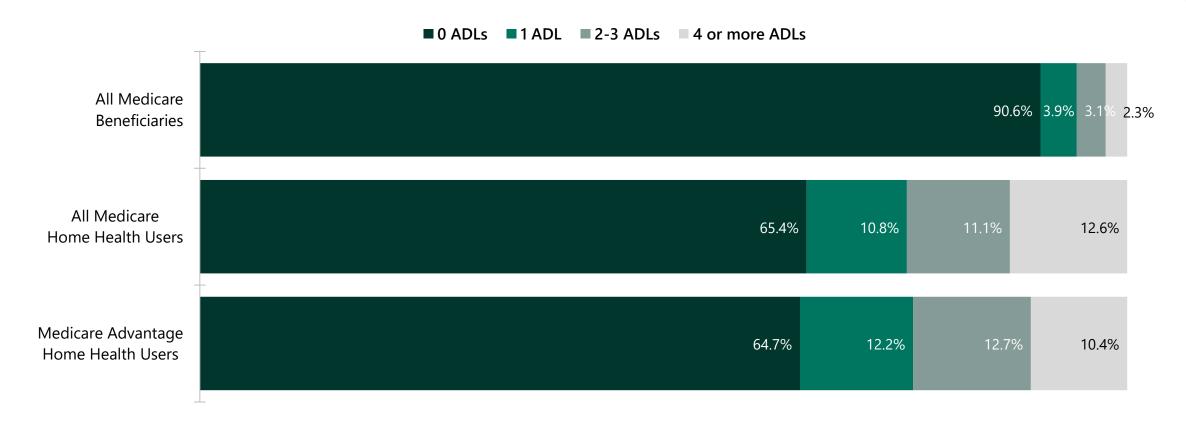


Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Chart 1.13: Share of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage, by Number of Activities of Daily Living (ADLs)

Demographics of Home Health Users



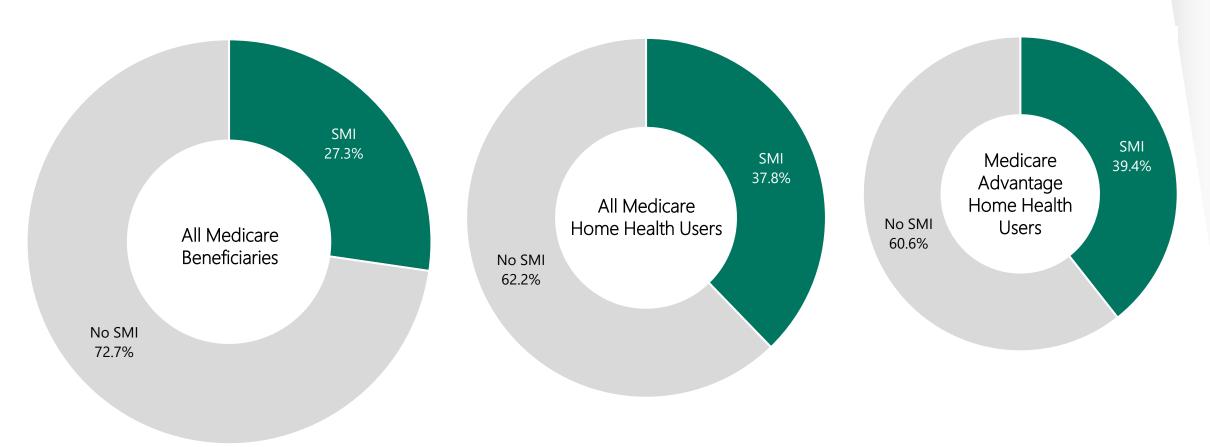
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care. Note: All Medicare Home Health Users includes both traditional Medicare and Medicare Advantage Home Health Users.

Chart 1.14: Share of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage, with Severe Mental Illness (SMI)

Demographics of Home Health Users



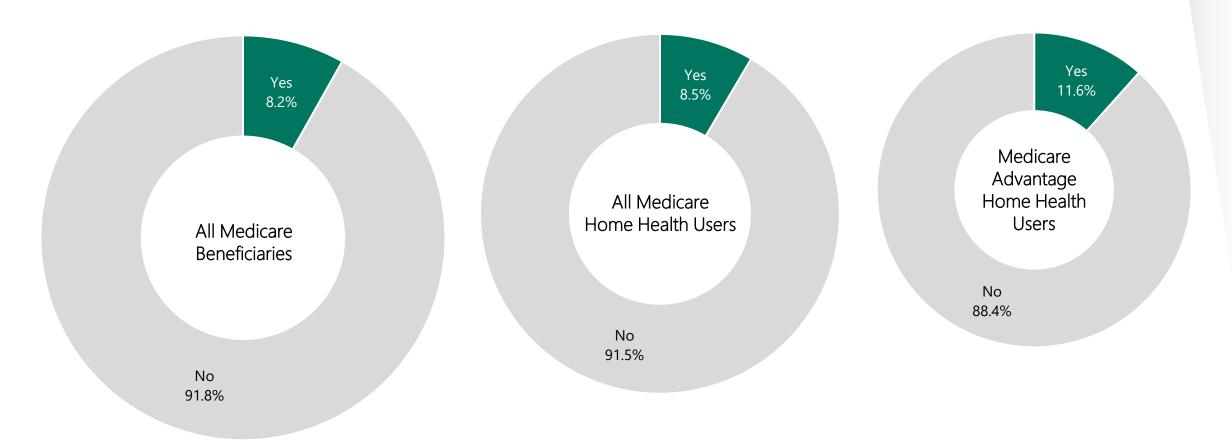
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Chart 1.15: Share of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage who had Trouble Accessing Needed Care

Demographics of Home Health Users



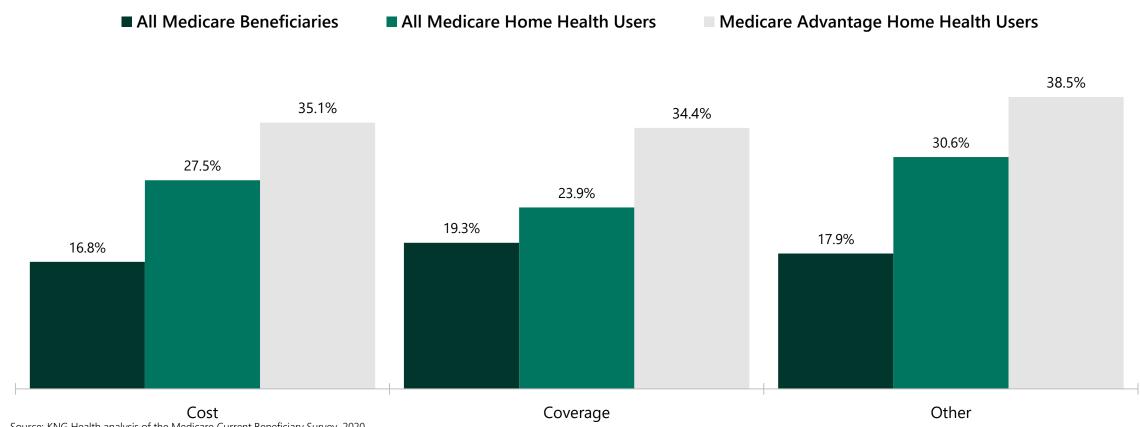
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Access to care includes information about the respondents' use of all types of medical services.

Note: All Medicare Home Health Users includes both traditional Medicare and Medicare Advantage Home Health Users.

Chart 1.16: Top Reasons Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage had Trouble Accessing Needed Care

Demographics of Home Health Users



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Access to care includes information about the respondents' use of all types of medical services.

Respondent can select multiple reasons; the percentages are calculated as the number of respondents who selected the reason over all respondents that indicated having trouble getting needed care.

Table 1.1: Selected Characteristics of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage

Demographics of Home Health Users

	All Medicare Beneficiaries	All Medicare Home Health Users	Medicare Advantage Home Health Users
Beneficiary Characteristics			
% People of Color	25.5%	26.4%	30.4%
% Female	54.5%	60.9%	60.8%
% Age 85+	10.7%	28.0%	24.8%
% Income 200% or less than FPL	40.1%	57.3%	64.0%
% Living alone	29.7%	36.6%	37.1%
% Dual Eligible	17.6%	30.6%	29.7%
Health Characteristics			
% 3+ Chronic conditions	58.2%	76.1%	82.5%
% 2+ ADL limitations*	5.4%	23.8%	23.1%
% Report fair or poor health	20.5%	41.3%	43.8%
% Are in somewhat worse health than last year	17.8%	39.3%	40.5%
% Severe Mental Illness	27.3%	37.8%	39.4%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

In 2020, 100% of FPL for a household of 1 was \$12,760, a household of 2 was \$17,240, a household of 3 was \$21,720, and a household of 4 was \$26,200. As a result, 200% of FPL was double each amount Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care.

Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.2: Selected Beneficiary Characteristics of Home Health Users by Age

Demographics of Home Health Users

	Age <65	Age 65-74	Age 75-84	Age 85+
Gender				
% Male	47.0%	39.7%	40.7%	33.1%
% Female	53.0%	60.3%	59.3%	66.9%
Race				
% White	68.0%	67.8%	80.2%	82.0%
% Black	20.3%	20.8%	10.8%	9.5%
% Other	11.6%	11.4%	8.9%	8.5%
Marital Status				
% Married	25.2%	47.5%	40.8%	25.2%
% Widowed	5.7%	16.0%	36.3%	59.3%
% Separated, Divorced, Never Married	69.2%	36.5%	22.9%	15.6%
Income Distribution				
% Under \$25,000 per year	75.1%	48.0%	43.3%	46.6%
% \$25,000 per year or more	24.9%	52.0%	56.7%	53.4%
Living Alone				
% Living Alone	33.4%	35.4%	35.4%	40.6%
Dual Eligibility				
% Dual Eligible	65.8%	33.8%	23.5%	20.3%
% Non-Dual Eligible	34.2%	66.2%	76.5%	79.7%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Table 1.3: Selected Health Characteristics of Home Health Users by Age

Demographics of Home Health Users

	Age <65	Age 65-74	Age 75-84	Age 85+
Measures of General Health Status				
% Report Fair or Poor Health	64.1%	41.5%	39.6%	33.0%
% In Somewhat or Much Worse Health than Last Year	39.3%	36.4%	39.1%	42.3%
Chronic Conditions				
% Have 3 or More Chronic Conditions	72.4%	76.7%	79.6%	73.1%
Disability				
% Have 2 or More ADLs	31.4%	16.9%	20.8%	30.4%
Cognitive Function				
% with Presence of SMI	63.0%	44.2%	32.6%	26.4%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care. Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.4: Selected Beneficiary Characteristics of Home Health Users by Gender

Demographics of Home Health Users

	Male	Female
Age		
% Age <65	15.0%	10.8%
% Age 65-74	27.5%	26.8%
% Age 75-84	33.9%	31.7%
% Age 85+	23.7%	30.7%
Race		
% White	83.6%	70.9%
% Black	11.0%	16.4%
% Other	5.3%	12.7%
Marital Status		
% Married	52.0%	26.2%
% Widowed	18.2%	43.2%
% Separated, Divorced, Never Married	29.8%	30.6%
Income Distribution		
% Under \$25,000 per year	35.0%	58.8%
% \$25,000 per year or more	65.0%	41.2%
Living Alone		
% Living Alone	25.8%	43.5%
Dual Eligibility		
% Dual Eligible	23.2%	35.4%
% Non-Dual Eligible	76.8%	64.6%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Table 1.5: Selected Health Characteristics of Home Health Users by Gender

Demographics of Home Health Users

	Male	Female
Measures of General Health Status		
% Report Fair or Poor Health	41.0%	41.5%
% In Somewhat or Much Worse Health than Last Year	37.8%	40.3%
Chronic Conditions		
% Have 3 or More Chronic Conditions	73.4%	77.8%
Disability		
% Have 2 or More ADLs	20.9%	25.6%
Cognitive Function		
% with Presence of SMI	33.7%	40.4%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care. Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.6: Selected Beneficiary Characteristics of Home Health Users by Race

Demographics of Home Health Users

	All Beneficiaries	Black Beneficiaries	Hispanic Beneficiaries
Gender			
% Male	39.1%	30.1%	26.6%
% Female	60.9%	69.9%	73.4%
Age			
% Age <65	12.4%	17.6%	7.7%
% Age 65-74	27.0%	39.3%	33.2%
% Age 75-84	32.5%	24.5%	32.5%
% Age 85+	28.0%	18.5%	26.5%
Marital Status			
% Married	36.3%	24.3%	31.0%
% Widowed	33.4%	27.6%	29.6%
% Separated, Divorced, Never Married	30.3%	48.1%	39.4%
Income Distribution			
% Under \$25,000 per year	49.5%	71.3%	81.8%
% \$25,000 per year or more	50.5%	28.7%	18.2%
Living Alone			
% Living Alone	36.6%	37.1%	36.3%
Dual Eligibility			
% Dual Eligible	30.6%	52.3%	70.5%
% Non-Dual Eligible	69.4%	47.7%	29.5%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Table 1.7: Selected Health Characteristics of Home Health Users by Race

Demographics of Home Health Users

	All Beneficiaries	Black Beneficiaries	Hispanic Beneficiaries
Measures of General Health Status			
% Report Fair or Poor Health	41.3%	55.9%	57.0%
% In Somewhat or Much Worse Health than Last Year	39.3%	39.4%	46.5%
Chronic Conditions			
% Have 3 or More Chronic Conditions	76.1%	76.3%	83.5%
Disability			
% Have 2 or More ADLs	23.8%	35.4%	40.3%
Cognitive Function			
% with Presence of SMI	37.8%	31.3%	38.6%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care. Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.8: Selected Beneficiary Characteristics of Home Health Users by Dual Eligibility Status

