



ADVANCING HOME CARI THROUGH RESEARCH.

### Home Care Chartbook 2022

Prepared by KNG Health Consulting, LLC

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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 among traditional Medicare beneficiaries.

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>





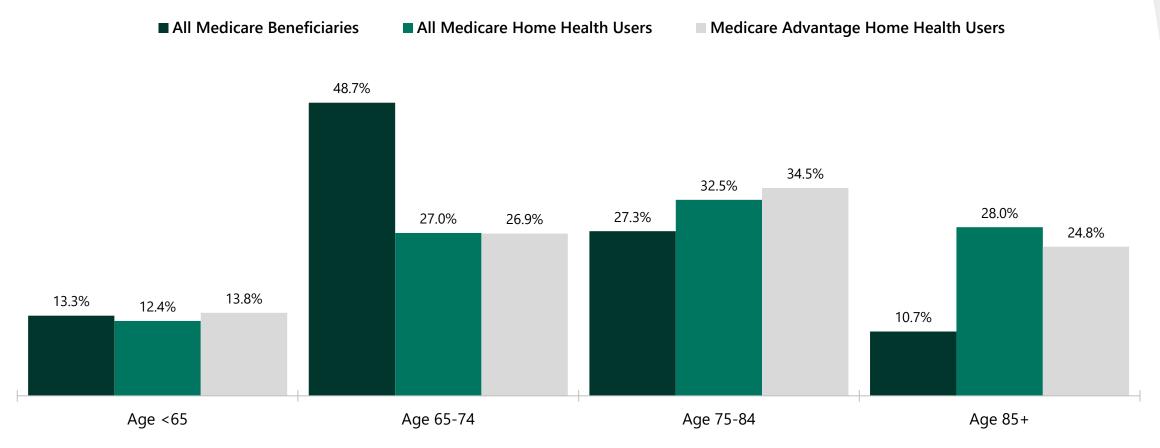
THROUGH RESEARCH.

# Demographics of Home Health Users

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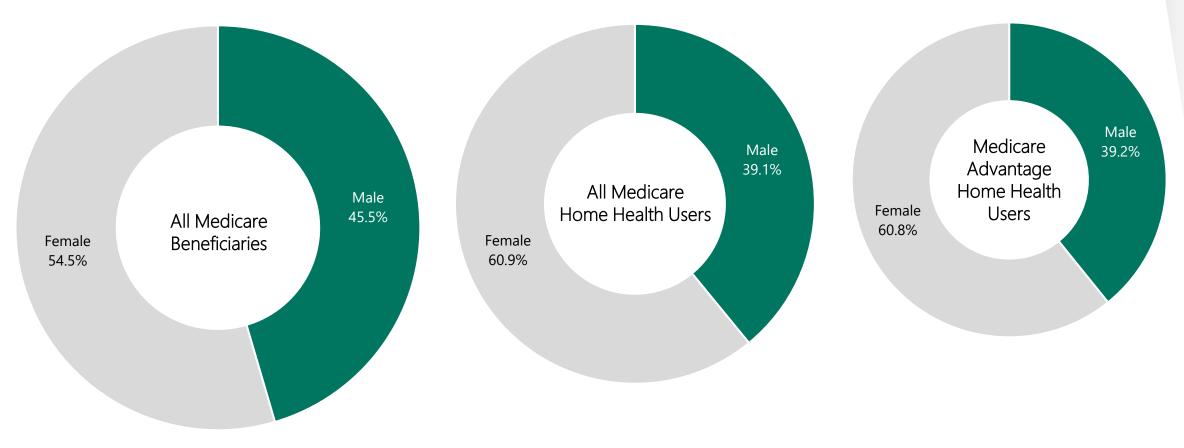
Chart 1.1: Age Distribution of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