Demographics of Home Health Users

	Dual Eligible	Non-Dual Eligible
Gender		
% Male	29.6%	43.2%
% Female	70.4%	56.8%
Age		
% Age <65	26.7%	6.1%
% Age 65-74	29.8%	25.8%
% Age 75-84	24.9%	35.9%
% Age 85+	18.6%	32.2%
Race		
% White	56.4%	84.4%
% Black	24.5%	9.9%
% Other	19.1%	5.7%
Marital Status		
% Married	15.7%	45.3%
% Widowed	28.8%	35.4%
% Separated, Divorced, Never Married	55.5%	19.2%
Income Distribution		
% Under \$25,000 per year	92.0%	30.7%
% \$25,000 per year or more	8.0%	69.3%
Living Alone		
% Living Alone	44.5%	33.1%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Table 1.9: Selected Health Characteristics of Home Health Users by Dual Eligibility Status

Demographics of Home Health Users

	Dual Eligible	Non-Dual Eligible
Measures of General Health Status		
% Report Fair or Poor Health	49.2%	37.8%
% In Somewhat or Much Worse Health than Last Year	41.3%	38.4%
Chronic Conditions		
% Have 3 or More Chronic Conditions	74.5%	76.8%
Disability		
% Have 2 or More ADLs	34.7%	18.9%
Cognitive Function		
% with Presence of SMI	45.0%	34.6%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care. Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.10: Selected Beneficiary Characteristics of Home Health Users by Severe Mental Illness (SMI)

Demographics of Home Health Users

	Any SMI	Depression	Mental Disorder
Gender			
% Male	34.9%	34.8%	31.9%
% Female	65.1%	65.2%	68.1%
Age			
% Age <65	20.7%	21.1%	29.6%
% Age 65-74	31.7%	32.7%	31.4%
% Age 75-84	28.1%	27.2%	25.7%
% Age 85+	19.5%	19.1%	13.2%
Race			
% White	77.4%	77.9%	81.7%
% Black	11.9%	12.4%	4.6%
% Other	10.7%	9.8%	13.7%
Marital Status			
% Married	34.1%	34.5%	31.1%
% Widowed	28.4%	28.2%	26.0%
% Separated, Divorced, Never Married	37.5%	37.3%	42.9%
Income Distribution			
% Under \$25,000 per year	54.1%	54.0%	60.4%
% \$25,000 per year or more	45.9%	46.0%	39.6%
Living Alone			
% Living Alone	40.9%	41.5%	39.1%
Dual Eligibility			
% Dual Eligible	36.5%	35.4%	48.4%
% Non-Dual Eligible	63.5%	64.6%	51.6%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.11: Selected Health Characteristics of Home Health Users by Severe Mental Illness (SMI)

Demographics of Home Health Users

	Any SMI	Depression	Mental Disorder
Measures of General Health Status			
% Report Fair or Poor Health	54.9%	55.0%	57.9%
% In Somewhat or Much Worse Health than Last Year	47.3%	48.0%	35.0%
Chronic Conditions			
% Have 3 or More Chronic Conditions	93.4%	95.0%	83.3%
Disability			
% Have 2 or More ADLs	29.1%	28.1%	37.2%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care. Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Table 1.12: Selected Beneficiary Characteristics of Home Health Users Compared to Skilled Nursing Facility Users

Demographics of Home Health Users

	Home Health Users	Skilled Nursing Facility User
Gender		
% Male	39.1%	37.1%
% Female	60.9%	62.9%
Age		
% Age <65	12.4%	14.2%
% Age 65-74	27.0%	16.9%
% Age 75-84	32.5%	31.1%
% Age 85+	28.0%	37.8%
Race		
% White	75.8%	81.1%
% Black	14.3%	9.6%
% Other	9.8%	9.3%
Marital Status		
% Married	36.3%	26.7%
% Widowed	33.4%	32.2%
% Separated, divorced, Never Married	30.3%	41.1%
Income Distribution		
% Under \$25,000 per year	49.5%	60.7%
% \$25,000 per year or more	50.5%	39.3%
Living Alone		
% Living Alone	36.6%	15.4%
Dual Eligibility		
% Dual Eligible	30.6%	52.3%
% Non-Dual Eligible	69.4%	47.7%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

Table 1.13: Selected Health Characteristics of Home Health Users Compared to Skilled Nursing Facility Users

Demographics of Home Health Users

	Home Health Users	Skilled Nursing Facility Users
Measures of General Health Status		
% Report Fair or Poor Health	41.3%	15.3%
% In Somewhat or Much Worse Health than Last Year	39.3%	16.0%
Chronic Conditions		
% Have 3 or More Chronic Conditions	76.1%	26.5%
Disability		
% Have 2 or More ADLs	23.8%	9.1%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care.

Table 1.14: Selected Health Characteristics of Home Health Users over Time (2015-2020)

Demographics of Home Health Users

	2015	2016	2017	2018	2019	2020
Socioeconomic Characteristics						
% Have Incomes under 200% of the Federal Poverty Level (FPL)	62.5%	64.0%	57.1%	54.4%	55.9%	57.3%
% Have Incomes under 100% of the Federal Poverty Level (FPL)	28.7%	27.5%	26.5%	20.5%	22.3%	23.1%
% Dual Eligible	38.1%	31.3%	32.4%	28.6%	29.4%	30.6%
Chronic Conditions						
% Have 3 or More Chronic Conditions	85.9%	80.5%	82.3%	75.0%	76.0%	76.1%
Disability						
% Have 2 or More ADLs	32.9%	27.8%	27.8%	20.2%	22.9%	23.8%
Cognitive Function						
% with Presence of SMI	44.0%	39.2%	38.3%	34.0%	34.8%	37.8%

Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2018-2020.

In 2020, 100% of FPL for a household of 1 was \$12,760, a household of 2 was \$17,240, a household of 3 was \$21,720, and a household of 4 was \$26,200. As a result, 200% of FPL was double each amount. Dual Eligibles are defined as individuals with any state buy-in at any point during the year.

ADL = Activities of daily living, such as eating, dressing, and bathing. Limitations with at least 2 ADLs is considered a measure of moderate to severe disability and is often the eligibility threshold for a nursing home level of care.

Severe mental illness (SMI) is defined as having depression or other mental disorder, including bipolar disorder, schizophrenia, and other psychoses.

Note: Analyses on data prior to 2018 were not conducted by KNG Health Consulting. As a result, there may be slight methodological differences in results.





ADVANCING HOME CARE THROUGH RESEARCH.

Clinical Profile of Home Health Users

Sponsored by



Table 2.1: Top 20 Medicare Severity Diagnosis Related Groups (MS-DRGs) for Beneficiaries Discharged from Hospital to Part A Home Health Episodes, 2021

Clinical Profile of Home Health Users

MS-DRGs	Number of Home Health Part A Claims	Percent of Total Home Health Part A Claims
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV > 96 HOURS WITH MCC	85,472	6.3%
RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC	80,334	5.9%
MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY WITHOUT MCC	68,748	5.0%
HEART FAILURE AND SHOCK WITH MCC	63,498	4.6%
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOUT MCC	20,654	1.5%
INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITH CC OR TPA IN 24 HOURS	18,546	1.4%
KIDNEY AND URINARY TRACT INFECTIONS WITHOUT MCC	16,929	1.2%
INFECTIOUS AND PARASITIC DISEASES WITH O.R. PROCEDURES WITH MCC	16,552	1.2%
SIMPLE PNEUMONIA AND PLEURISY WITH MCC	16,018	1.2%
RENAL FAILURE WITH CC	14,962	1.1%
ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE WITH MCC	14,612	1.1%
PULMONARY EDEMA AND RESPIRATORY FAILURE	14,463	1.1%
HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT WITH CC	14,050	1.0%
RENAL FAILURE WITH MCC	13,388	1.0%
MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH CC	13,077	1.0%
CELLULITIS WITHOUT MCC	12,819	0.9%
KIDNEY AND URINARY TRACT INFECTIONS WITH MCC	12,717	0.9%
HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC	12,338	0.9%
GASTROINTESTINAL HEMORRHAGE WITH CC	12,115	0.9%
CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH MCC	11,830	0.9%
Total for Top 20 MS-DRGs	533,122	39.0%

Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Note: Data is limited to beneficiaries with a Part A home health episode and a short-term acute care hospital stay within 14 days of home health admission discharged in 2021. Prior short term-acute care stays are limited to 2020 and 2021. CC – Complication or Comorbidity; MCC – Major Complication or Comorbidity All Medicare

Table 2.2: Comparison of Top 20 MS-DRGs for Beneficiaries Discharged from Hospital to Part A Home Health Episodes, 2017-2021

Clinical Profile of Home Health Users

MS-DRGs	2017	2018	2019	2020	2021
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC	78,407	78,911	77,883	84,183	85,472
RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC	8,917	9,782	10,116	39,281	80,334
MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY WITHOUT MCC	235,362	206,011	189,379	109,933	68,748
HEART FAILURE AND SHOCK WITH MCC	68,384	65,603	68,242	62,540	63,498
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOUT MCC	25,117	24,295	23,584	22,108	20,654
INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITH CC OR TPA IN 24 HOURS	18,787	18,159	18,387	19,475	18,546
KIDNEY AND URINARY TRACT INFECTIONS WITHOUT MCC	23,328	20,669	20,344	17,751	16,929
INFECTIOUS AND PARASITIC DISEASES WITH O.R. PROCEDURES WITH MCC	11,937	13,248	13,309	16,280	16,552
SIMPLE PNEUMONIA AND PLEURISY WITH MCC	18,366	26,556	24,504	21,800	16,018
RENAL FAILURE WITH CC	20,820	19,005	17,840	16,598	14,962
ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE WITH MCC	12,870	13,354	13,413	13,820	14,612
PULMONARY EDEMA AND RESPIRATORY FAILURE	27,096	22,310	21,244	17,059	14,463
HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT WITH CC	9,237	9,693	10,061	14,316	14,050
RENAL FAILURE WITH MCC	14,979	13,742	12,876	13,050	13,388
MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH CC	15,568	15,155	13,995	13,420	13,077
CELLULITIS WITHOUT MCC	20,514	18,471	16,989	13,764	12,819
KIDNEY AND URINARY TRACT INFECTIONS WITH MCC	13,943	12,673	11,936	12,312	12,717
HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC*	N/A	N/A	N/A	2,419	12,338
GASTROINTESTINAL HEMORRHAGE WITH CC	15,239	13,889	13,286	12,750	12,115
CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH MCC	38,909	24,233	21,636	14,872	11,830
Total for Top 20 MS-DRGs	677,780	625,759	599,024	537,731	533,122

Source: KNG Health analysis of the Medicare Standard Analytic Files, 2017-2021.

Note: Data is limited to beneficiaries with a Part A home health episode and a short-term acute care hospital stay within 14 days of home health admission discharged in each year. Prior short term-acute care stays are limited to the year of interest and the prior year.

^{*}MS-DRG: "HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC" was added to the list of MS-DRGs in October 2020.

Table 2.3: Top 20 Primary International Classification of Diseases, Version 10 (ICD-10) Diagnoses for All Home Health Claims, 2021

Clinical Profile of Home Health Users

Primary ICD-10 Diagnoses	Number of Home Health Claims	Percent of Total Home Health Claims
TYPE 2 DIABETES MELLITUS	807,110	7.6%
ENCOUNTER FOR OTHER POSTPROCEDURAL AFTERCARE	573,055	5.4%
ORTHOPEDIC AFTERCARE	517,912	4.9%
ESSENTIAL (PRIMARY) HYPERTENSION	460,622	4.3%
PRESSURE ULCER	393,513	3.7%
HYPERTENSIVE HEART DISEASE	378,128	3.6%
SEQUELAE OF CEREBROVASCULAR DISEASE	354,209	3.3%
OTHER CHRONIC OBSTRUCTIVE PULMONARY DISEASE	306,593	2.9%
HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE	280,710	2.6%
ACUTE RESPIRATORY DISTRESS SYNDROME DUE TO COVID-19	253,709	2.4%
CHRONIC ISCHEMIC HEART DISEASE	234,664	2.2%
FRACTURE OF FEMUR	218,313	2.1%
ATRIAL FIBRILLATION AND FLUTTER	193,088	1.8%
PARKINSON'S DISEASE	191,194	1.8%
OSTEOARTHRITIS OF KNEE	166,480	1.6%
ENCOUNTER FOR FITTING AND ADJUSTMENT OF OTHER DEVICES	161,752	1.5%
OTHER DISORDERS OF URINARY SYSTEM	155,747	1.5%
OTHER DISORDERS OF VEINS	146,581	1.4%
HYPERTENSIVE CHRONIC KIDNEY DISEASE	137,109	1.3%
ALZHEIMER'S DISEASE	130,541	1.2%
Total for Top 20 Primary ICD-10 Diagnoses	6,061,030	57.1%

Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Table 2.4: Comparison of Top 20 Primary ICD-10 Diagnoses for Beneficiaries Discharged from Hospital to Part A Home Health Episodes, 2017-2021

Clinical Profile of Home Health Users

Primary ICD-10 Diagnoses	2017	2018	2019	2020	2021
TYPE 2 DIABETES MELLITUS	462,657	436,263	425,619	775,054	807,110
ENCOUNTER FOR OTHER POSTPROCEDURAL AFTERCARE	289,864	276,956	272,620	462,147	573,055
ORTHOPEDIC AFTERCARE	409,226	414,993	411,774	439,492	517,912
ESSENTIAL (PRIMARY) HYPERTENSION	233,523	217,154	215,293	334,211	460,622
PRESSURE ULCER	226,755	225,077	215,875	372,701	393,513
HYPERTENSIVE HEART DISEASE	228,176	231,060	232,623	363,700	378,128
SEQUELAE OF CEREBROVASCULAR DISEASE	207,754	204,483	205,440	333,802	354,209
OTHER CHRONIC OBSTRUCTIVE PULMONARY DISEASE	317,461	287,759	267,145	348,732	306,593
HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE	148,011	158,925	173,266	276,595	280,710
ACUTE RESPIRATORY DISTRESS SYNDROME DUE TO COVID-19	N/A	N/A	N/A	87,376	253,709
CHRONIC ISCHEMIC HEART DISEASE	68,774	105,091	123,382	226,159	234,664
FRACTURE OF FEMUR	114,184	119,290	123,531	195,695	218,313
ATRIAL FIBRILLATION AND FLUTTER	113,041	106,724	101,984	171,740	193,088
PARKINSON'S DISEASE	91,605	95,180	100,182	163,586	191,194
OSTEOARTHRITIS OF KNEE	76,927	77,312	80,256	131,084	166,480
ENCOUNTER FOR FITTING AND ADJUSTMENT OF OTHER DEVICES	74,637	73,083	69,840	151,942	161,752
OTHER DISORDERS OF URINARY SYSTEM	93,803	87,942	91,224	144,164	155,747
OTHER DISORDERS OF VEINS	89,266	92,845	93,381	146,123	146,581
HYPERTENSIVE CHRONIC KIDNEY DISEASE	73,570	73,393	80,053	131,868	137,109
ALZHEIMER'S DISEASE	49,934	51,814	59,672	111,326	130,541
Total for Top 20 Primary ICD-10 Diagnoses	3,369,168	3,335,344	3,343,160	5,367,497	6,061,030

Source: KNG Health analysis of the Medicare Standard Analytic Files, 2017-2021.