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

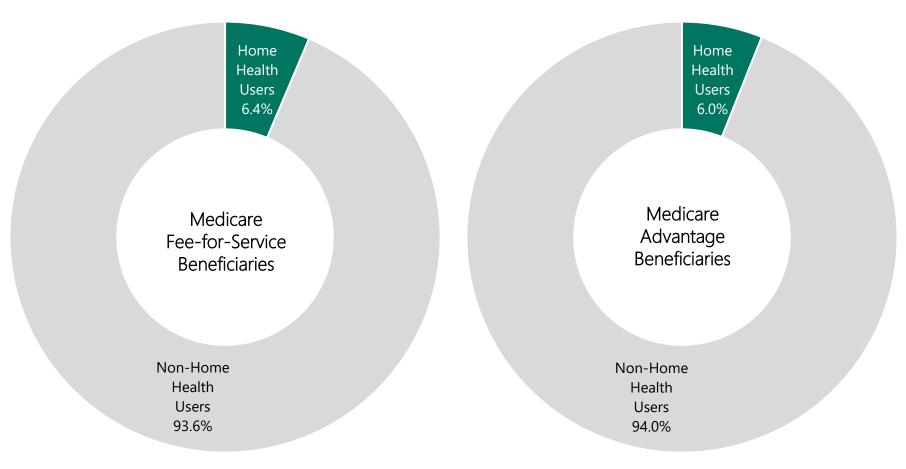
#### Demographics of Home Health Users



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

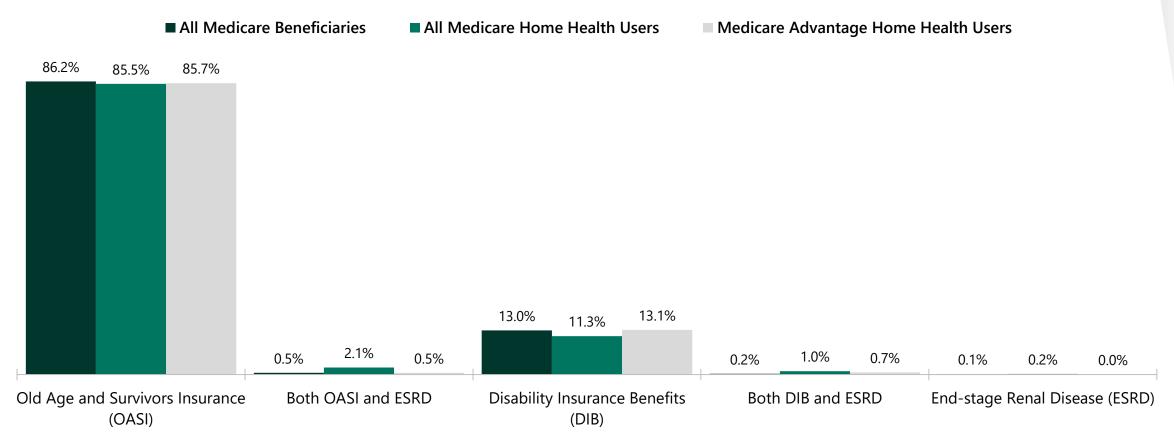
### Chart 1.3: Distribution of Home Health Users in Medicare Fee-For-Service and Medicare Advantage

#### 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.

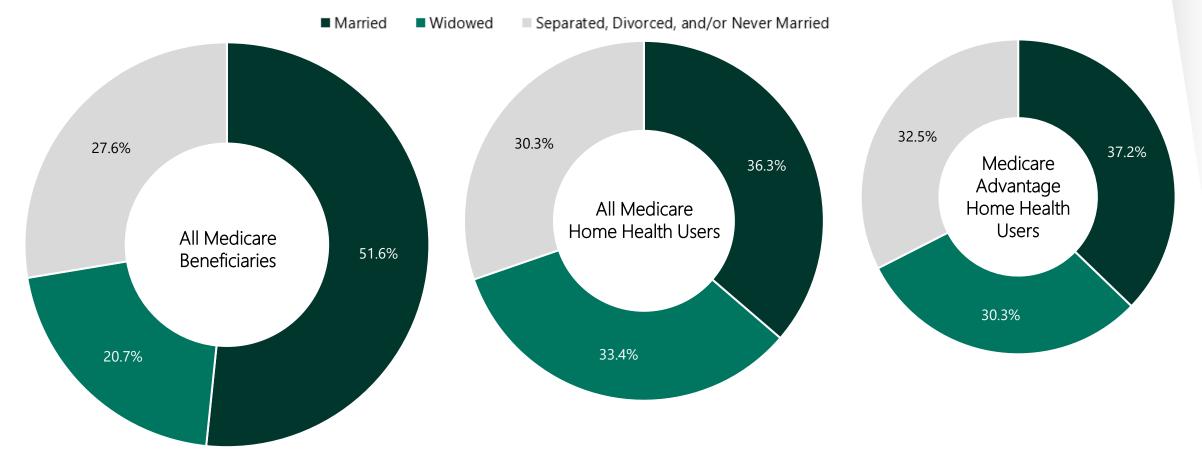
Chart 1.4: Reason for Medicare Enrollment of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



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

Totals may not sum to 100 percent due to rounding.

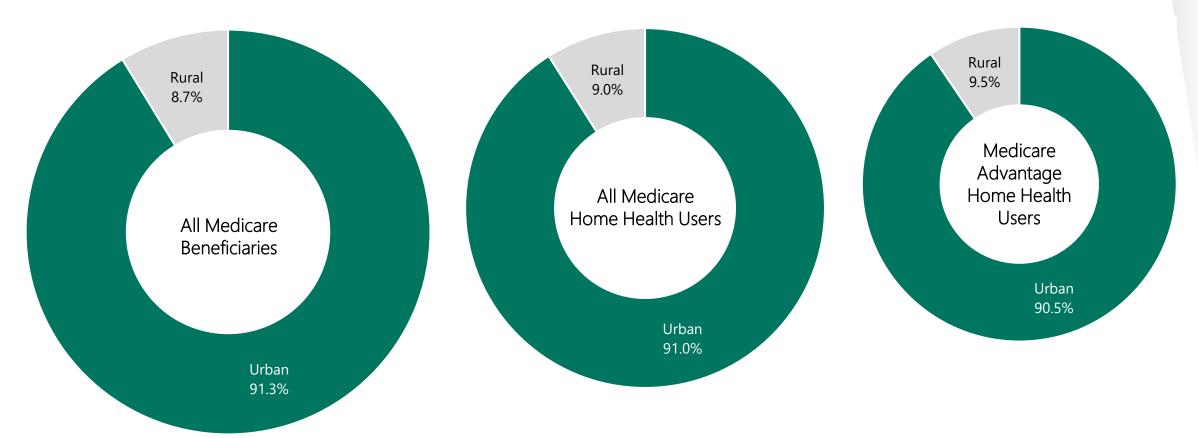
Chart 1.5: Marital Status of Medicare Beneficiaries, All Medicare Home Health Users, and Home Health Users in Medicare Advantage



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



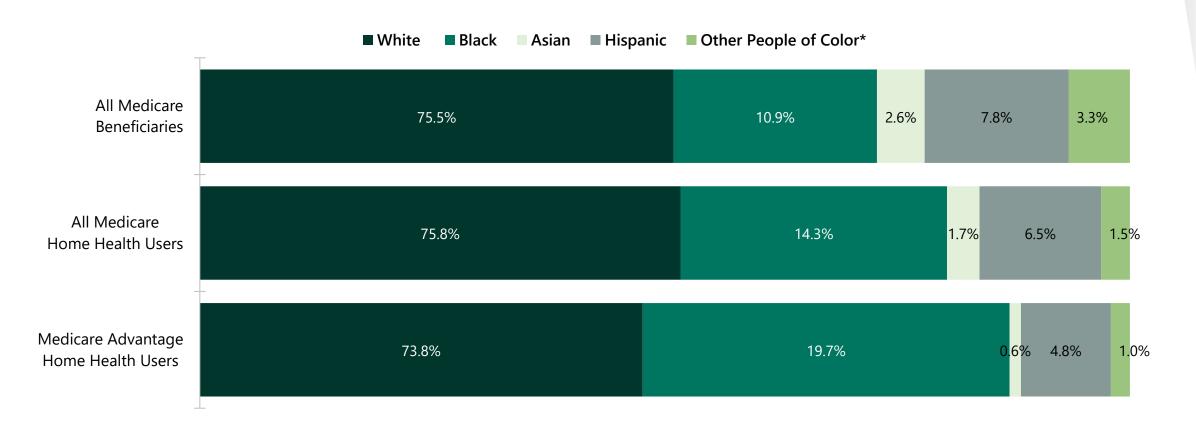
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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

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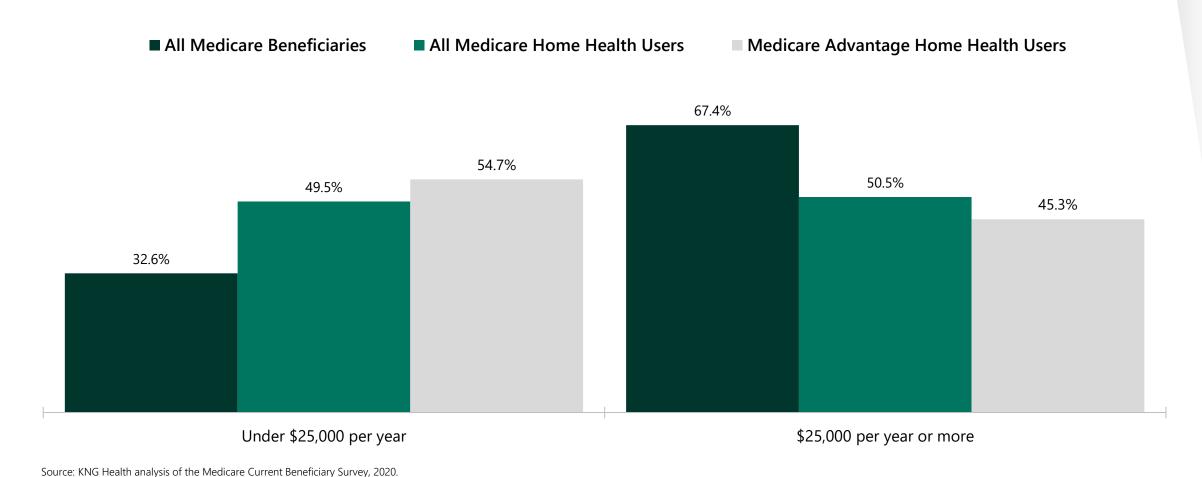
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

Totals may not sum to 100 percent due to rounding.