Table 2.5: Percent of Medicare Home Health Users with 3 or More Chronic Conditions Compared to All Medicare Beneficiaries, by State, 2021

Clinical Profile of Home Health Users

State	% of Beneficiaries with 3+ CC	% of HH Users with 3+ CC
Alabama	8.15%	84.67%
Alaska	9.08%	84.42%
Arizona	6.19%	83.18%
Arkansas	9.68%	83.65%
California	7.14%	82.49%
Colorado	5.62%	79.96%
Connecticut	8.11%	84.81%
Washington, D.C.	10.27%	84.29%
Delaware	9.78%	84.70%
Florida	8.20%	82.19%
Georgia	7.38%	84.90%
Hawaii	4.00%	86.93%
Idaho	6.47%	78.95%
Illinois	10.27%	86.48%
Indiana	9.05%	86.46%
Iowa	9.00%	87.09%
Kansas	10.87%	86.48%
Kentucky	8.73%	83.17%
Louisiana	8.79%	83.85%
Maine	6.39%	85.50%
Maryland	10.86%	85.69%
Massachusetts	10.69%	81.90%
Michigan	7.51%	85.57%
Minnesota	6.80%	86.80%
Mississippi	12.10%	83.77%

Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Having a chronic condition is defined as having a Medicare claim with a chronic condition listed by the Centers for Medicare and Medicaid Services' Chronic Conditions Data Warehouse.

State	% of Beneficiaries with 3+ CC	% of HH Users with 3+ CC
Missouri	8.23%	85.01%
Montana	7.51%	83.84%
Nebraska	10.03%	88.16%
Nevada	7.63%	82.91%
New Hampshire	8.89%	81.81%
New Jersey	8.89%	85.64%
New Mexico	6.35%	80.90%
New York	7.67%	85.11%
North Carolina	7.68%	86.58%
North Dakota	11.75%	90.39%
Ohio	7.78%	85.82%
Oklahoma	11.78%	85.20%
Oregon	5.09%	84.57%
Pennsylvania	7.69%	84.63%
Rhode Island	6.70%	84.02%
South Carolina	8.76%	84.16%
South Dakota	10.84%	87.14%
Tennessee	7.97%	87.32%
Texas	8.35%	84.99%
Utah	7.02%	77.28%
Vermont	9.64%	83.39%
Virginia	9.58%	84.74%
Washington	6.37%	86.10%
West Virginia	9.57%	86.10%
Wisconsin	6.81%	87.97%
Wyoming	10.24%	82.22%





ADVANCING HOME CARE THROUGH RESEARCH.

Role of Home Health in Post-Acute Care Market

Sponsored by



Chart 3.1: Share of Home Health Discharges following an Inpatient Stay by State, 2021

Role of Home Health in Post-Acute Care Market

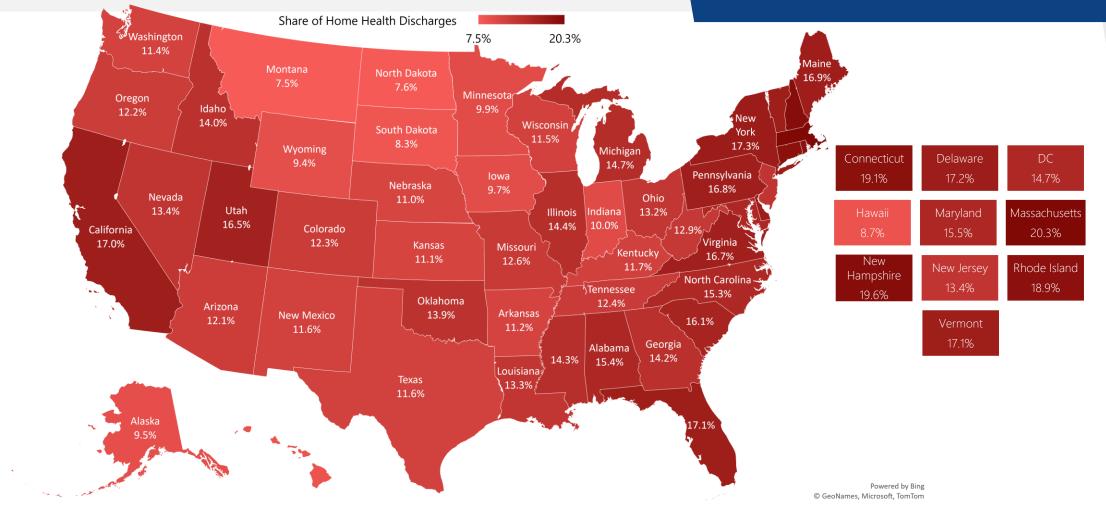


Chart 3.2a: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries in 2021, for States in Northeastern Region

Role of Home Health in Post-Acute Care Market

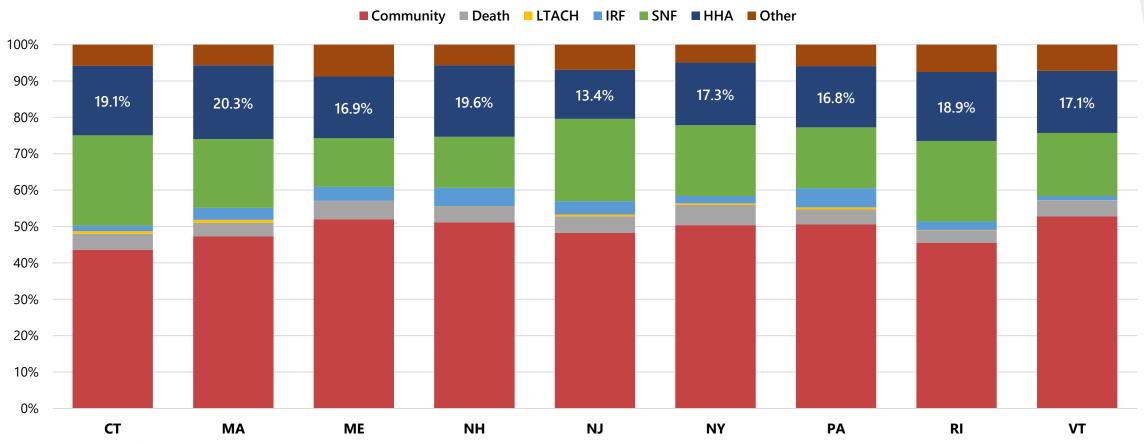


Chart 3.2b: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries in 2021, for States in Midwestern Region

Role of Home Health in Post-Acute Care Market

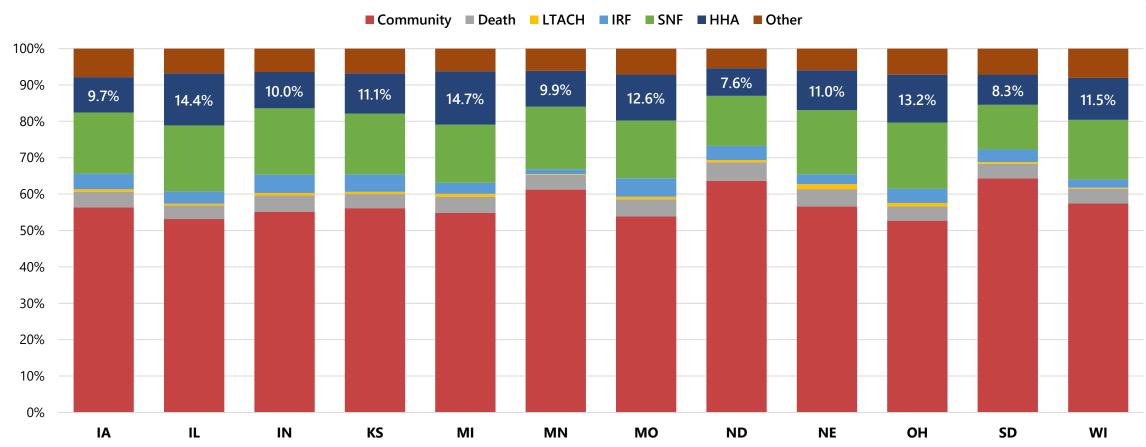


Chart 3.2c: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries in 2021, for States in Southern Region

Role of Home Health in Post-Acute Care Market

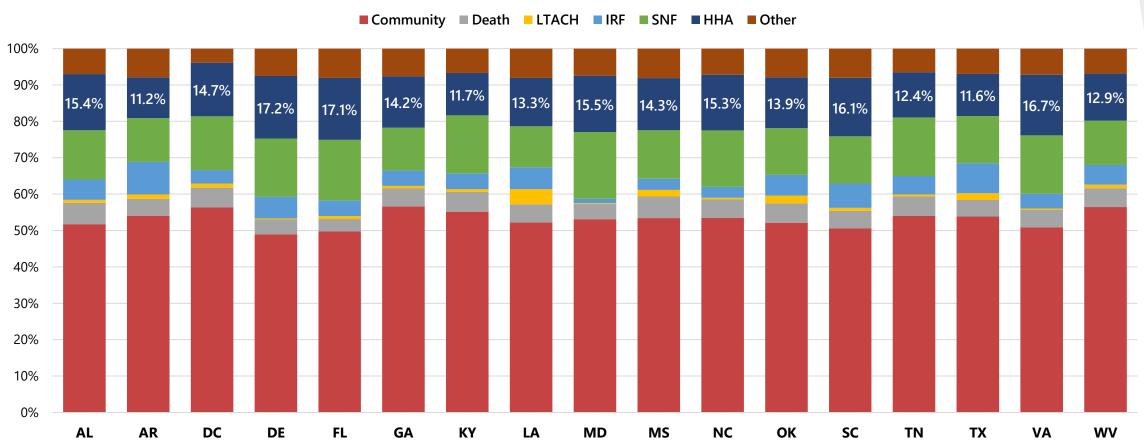


Chart 3.2d: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries in 2021, for States in Western Region

Role of Home Health in Post-Acute Care Market

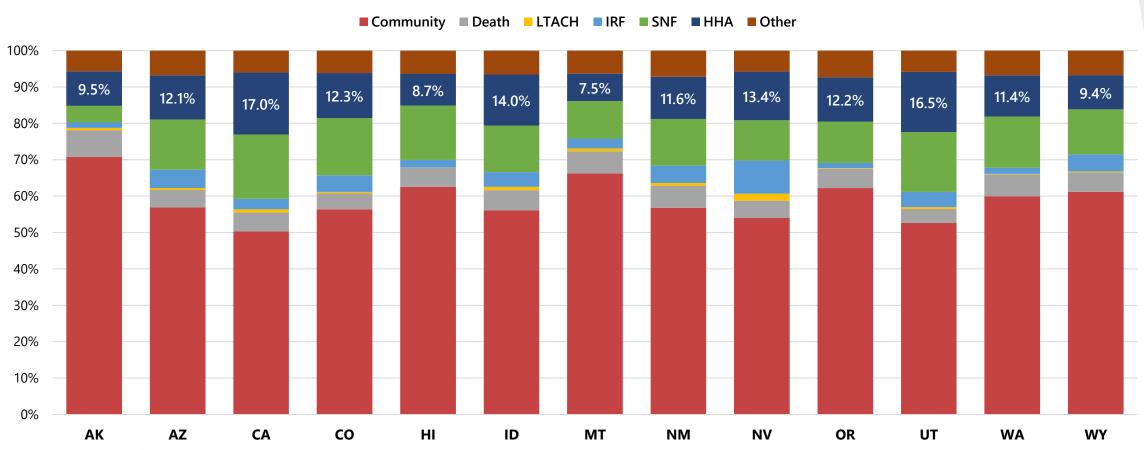


Chart 3.3: Total Medicare Post-Acute Care Expenditures, Billions of Dollars, 2004-2020

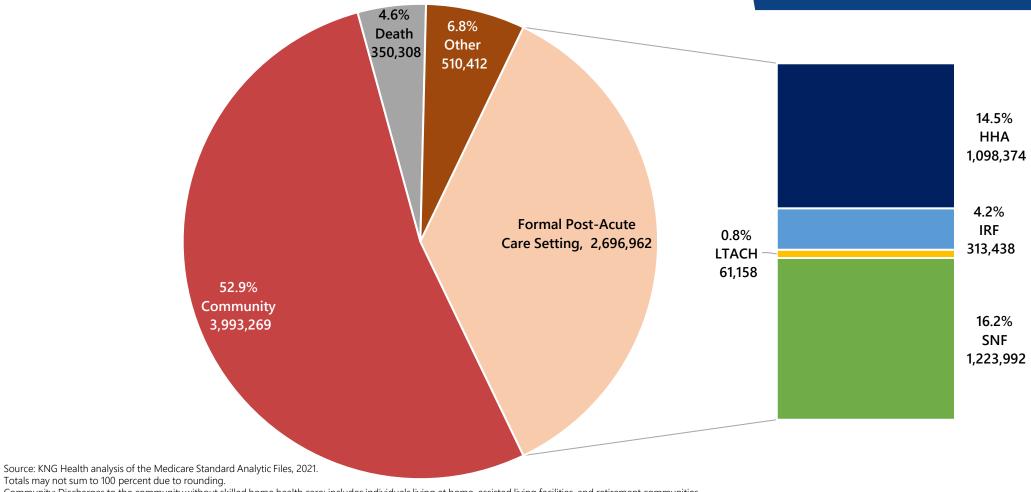
Role of Home Health in Post-Acute Care Market



Source: Medicare Payment Advisory Commission. A Data Book: Health Care Spending and the Medicare Program, June 2017-2022.

Chart 3.4: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries, 2021

Role of Home Health in Post-Acute Care Market



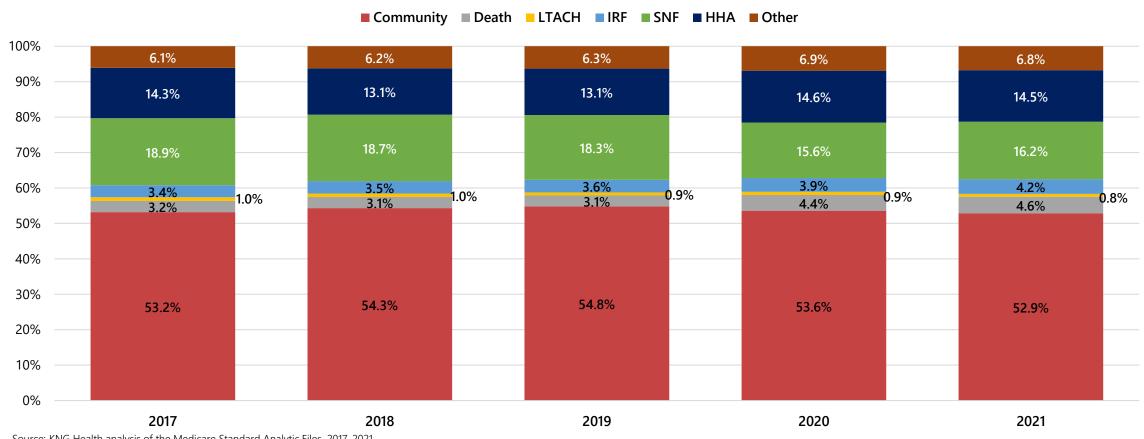
Totals may not sum to 100 percent due to rounding.

Community: Discharges to the community without skilled home health care; includes individuals living at home, assisted living facilities, and retirement communities.

Formal Post-Acute Care Settings: Settings designated as post-acute care by Medicare. Includes skilled nursing facilities (SNF), home health agencies (HHA), inpatient rehabilitation facilities (IRF), and long-term acute care hospitals (LTACH). Other: Hospice, a different inpatient hospital, or other inpatient hospitals such as inpatient psychiatric facilities.

Chart 3.5: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries, 2017-2021

Role of Home Health in Post-Acute Care Market



Source: KNG Health analysis of the Medicare Standard Analytic Files, 2017-2021.

Totals may not sum to 100 percent due to rounding.

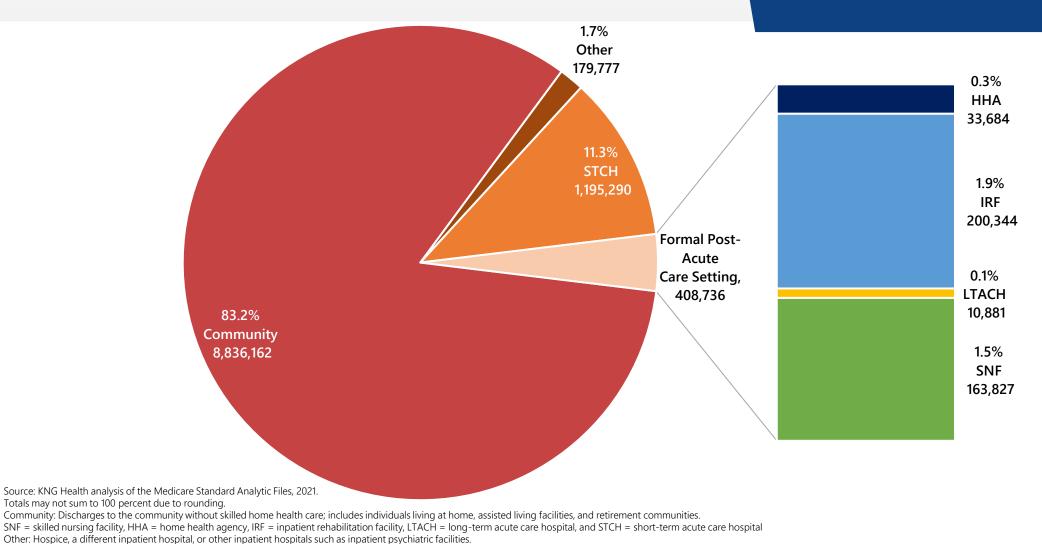
Community: Discharges to the community without skilled home health care; includes individuals living at home, assisted living facilities, and retirement communities.

SNF = skilled nursing facility, HHA = home health agency, IRF = inpatient rehabilitation facility, and LTACH = long-term acute care hospital

Other: Hospice, a different inpatient hospital, or other inpatient hospitals such as inpatient psychiatric facilities.

Chart 3.6: Distribution of Care Settings Prior to Home Health Episodes, 2021

Role of Home Health in Post-Acute Care Market



Copyright ©2022. Research Institute for Home Care. All Rights Reserved. Source KNG Health Consulting, LLC





THROUGH RESEARCH.

Organizational Trends in Home Health

Sponsored by



Chart 4.1: Number of Medicare Certified Free-Standing Home Health Agencies, 2010-2020

Organizational Trends in Home Health

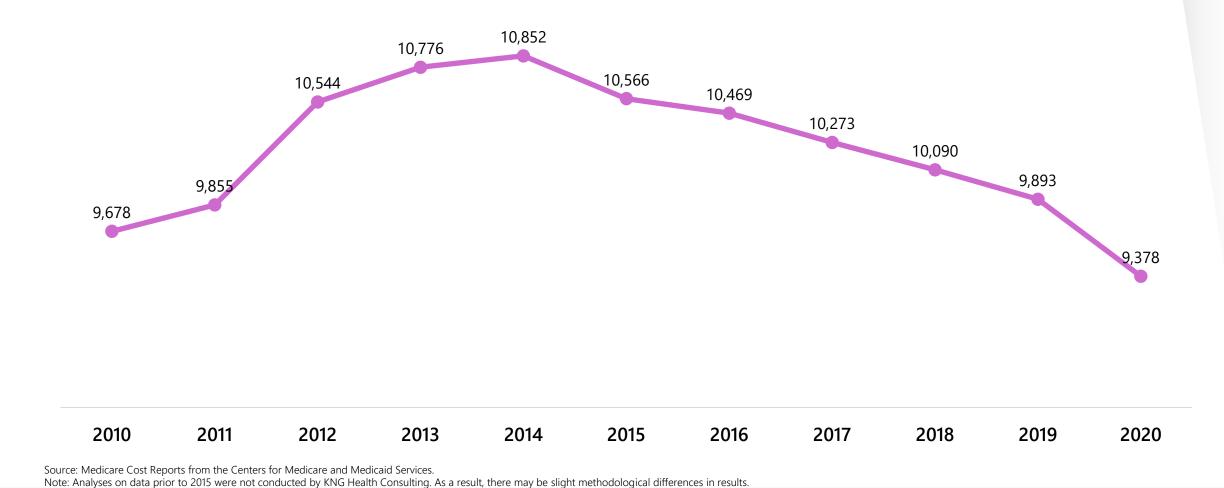
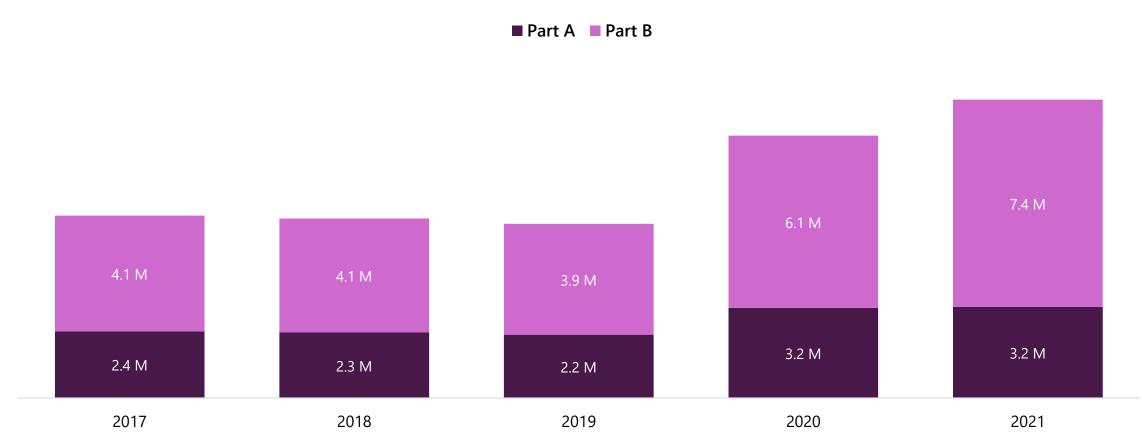


Chart 4.2: Number of Medicare Part A and Part B Home Health Episodes, in Millions, 2017-2021

Organizational Trends in Home Health



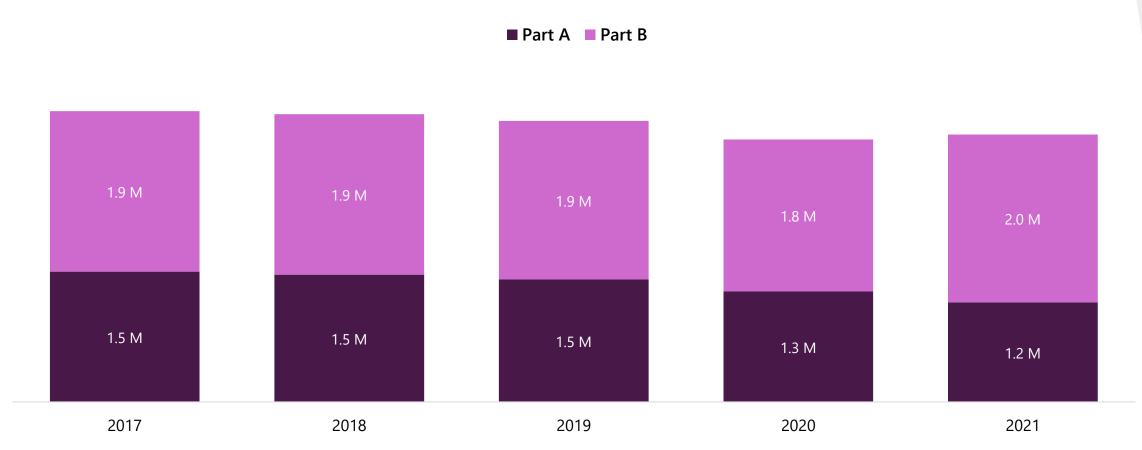
Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

In 2020, due to changes outlined in the Patient-Driven Groupings Model (PDGM), the definition of home health episodes changed from 60 days 30 days.

Note: Part A home health episodes are defined as home health claims with a claim value code of "62." Part B home health episodes are defined as home health claims without a claim value code of "62."

Chart 4.3: Number of Medicare Beneficiaries with Part A and Part B Home Health Episodes, in Millions, 2017-2021

Organizational Trends in Home Health

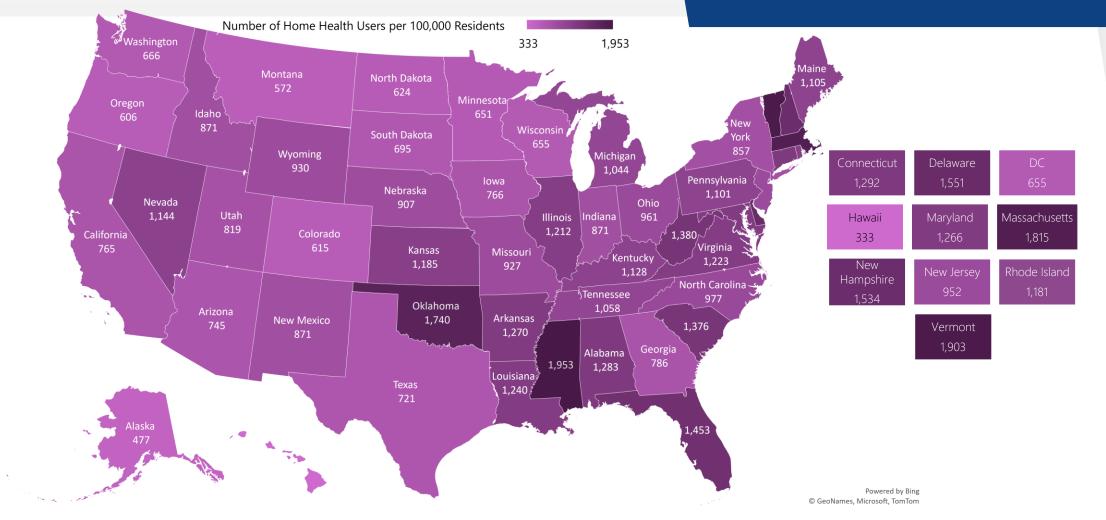


Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Note: Part A home health episodes are defined as home health claims with a claim value code of "62." Part B home health episodes are defined as home health claims without a claim value code of "62."