<sup>\*</sup>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

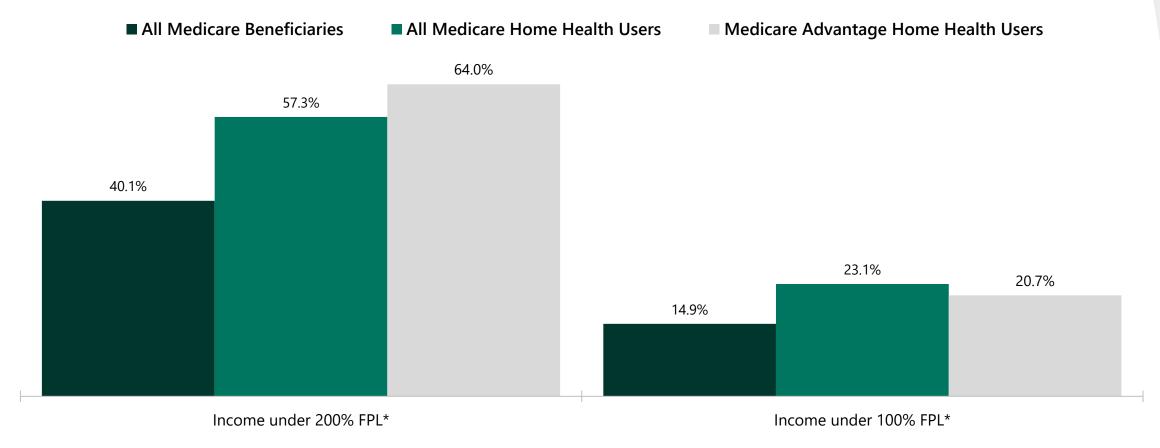
#### Demographics of Home Health Users



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

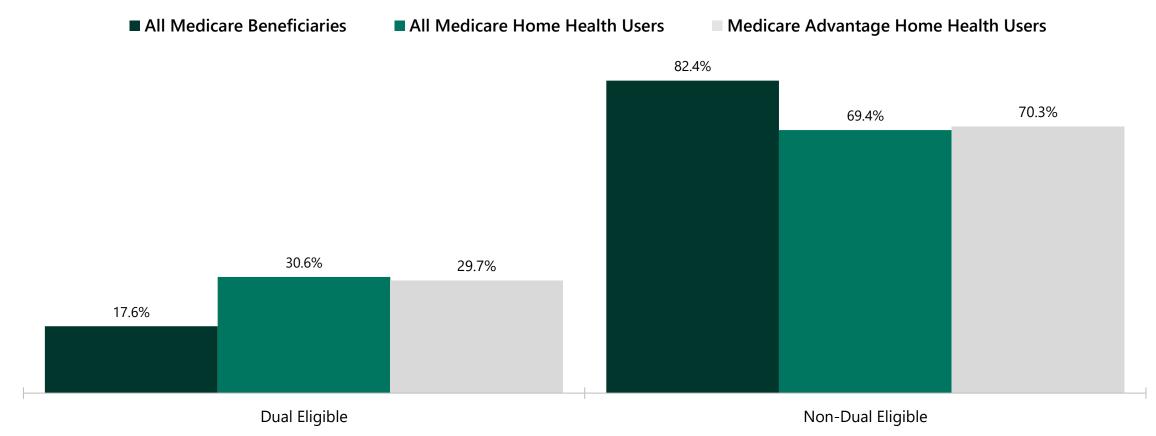


Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

\*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



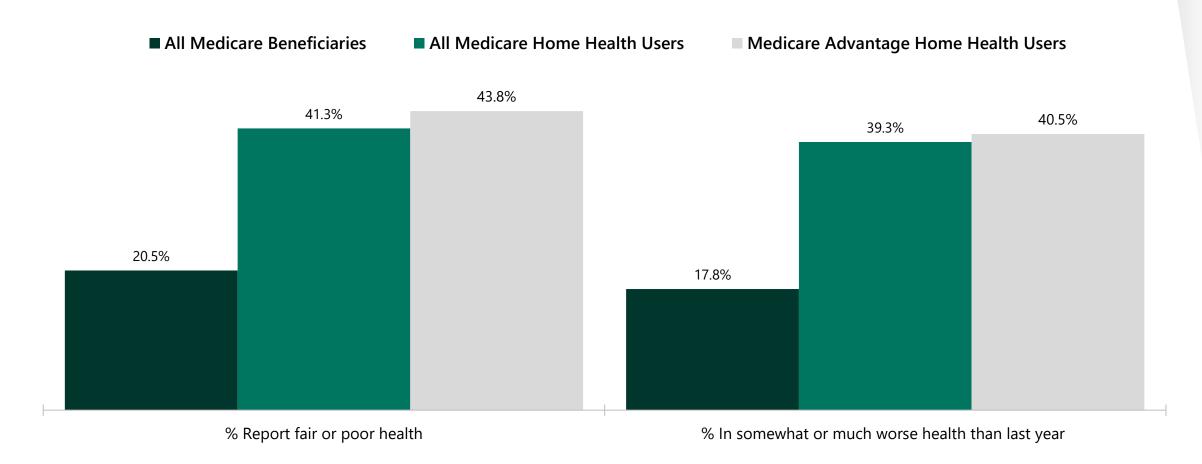
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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

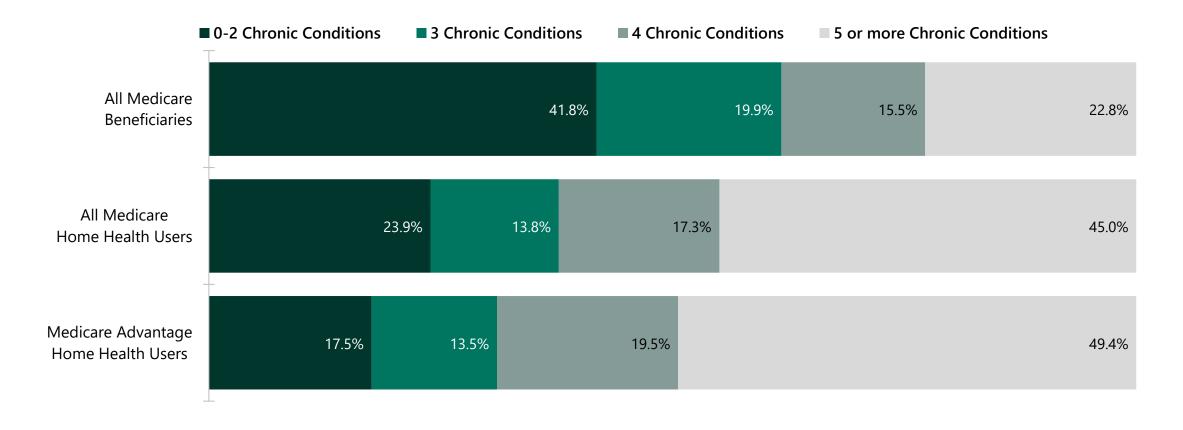


Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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

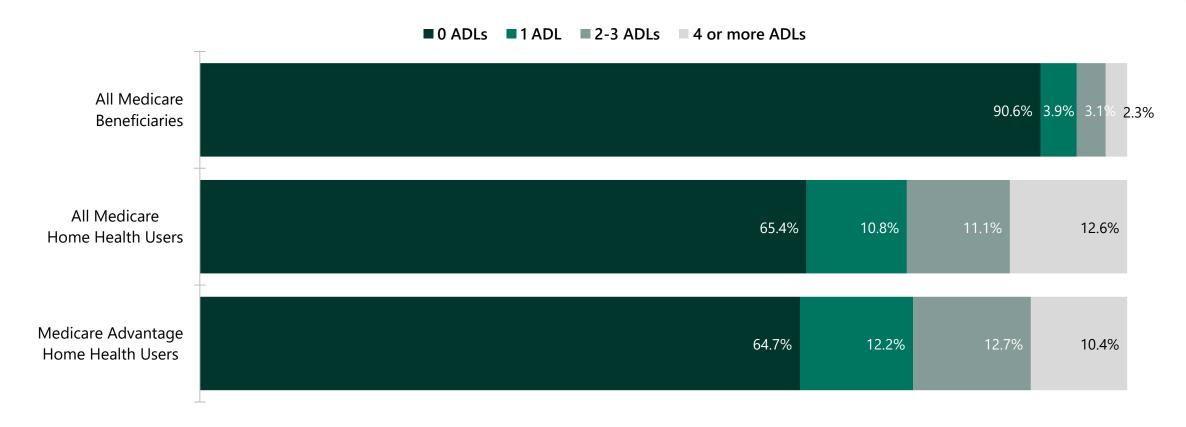


Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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