Chart 4.4: Number of Medicare Beneficiaries with a Home Health Episode per 100,000 Residents by State, 2021

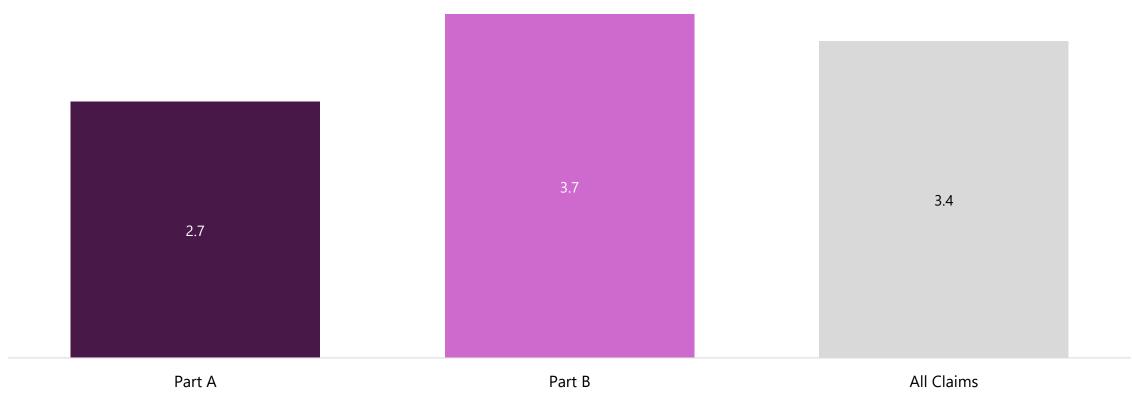
Organizational Trends in Home Health



Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021. Note: State resident counts are based on state population estimates produced by the United States Census Bureau

Chart 4.5: Number of Home Health Episodes per Medicare Home Health User by Part A, Part B, and all Claims, 2021

Organizational Trends in Home Health

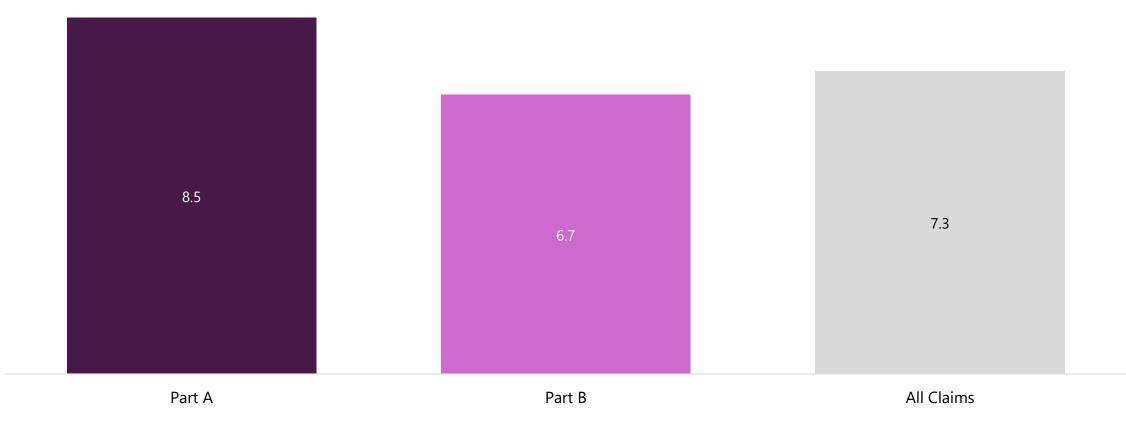


Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Note: Part A home health episodes are defined as home health claims with a claim value code of "62." Part B home health episodes are defined as home health claims without a claim value code of "62."

Chart 4.6: Number of Home Health Visits per Episode by Part A, Part B, and all Claims, 2021

Organizational Trends in Home Health



Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Note: Part A home health claims are defined as home health claims with a claim value code of "62." Part B home health claims are defined as home health claims without a claim value code of "62."





ADVANCING HOME CARE THROUGH RESEARCH.

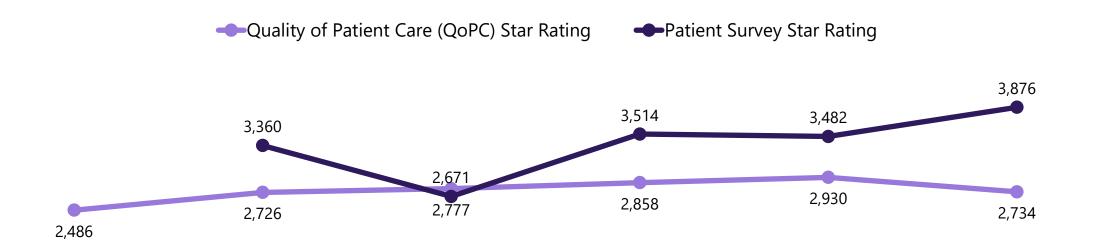
Quality of Home Health Care

Sponsored by



Chart 5.1: Number of High-Quality* Medicare Certified Home Health Agencies by types of Home Health star ratings, 2015-2020

Quality of Home Health Care



2015 2016 2017 2018 2019 2020

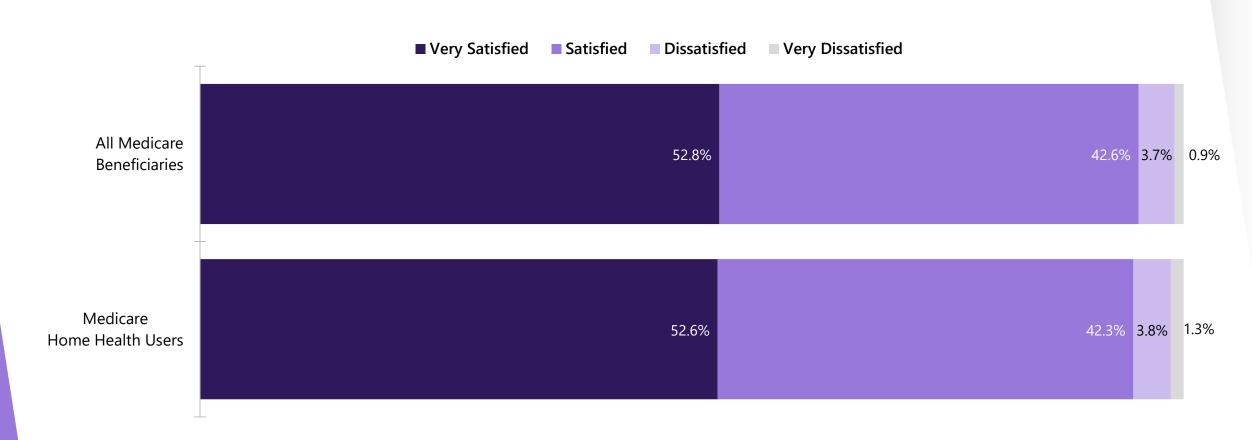
Source: KNG Health analysis of Home Health Care Compare Data, 2015-2020.

Note: The Quality of Patient Care (QoPC) Star Rating is based on OASIS assessments and Medicare claims data. Collection for this measure began in 2015. The Patient Survey Star Ratings are based on the Home Health CAHPS Survey. Collection for this measure began in 2016.

^{*} Home Health Agencies are defined as high-quality if they have a QoPC star rating or Patient Survey Star Rating of 4 or higher.

Chart 5.2: "Satisfaction: Quality of Care" Measure in Home Health Users and All Medicare Beneficiaries, 2020

Quality of Home Health Care



Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020. Totals may not sum to 100 percent due to rounding. Satisfaction with Care includes all medical services received.

Table 5.1: National Average for How Often Home Health Team Met Quality Measures Related to Patient Care, 2015-2021*

Quality of Home Health Care

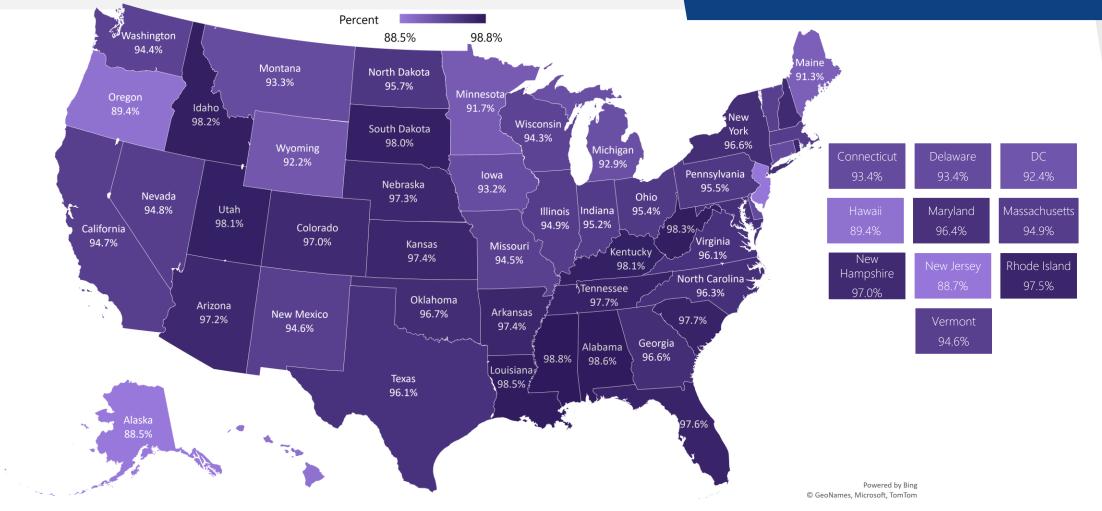
Research Institute for Home Care Chartbook / 62

Measure of Patient Care	2015	2016	2017	2018	2019	2020	2021*
Checked Patients for Depression	97.8%	97.9%	98.0%	97.8%	97.5%	97.4%	N/A
Checked Patients' Risk of Falling	98.3%	99.3%	99.5%	99.5%	99.6%	99.6%	N/A
For diabetic patients, got doctor's orders, gave and educated about foot care	94.9%	96.2%	96.9%	97.4%	97.9%	96.4%	N/A
Taught patients (or their family caregivers) about their drugs	93.5%	96.3%	97.5%	98.0%	98.5%	98.6%	N/A
Began care in timely manner	91.8%	92.5%	93.4%	93.9%	95.1%	95.7%	N/A
Determined whether patients received a flu shot for the current flu season	71.0%	72.7%	76.2%	77.8%	78.6%	78.7%	N/A
Determined whether patients received a pneumococcal vaccine (pneumonia shot)	71.6%	75.2%	79.6%	80.9%	81.8%	82.2%	N/A

^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 5.3: Performance on "How Often the Home Health Team Began Their Patients' Care in a Timely Manner" by State, 2020*

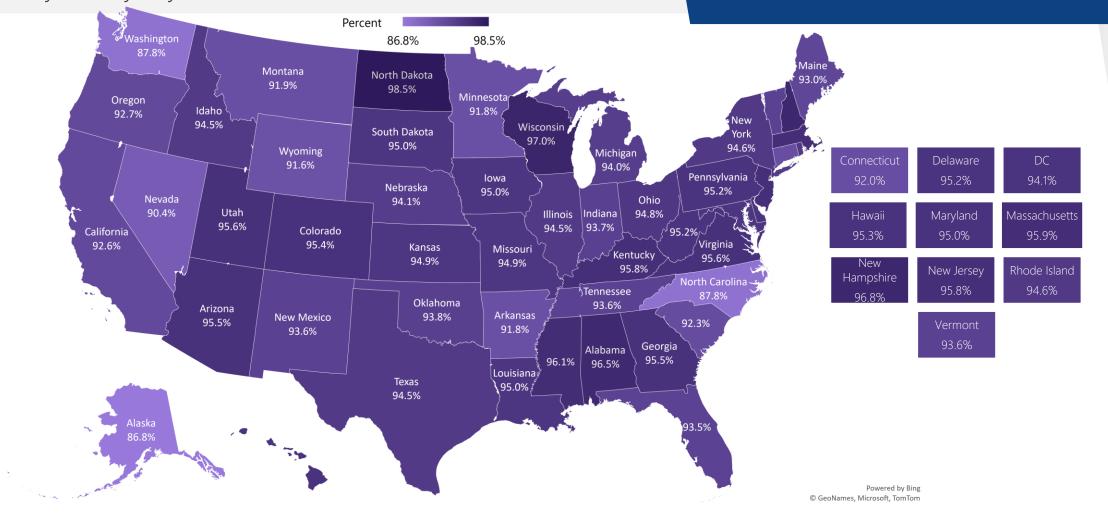
Quality of Home Health Care



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 5.4: Performance on "How Often Physician-Recommended Actions to Address Medication Issues were Completely Timely" by State, 2020*

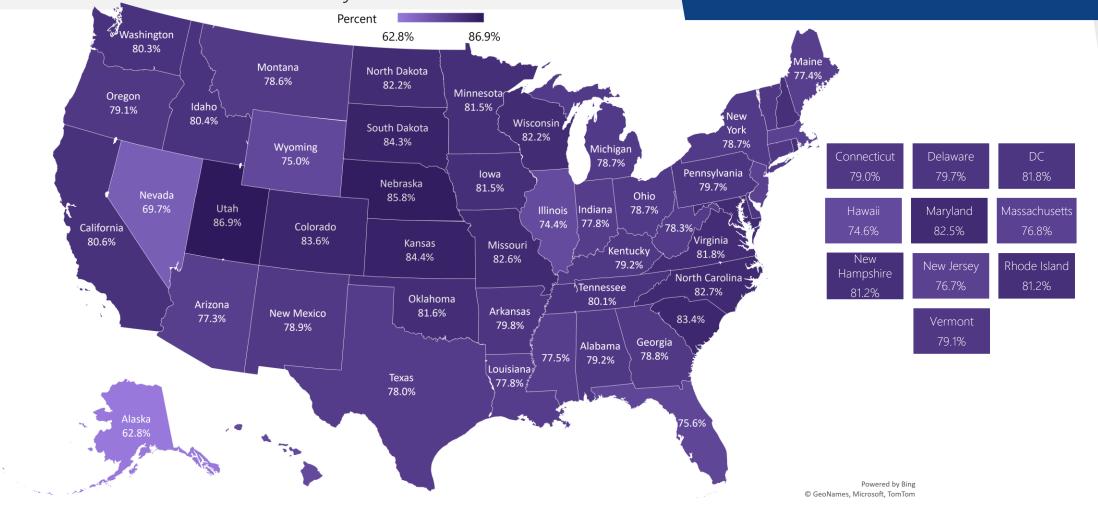
Quality of Home Health Care



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 5.5: Performance on "How Often the Home Health Team Made Sure that Their Patients Have Received a Flu Shot for the Current Flu Season" by State, 2020*

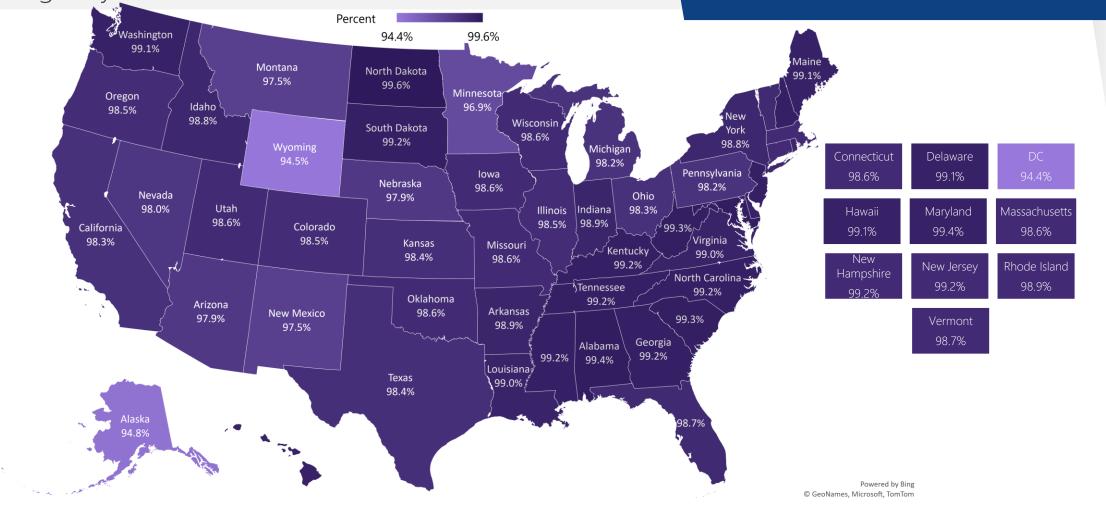
Quality of Home Health Care



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 5.6: Performance on "How Often the Home Health Team Taught Patients (or Their Family Caregivers) About Their Drugs" by State, 2020*

Quality of Home Health Care



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.





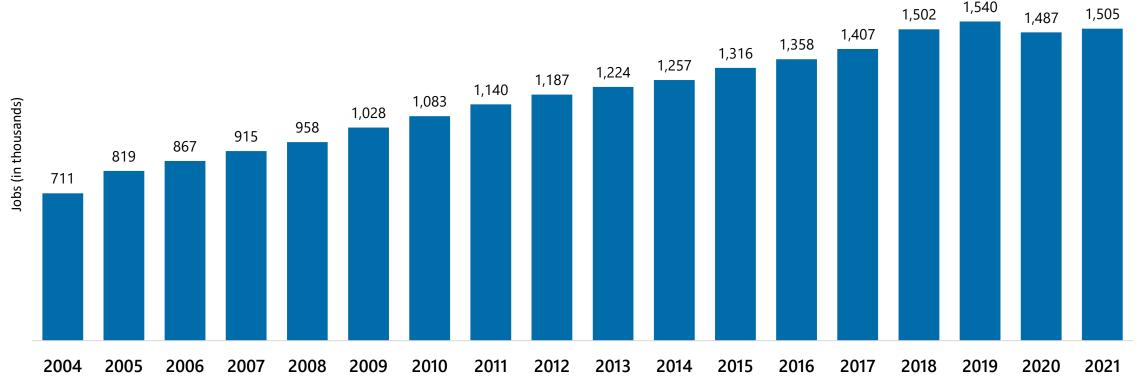
ADVANCING HOME CARE THROUGH RESEARCH.

Economic Contributions of Home Health Agencies

Sponsored by



Economic Contributions of Home Health Agencies

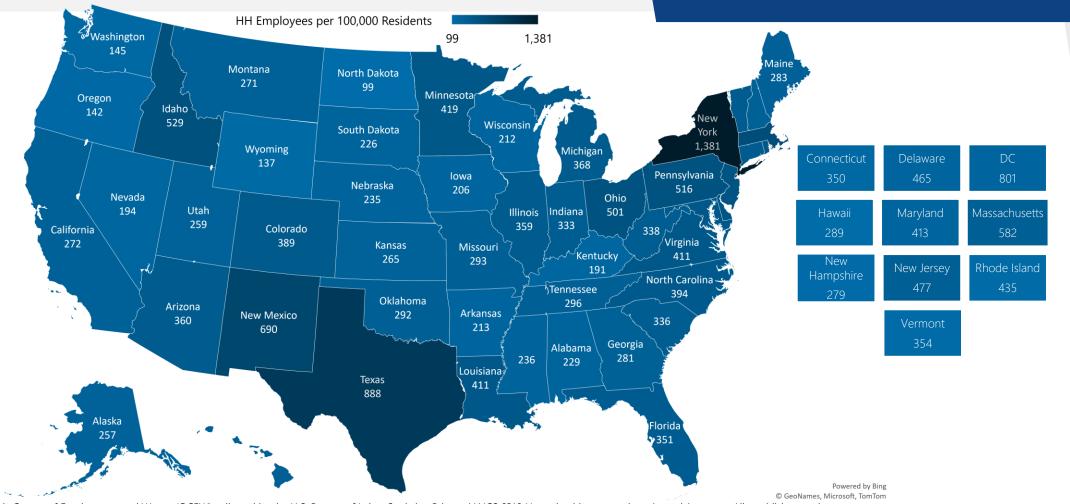


Source: Quarterly Census of Employment and Wages (QCEW) collected by the U.S. Bureau of Labor Statistics. Private, NAICS 6216 Home health care services. Annual Averages, All establishment sizes.

Note: This chart reports employment data for privately-owned facilities only, including for-profit and non-profit organizations, and does not include employment from government-owned facilities. Output is not adjusted by U.S. Bureau of Economic Analysis multipliers.

Chart 6.2: Estimated Number of Home Health (HH) Employees by State per 100,000 Residents, 2021

Economic Contributions of Home Health Agencies



Source: Quarterly Census of Employment and Wages (QCEW) collected by the U.S. Bureau of Labor Statistics. Private, NAICS 6216 Home health care services. Annual Averages, All establishment sizes.

Note: This chart reports employment data for privately-owned facilities only, including for-profit and non-profit organizations, and does not include employment from government-owned facilities. Output is not adjusted by U.S. Bureau of Economic Analysis multipliers.

Table 6.1: Impact of Home Health (HH) on Employment by State, 2021

Economic Contributions of Home Health Agencies

State	Estimated Number of HH Employees ¹	Multiplier for Employment ²	Estimated Jobs Created by HH Industry ³
Alabama	11,560	1.5758	18,216
Alaska	1,884	1.2724	2,397
Arizona	26,220	1.4693	38,525
Arkansas	6,457	1.3858	8,948
California	106,769	1.4881	158,883
Colorado	22,592	1.5362	34,706
Connecticut	12,626	1.4344	18,111
Delaware	4,664	1.4035	6,546
District of Columbia	5,370	1.1447	6,147
Florida	76,478	1.6012	122,457
Georgia	30,381	1.5899	48,303
Hawaii	4,172	1.3984	5,834
Idaho	10,052	1.4145	14,219
Illinois	45,477	1.4781	67,220
Indiana	22,675	1.4888	33,759
lowa	6,573	1.4553	9,566
Kansas	7,778	1.4588	11,347
Kentucky	8,604	1.5335	13,194
Louisiana	19,011	1.4541	27,644
Maine	3,888	1.4913	5,798
Maryland	25,457	1.4033	35,724
Massachusetts	40,650	1.4360	58,373
Michigan	37,033	1.4728	54,542
Minnesota	23,937 Bureau of Labor Statistics 2021	1.4053	33,639

^{1.} QCEW collected by the U.S. Bureau of Labor Statistics, 2021.

Note: The QCEW collects wage data quarterly. All states report employment figures on privately owned home health agencies, including for-profit and non-profit organizations. AL, AR, IL, IA, MN, MO, NC, OH and VA submit wage data for their government-owned facilities, which are included in this analysis. The QWEC does not include wage data for HHA contractors, but the multiplier is intended to account for such wages.

State	Estimated Number of HH Employees ¹	Multiplier for Employment ²	Estimated Jobs Created by HH Industry ³
Mississippi	6,961	1.5093	10,506
Missouri	18,059	1.4589	26,346
Montana	2,993	1.3537	4,052
Nebraska	4,614	1.4619	6,745
Nevada	6,092	1.5083	9,189
New Hampshire	3,882	1.4530	5,641
New Jersey	44,182	1.4596	64,488
New Mexico	14,593	1.3563	19,792
New York	273,857	1.3498	369,652
North Carolina	41,541	1.4740	61,231
North Dakota	771	1.3895	1,071
Ohio	58,960	1.4746	86,942
Oklahoma	11,654	1.4632	17,052
Oregon	6,048	1.4683	8,880
Pennsylvania	66,908	1.5045	100,663
Rhode Island	4,770	1.4058	6,706
South Carolina	17,436	1.4988	26,133
South Dakota	2,023	1.3464	2,724
Tennessee	20,613	1.6348	33,698
Texas	262,152	1.5417	404,160
Utah	8,646	1.6314	14,105
Vermont	2,284	1.4189	3,241
Virginia	35,488	1.4066	49,917
Washington	11,226	1.4534	16,316
West Virginia	6,035	1.3551	8,178
Wisconsin	12,489	1.4714	18,376
Wyoming	791	1.3500	1,068
Total U.S.	1,505,376		2,210,969

^{2.} U.S. Bureau of Economic Analysis multipliers, 2020.

^{3.} KNG Health Analysis.

Table 6.2: Impact of Home Health (HH) on Labor Income by State, 2021

Economic Contributions of Home Health Agencies

State	Estimated Home Health Total Wages ¹	Multiplier for Earnings ²	Estimated Impact of HH Payroll on Labor Income ³
Alabama	\$613,875,815	1.4972	\$919,094,848
Alaska	\$47,546,913	1.3674	\$65,015,652
Arizona	\$933,974,525	1.6049	\$1,498,935,680
Arkansas	\$274,419,346	1.4316	\$392,858,720
California	\$5,071,890,984	1.5952	\$8,090,680,320
Colorado	\$958,675,958	1.6439	\$1,575,967,488
Connecticut	\$663,055,350	1.4808	\$981,852,352
Delaware	\$209,564,043	1.3959	\$292,530,464
District of Columbia	\$197,354,641	1.1756	\$232,010,128
Florida	\$3,477,467,036	1.6025	\$5,572,640,768
Georgia	\$1,159,547,950	1.6564	\$1,920,675,200
Hawaii	\$168,150,445	1.4944	\$251,284,032
Idaho	\$263,026,760	1.4740	\$387,701,440
Illinois	\$1,659,483,319	1.6787	\$2,785,774,592
Indiana	\$838,150,498	1.5556	\$1,303,826,944
lowa	\$297,649,078	1.4202	\$422,721,216
Kansas	\$308,719,839	1.4789	\$456,565,760
Kentucky	\$453,525,302	1.4935	\$677,340,032
Louisiana	\$718,498,076	1.4910	\$1,071,280,640
Maine	\$180,998,758	1.4835	\$268,511,648
Maryland	\$1,034,111,024	1.5177	\$1,569,470,208
Massachusetts	\$1,875,637,379	1.5214	\$2,853,594,624
Michigan	\$1,487,629,138	1.5646	\$2,327,544,576
Minnesota	\$808,249,804	1.5663	\$1,265,961,728

^{1.} QCEW collected by the U.S. Bureau of Labor Statistics, 2021.

Note: The QCEW collects wage data quarterly. All states report employment figures on privately owned home health agencies, including for-profit and non-profit organizations. AL, AR, IL, IA, MN, MO, NC, OH and VA submit wage data for their government-owned facilities, which are included in this analysis. The QWEC does not include wage data for HHA contractors, but the multiplier is intended to account for such wages.

State	Estimated Home Health Total Wages ¹	Multiplier for Earnings ²	Estimated Impact of HH Payroll on Labor Income ³
Mississippi	\$344,130,113	1.4343	\$493,585,792
Missouri	\$628,131,498	1.5576	\$978,377,664
Montana	\$99,446,392	1.4075	\$139,970,800
Nebraska	\$176,408,424	1.4700	\$259,320,384
Nevada	\$330,899,728	1.4668	\$485,363,712
New Hampshire	\$200,706,511	1.4978	\$300,618,208
New Jersey	\$1,782,230,194	1.5990	\$2,849,786,112
New Mexico	\$351,620,506	1.4156	\$497,753,952
New York	\$8,882,485,072	1.4496	\$12,876,050,432
North Carolina	\$1,462,682,486	1.6165	\$2,364,426,240
North Dakota	\$37,551,671	1.3738	\$51,588,488
Ohio	\$1,996,890,421	1.5922	\$3,179,449,088
Oklahoma	\$424,810,728	1.5264	\$648,431,104
Oregon	\$269,459,817	1.5150	\$408,231,616
Pennsylvania	\$2,979,768,954	1.5744	\$4,691,347,968
Rhode Island	\$199,760,508	1.4535	\$290,351,904
South Carolina	\$598,412,910	1.5741	\$941,961,792
South Dakota	\$74,677,595	1.3956	\$104,220,048
Tennessee	\$1,020,530,433	1.6548	\$1,688,773,760
Texas	\$6,451,402,720	1.7314	\$11,169,958,912
Utah	\$354,581,696	1.6148	\$572,578,496
Vermont	\$111,323,207	1.4001	\$155,863,616
Virginia	\$1,232,394,965	1.5409	\$1,898,997,376
Washington	\$565,025,311	1.5000	\$847,537,984
West Virginia	\$230,352,894	1.3730	\$316,274,528
Wisconsin	\$528,148,409	1.5150	\$800,144,832
Wyoming	\$30,741,459	1.3414	\$41,236,592
Total U.S.	\$55,065,776,603		\$86,236,040,460

^{2.} U.S. Bureau of Economic Analysis multipliers, 2020.

^{3.} KNG Health Analysis.