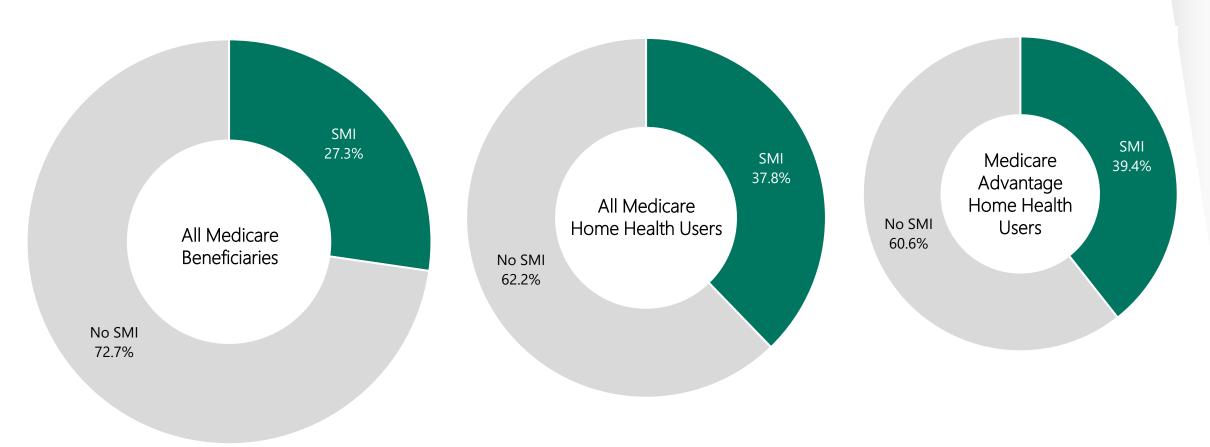
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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



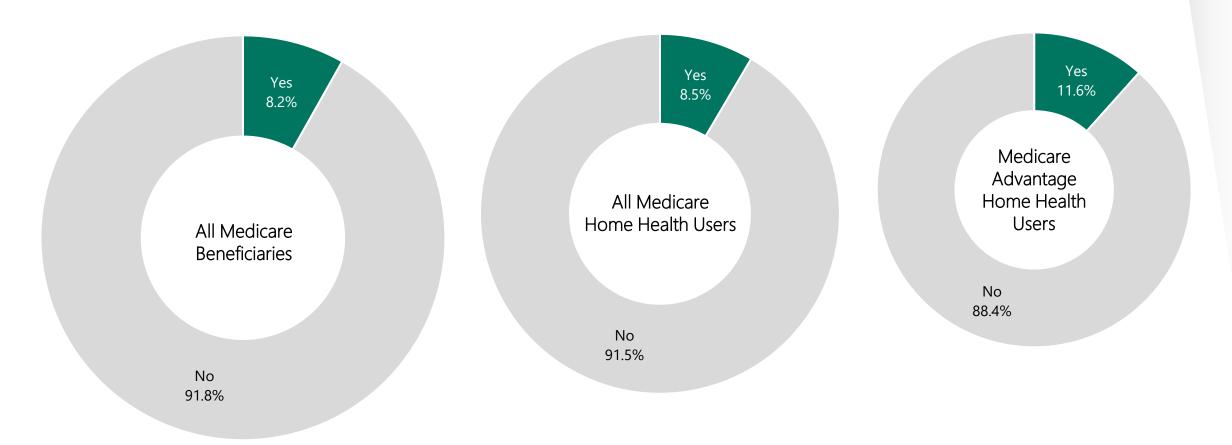
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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



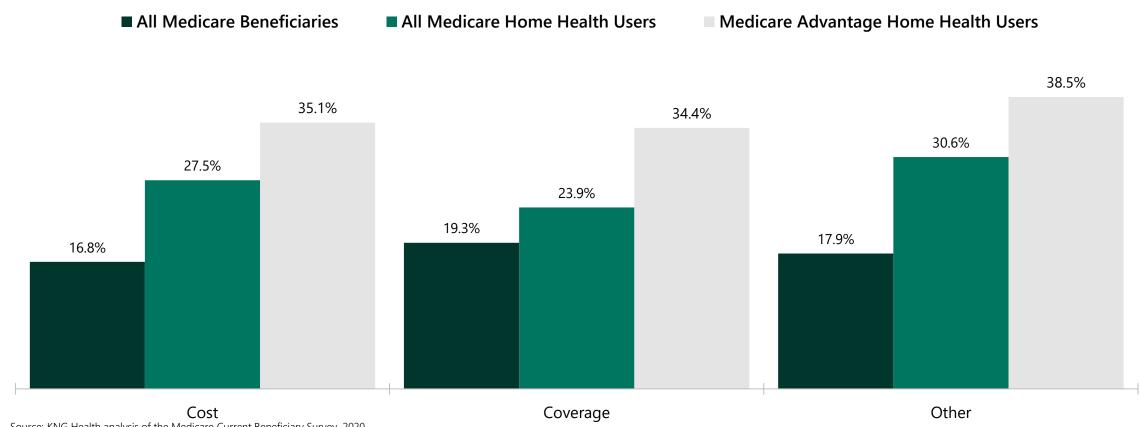
Source: KNG Health analysis of the Medicare Current Beneficiary Survey, 2020.