Table 6.3: Impact of Home Health (HH) on Output by State, 2021

Economic Contributions of Home Health Agencies

State	Estimated Home Health Expenditures ¹	Multiplier for Output ²	Estimated Impact of HH Spending on Output ³
Alabama	\$461,861,607	1.9844	\$916,518,189
Alaska	\$30,171,823	1.7296	\$52,185,184
Arizona	\$397,615,844	2.1840	\$868,393,009
Arkansas	\$249,169,026	1.8570	\$462,706,880
California	\$3,220,835,474	2.1864	\$7,042,034,476
Colorado	\$432,743,494	2.2740	\$984,058,675
Connecticut	\$346,341,309	1.9485	\$674,846,053
Delaware	\$138,334,784	1.7712	\$245,018,561
District of Columbia	\$80,677,900	1.3023	\$105,066,827
Florida	\$2,226,725,270	2.1726	\$4,837,783,390
Georgia	\$561,384,878	2.2994	\$1,290,848,440
Hawaii	\$53,703,992	1.9819	\$106,435,940
Idaho	\$134,505,305	1.9144	\$257,496,953
Illinois	\$880,076,459	2.3816	\$2,095,990,009
Indiana	\$425,900,855	2.1140	\$900,354,442
lowa	\$230,047,451	1.8317	\$421,377,908
Kansas	\$379,219,803	1.9801	\$750,893,145
Kentucky	\$334,546,058	1.9964	\$667,887,750
Louisiana	\$398,314,393	1.9516	\$777,350,352
Maine	\$121,759,078	1.9219	\$234,008,776
Maryland	\$717,424,914	2.0266	\$1,453,933,248
Massachusetts	\$824,466,874	2.0277	\$1,671,771,437
Michigan	\$686,458,061	2.1101	\$1,448,495,176
Minnesota	\$339,590,931	2.1219	\$720,578,024

^{1.} CMS Medicare Cost Reports for Home Health Agencies, 2020.

Note: All Medicare-certified home health agencies are required to submit an annual cost report, which includes cost and charges by cost center in total and for Medicare. Cost report data do not include expenditures from HHA contractors, but the multiplier is intended to account for such figures.

State	Estimated Home Health Expenditures ¹	Multiplier for Output ²	Estimated Impact of HH Spending on Output ³
Mississippi	\$277,269,145	1.8469	\$512,088,380
Missouri	\$565,106,706	2.1185	\$1,197,178,553
Montana	\$62,518,149	1.7905	\$111,938,749
Nebraska	\$120,126,313	1.9075	\$229,140,945
Nevada	\$239,975,064	1.9288	\$462,863,900
New Hampshire	\$114,323,729	1.9120	\$218,586,963
New Jersey	\$644,280,891	2.2159	\$1,427,661,990
New Mexico	\$3,126,700,079	1.8006	\$5,629,936,324
New York	\$1,633,603,497	1.9304	\$3,153,508,213
North Carolina	\$568,153,655	2.2309	\$1,267,494,017
North Dakota	\$12,178,496	1.7446	\$21,246,605
Ohio	\$1,122,569,388	2.1873	\$2,455,395,985
Oklahoma	\$433,218,768	2.0048	\$868,517,021
Oregon	\$252,454,703	2.0151	\$508,721,473
Pennsylvania	\$1,492,444,993	2.1441	\$3,199,951,236
Rhode Island	\$136,387,520	1.8694	\$254,962,833
South Carolina	\$301,727,901	2.1673	\$653,934,876
South Dakota	\$117,816,583	1.7704	\$208,582,484
Tennessee	\$622,175,543	2.3062	\$1,434,861,254
Texas	\$2,925,697,190	2.4833	\$7,265,383,746
Utah	\$291,826,578	2.2398	\$653,633,163
Vermont	\$136,841,544	1.7525	\$239,814,814
Virginia	\$599,334,582	2.0823	\$1,247,994,369
Washington	\$323,830,317	2.0130	\$651,870,432
West Virginia	\$208,123,370	1.6993	\$353,664,053
Wisconsin	\$358,207,005	2.0066	\$718,778,142
Wyoming	\$25,020,617	1.6862	\$42,189,765
Total U.S.	\$30,383,787,909		\$63,975,933,132

^{2.} U.S. Bureau of Economic Analysis multipliers, 2020.

^{3.} KNG Health Analysis.





THROUGH RESEARCH.

Health Outcomes of Home Health Users

Sponsored by



Table 7.1: 30-day Readmission Rates for Top 20 MS-DRGs Discharged from Hospital to Selected Post-Acute Care Settings, by Setting, 2021

Health Outcomes of Home Health Users

MS-DRGs	% of Home Health Users Readmitted Within 30 Days	% of Skilled Nursing Facility Users Readmitted Within 30 Days	
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV > 96 HOURS WITH MCC	19.4%	23.7%	
RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC	15.3%	21.5%	
MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY WITHOUT MCC	4.0%	8.6%	
HEART FAILURE AND SHOCK WITH MCC	21.0%	26.6%	
SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV > 96 HOURS WITHOUT MCC	16.2%	18.9%	
INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITH CC OR TPA IN 24 HOURS	11.0%	15.9%	
KIDNEY AND URINARY TRACT INFECTIONS WITHOUT MCC	14.9%	15.6%	
INFECTIOUS AND PARASITIC DISEASES WITH O.R. PROCEDURES WITH MCC	19.9%	27.1%	
SIMPLE PNEUMONIA AND PLEURISY WITH MCC	19.1%	22.7%	
RENAL FAILURE WITH CC	19.6%	20.8%	
ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE WITH MCC	27.8%	30.0%	
PULMONARY EDEMA AND RESPIRATORY FAILURE	19.3%	25.3%	
HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT WITH CC	6.4%	10.4%	
RENAL FAILURE WITH MCC	21.9%	22.8%	
MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH CC	15.5%	19.7%	
CELLULITIS WITHOUT MCC	13.9%	17.1%	
KIDNEY AND URINARY TRACT INFECTIONS WITH MCC	17.5%	17.5%	
HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC	6.4%	11.9%	
GASTROINTESTINAL HEMORRHAGE WITH CC	19.3%	21.0%	
CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH MCC	19.5%	25.3%	
Average Rate Across All MS-DRGs*	18.2%	22.1%	

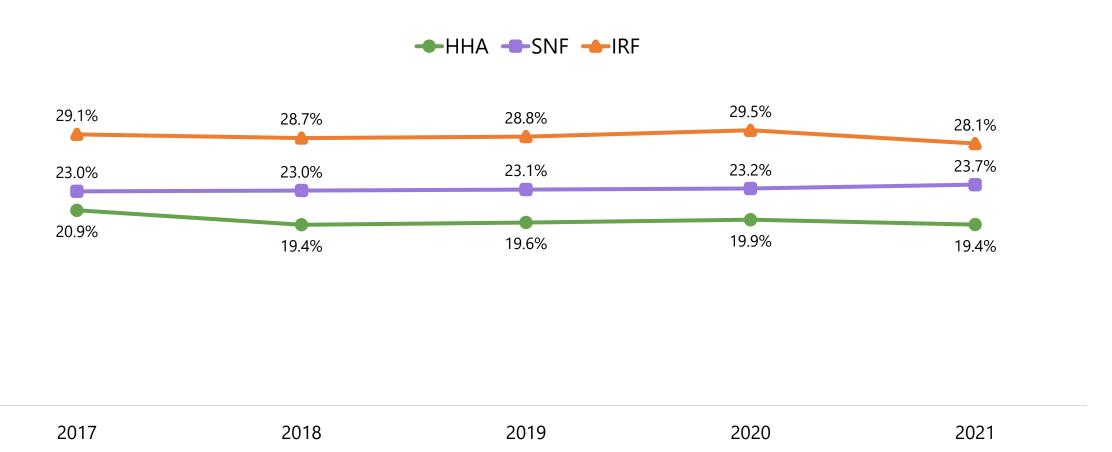
Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

Note: Data for beneficiaries with a Part A home health episode and a prior short-term acute care hospital stay in 2016-2021. CC = Complication or Comorbidity, MCC = Major Complication or Comorbidity All Medicare

^{*}Includes all MS-DRGs, not just those listed.

Chart 7.2a: 30-day Readmission Rates for MS-DRG 871 Discharged from Hospital to Selected Post-Acute Care Settings, 2017-2021

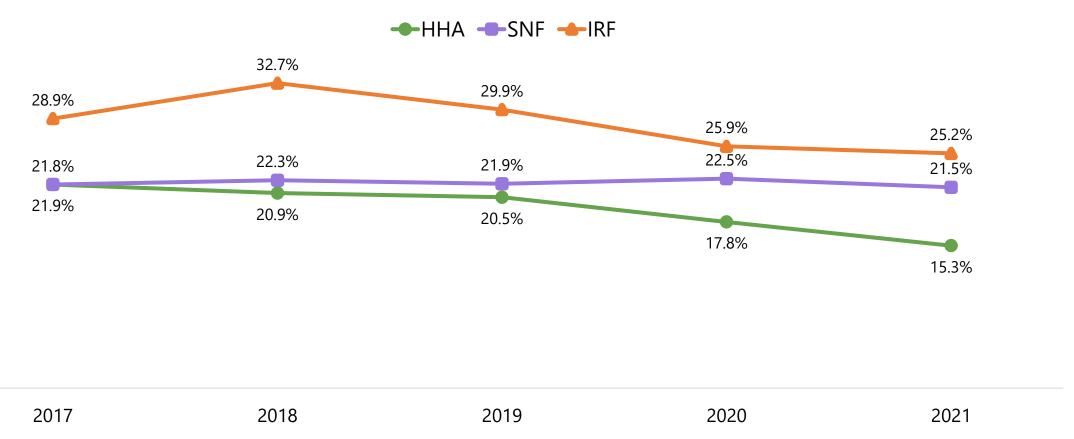
Health Outcomes of Home Health Users



Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021. HHA = home health agency, SNF = skilled nursing facility, and IRF = inpatient rehabilitation facility Note: Analysis includes Part A home health claims only. MS-DRG 871 - SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV > 96 HOURS WITH MCC

Chart 7.2b: 30-day Readmission Rates for MS-DRG 177 Discharged from Hospital to Selected Post-Acute Care Settings, 2017-2021

Health Outcomes of Home Health Users



Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

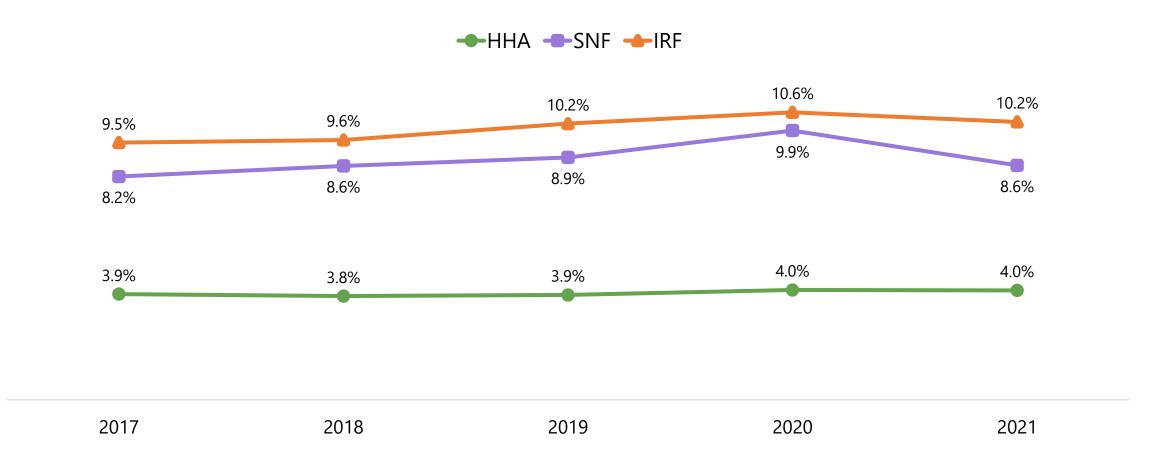
HHA = home health agency, SNF = skilled nursing facility, and IRF = inpatient rehabilitation facility

Note: Analysis includes Part A home health claims only.

MS-DRG 177 - RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC

Chart 7.2c: 30-day Readmission Rates for MS-DRG 470 Discharged from Hospital to Selected Post-Acute Care Settings, 2017-2021

Health Outcomes of Home Health Users



Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

HHA = home health agency, SNF = skilled nursing facility, and IRF = inpatient rehabilitation facility

Note: Analysis includes Part A home health claims only.

MS-DRG 470 - MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY WITHOUT MCC

Table 7.2: National Averages for Patient Outcomes while in Home Health Care, 2015 - 2021

Health Outcomes of Home Health Users

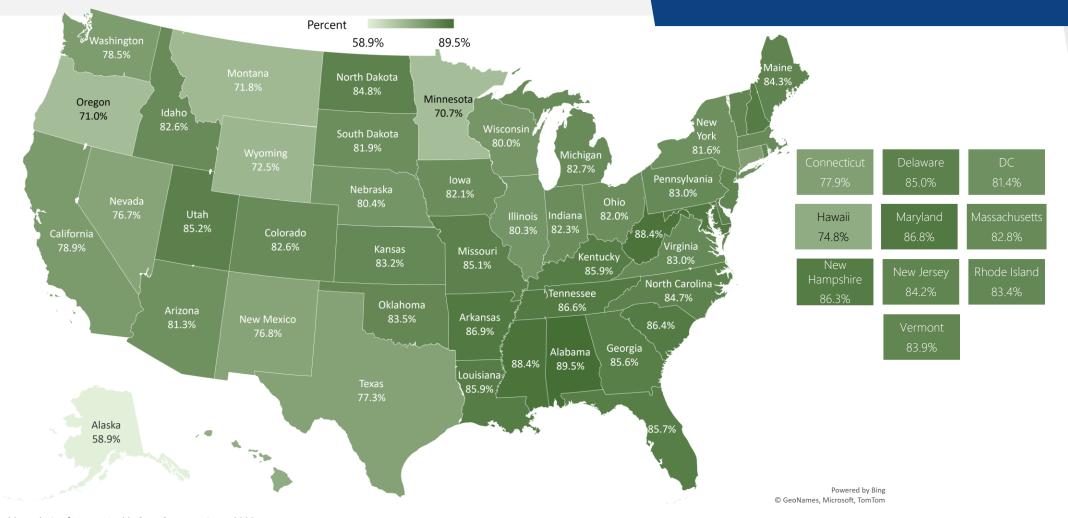
Measure of Patient Outcomes	2015	2016	2017	2018	2019	2020	2021*
Wounds improved or healed after operation	89.4%	90.0%	90.6%	90.9%	91.5%	92.3%	N/A
Got better at bathing	68.5%	71.5%	74.3%	76.6%	79.7%	82.3%	N/A
Had less pain when moving around	68.0%	71.2%	74.4%	77.2%	80.6%	N/A	N/A
Breathing improved	66.0%	70.1%	73.1%	76.2%	79.8%	82.8%	N/A
Got better at walking or moving around	63.5%	67.6%	71.2%	74.1%	77.7%	79.6%	N/A
Got better at getting in and out of bed	58.9%	63.9%	68.2%	72.3%	77.5%	81.1%	N/A
Got better at taking drugs correctly by mouth	53.2%	57.3%	60.9%	64.6%	69.4%	75.0%	N/A
Had to be admitted to hospital	15.9%	16.2%	16.4%	15.8%	15.6%	15.4%	N/A
Needed any urgent, unplanned care in the hospital emergency room – without being admitted to the hospital	12.2%	12.5%	12.7%	12.9%	12.8%	13.0%	N/A

Source: KNG Health analysis of Home Health Care Compare Data, 2015-2021.

*The Centers for Medicare & Medicard Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 7.3: Performance on "How Often Patients Got Better at Bathing" by State, 2020*

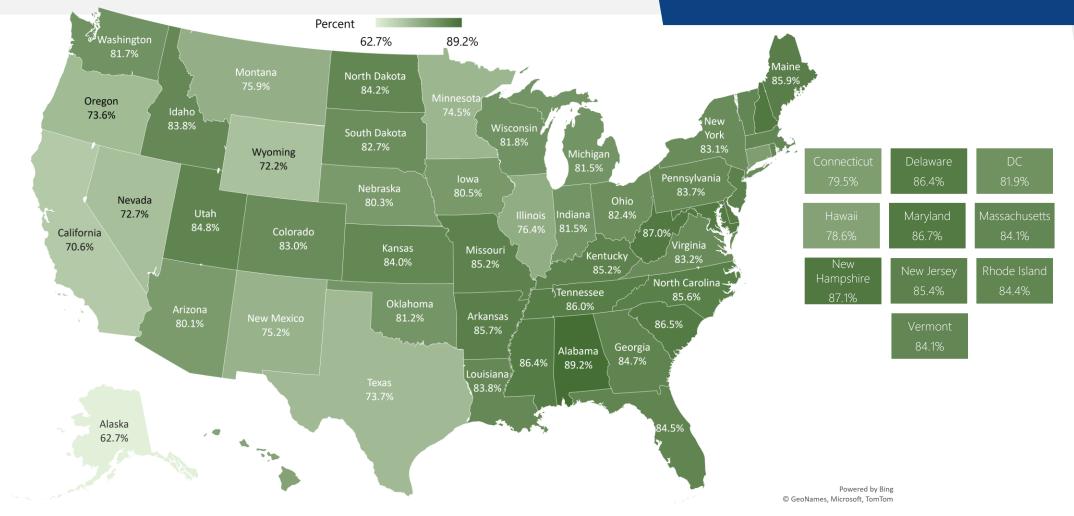
Health Outcomes of Home Health Users



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 7.4: Performance on "How Often Patients Got Better at Getting In and Out of Bed" by State, 2020*

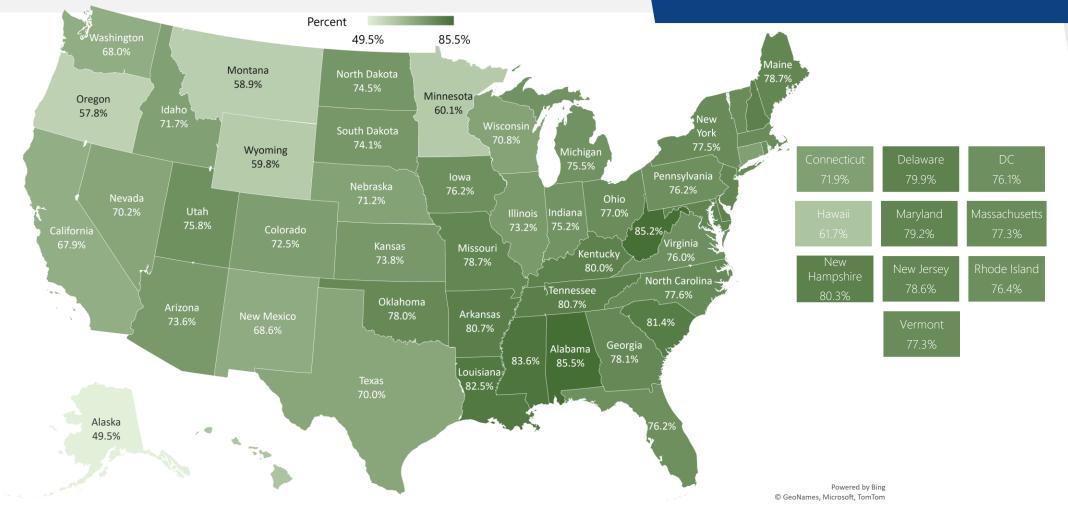
Health Outcomes of Home Health Users



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 7.5: Performance on "How Often Patients Got Better at Taking Their Drugs Correctly by Mouth" by State, 2020*

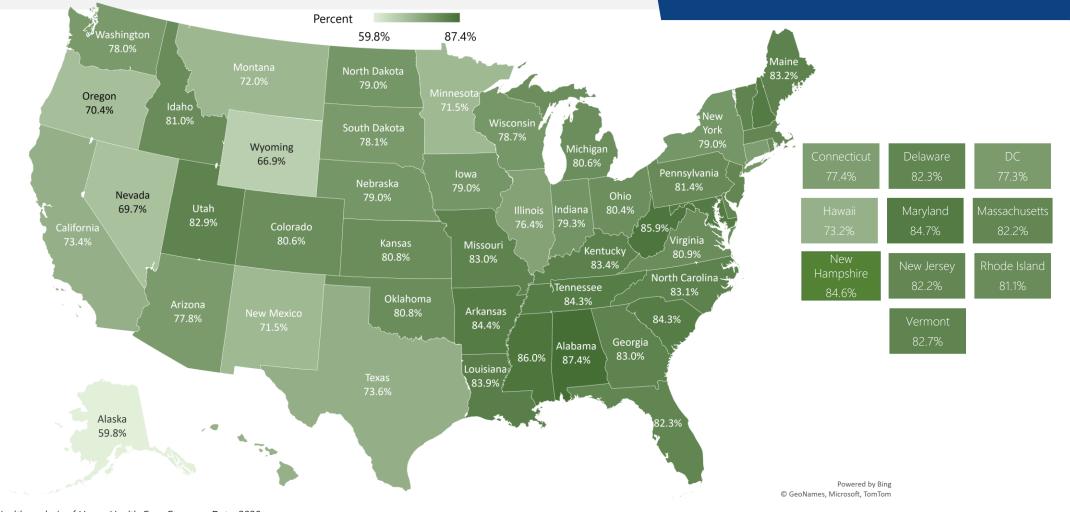
Health Outcomes of Home Health Users



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 7.6: Performance on "How Often Patients Got Better at Walking or Moving Around" by State, 2020*

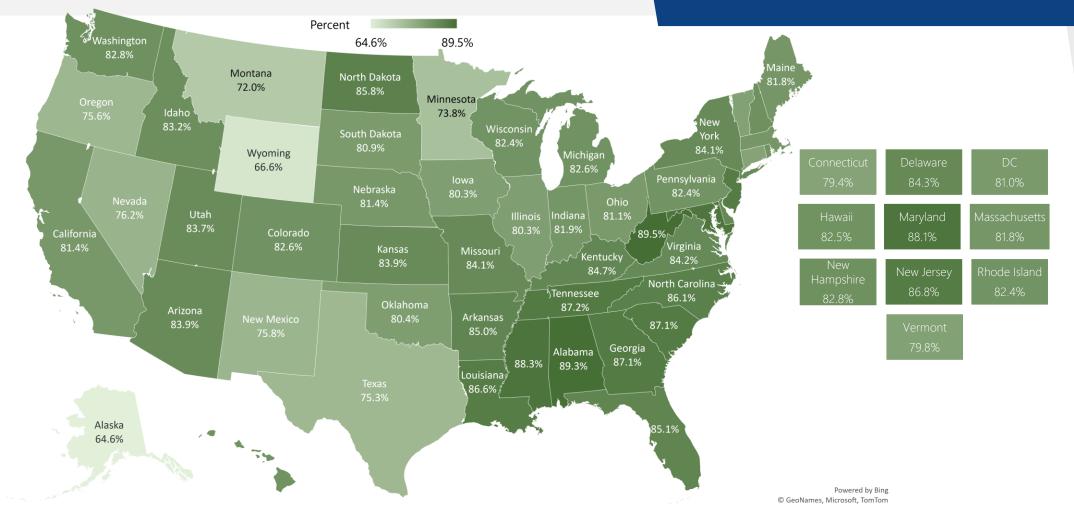
Health Outcomes of Home Health Users



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.

Chart 7.7: Performance on "How Often Patients' Breathing Improved" by State, 2020*

Health Outcomes of Home Health Users



^{*}The Centers for Medicare & Medicaid Services did not collect new data in 2021. As a result, data reported on Home Health Care Compare for 2021 is the same data reported in 2020.





Appendix

Sponsored by



Data and Study Population

- The Medicare Current Beneficiary Survey is a nationally representative sample that contains information on beneficiary demographics, health status, household characteristics, access, satisfaction, and usual source of care, as well as insurance coverage. This data includes statistics on both Traditional Medicare beneficiaries and Medicare Advantage beneficiaries.
- To examine the demographic, socioeconomic, and clinical characteristics of Medicare Beneficiaries and Medicare Home Health users, we conducted analyses using data from the 2020 Medicare Current Beneficiary Survey.
- The patient population included in our analysis consists of Medicare beneficiaries who fulfill the following criteria:
 - Both traditional and Medicare Advantage Beneficiaries must be continuously enrolled in their respective Medicare plan for the full year.
 - Medicare Home Health Users must receive home health services at least one time during the year.

Methodology: Medicare Current Beneficiary Survey (continued)

Appendix

Identification of Study Cohorts

- All Medicare Beneficiaries are identified as survey respondents living both in the community and facilities.
- All Medicare Home Health Users are identified as traditional Medicare and Medicare Advantage beneficiaries who receive home health services that were captured in the Outcome and Assessment Information segment of the Medicare Current Beneficiary Survey.
- Medicare Advantage Home Health Users are identified as survey respondents who were coded as Medicare Advantage beneficiaries in the Health Insurance Summary segment in Medicare Current Beneficiary Survey every month of the year.

Descriptive Analysis

- <u>Demographic characteristics</u>: Obtained from the following Medicare Current Beneficiary Survey segments:
 - Demographics
- <u>Socioeconomic characteristics</u>: Obtained from the following Medicare Current Beneficiary Survey segments:
 - Demographics
 - Health Insurance Summary
 - Household Characteristics
- <u>Clinical characteristics</u>: Obtained from the following Medicare Current Beneficiary Survey segments:
 - General Health
 - Chronic Conditions
 - Nagi Disability
 - Access to Care
 - Outcome and Assessment Information
 - Satisfaction with Care

Appendix

U.S. Bureau of Labor Statistics and Bureau of Economic Analysis Data

• To examine the economic contributions of home health agencies to the US economy, we conducted analyses using 2021 data from the U.S. Bureau of Labor Statistics and 2020 multipliers from the Bureau of Economic Analysis, which are "estimates of regional input-output multipliers for any state, county, or combination of states or counties," limited to the industry of home healthcare services (NAICS 6216).

Home Health Care Compare Data

• To examine the organizational trends of home health agencies, quality of home health agencies and home care, and the patient outcomes of home health users, we conducted analyses using 2015-2021 Home Health Care Compare data. Due to data collection pauses in 2020, the 2021 Home Health Care Compare data is a duplicate of 2020 data and was not referenced in this report.

- Medicare Cost Report data is a collection of facility characteristics, utilization, costs and charges, Medicare settlement, and financial statement data reported to the Healthcare Cost Report Information System. Cost Report data is reported annually by all Medicare-certified institutional providers, including home health agencies.
- Medicare Cost Reports were used to count the number of free-standing home health agencies and calculate the total home health agency expenditures for economic impact analysis.
 - The number of free-standing facilities corresponds to a unique count of home health agency provider numbers in the Home Health Agency Report Files for FY 2015-2020.
 - The total expenditures for individual home health agencies correspond to the total operating expenditures listed on the home health agency's statement of Revenues and Expenses (Worksheet F-1) accounting for additions and subtractions in the FY 2020 HHA NMRC File and then aggregated up to a state level.

- The 2015-2022 Q1 100% Home Health Agency Standard Analytic LDS, 2015-2022 Q1 100% Inpatient Standard Analytic File, and 2015-2022 Q1 100% Skilled Nursing Standard Analytic LDS (SNF SAF) were used to examine:
 - the clinical profile of home health users.
 - the role of Home Health Agencies (HHAs) in the post-acute care industry;
 - the organizational trends of home health agencies; and
 - the health outcomes of home health users.
- To align with previous analyses, claims were not excluded based on Medicare status or coverage type.
- We used 2 methodologies to define Part A home health care episodes/visits.
 - When assessing Part A home health episodes with a preceding hospitalization, we required the home health claims to have a short-term acute care hospital stay within 14 days of admission.
 - When assessing all Part A home health episodes, we required the home health claims to have a claim value code of "62," which indicated Medicare Part A was the source of payment.¹

^{1.} Morefield, B., & Tomai, L. (2021). Distinguishing frontloading: an Examination of Medicare Home Health Claims. Health Services and Outcomes Research Methodology, 21(4), 477-485.

- In this analysis, we define a readmission as an admission to a short-term acute care hospital (STACH) within 30 days of an initial, or 'index', admission to a STACH. To be considered an index admission, there must be no other STACH admission in the prior 30 days.
- Using the Medicare claims data, we identified readmission rates based on the following methodology.