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<br>Beneficiaries | All Medicare<br>Home Health Users | Medicare Advantage<br>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%   |
| <b>Dual Eligibility</b>              |         |           |           |         |
| % 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%  |
| <b>Dual Eligibility</b>              |       |        |
| % 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%                  |
| <b>Dual Eligibility</b>              |                   |                     |                        |
| % 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%           |
| <b>Dual Eligibility</b>              |         |            |                 |
| % 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.





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### Clinical Profile of Home Health Users

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# 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<br>Claims | Percent of Total Home Health Part<br>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.

<sup>\*</sup>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: Top 20 Primary International Classification of Diseases, Version 10 (ICD-10) Diagnoses for All Home Health Claims, 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%                   |
| lowa             | 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%                   |

| 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%                   |

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

Note: Beneficiaries with 3+ chronic conditions are defined as traditional Medicare beneficiaries with at least 3 chronic conditions are defined as traditional Medicare beneficiaries with at least 3 chronic conditions are defined as traditional Medicare beneficiaries with at least 3 chronic condition diagnoses based on home health agency Medicare claims.

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.





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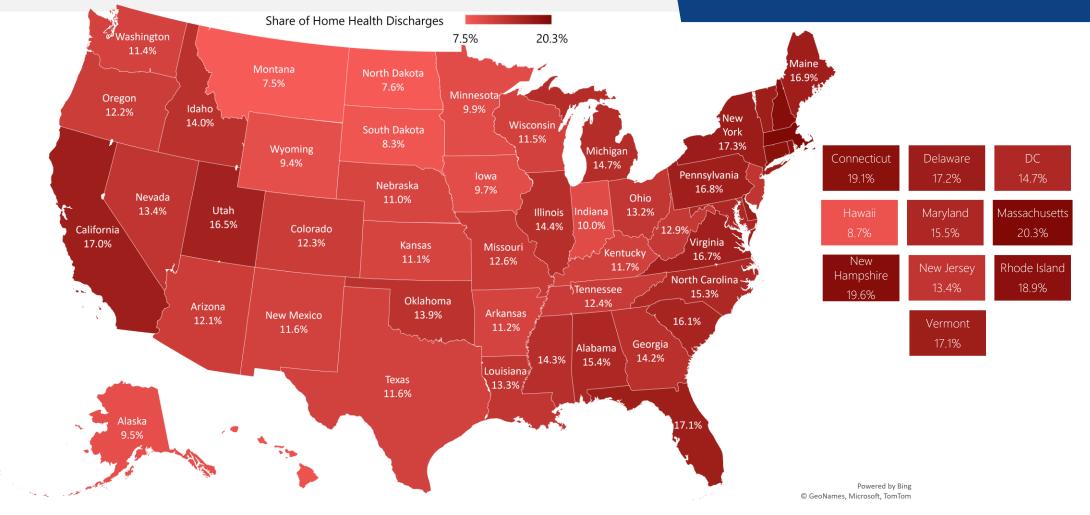
#### Role of Home Health in Post-Acute Care Market

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

### Role of Home Health in Post-Acute Care Market



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

Note: Home health discharges are defined as a home health admission within 14 days of discharge from a short-term acute care hospital.

#### 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

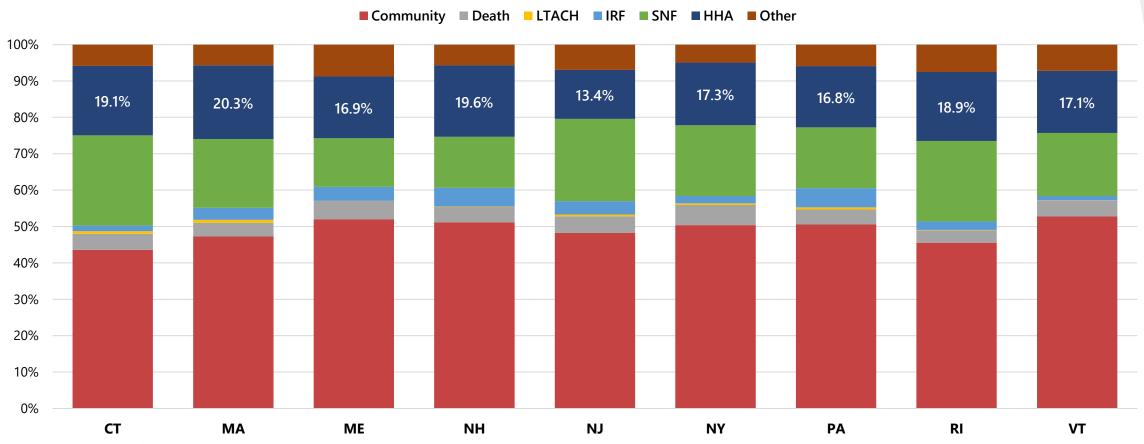


Chart 3.2b: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries in 2021, for States in Midwestern Region

### Role of Home Health in Post-Acute Care Market

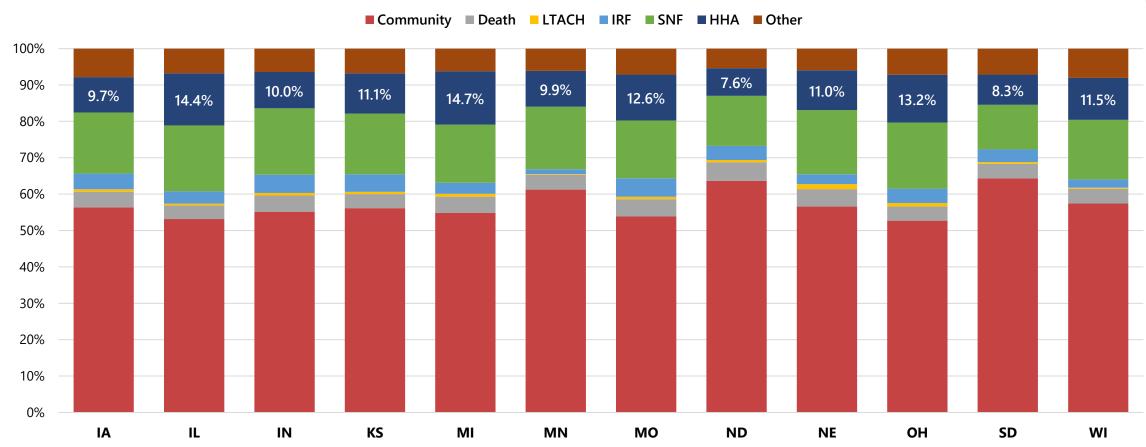
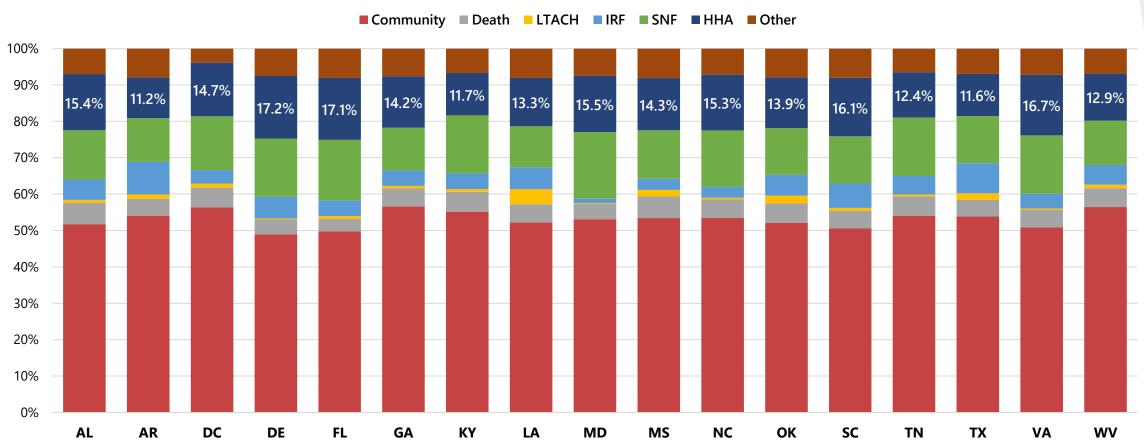


Chart 3.2c: Initial Patient Destinations Following an Inpatient Hospital Stay for Medicare Beneficiaries in 2021, for States in Southern Region

### 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

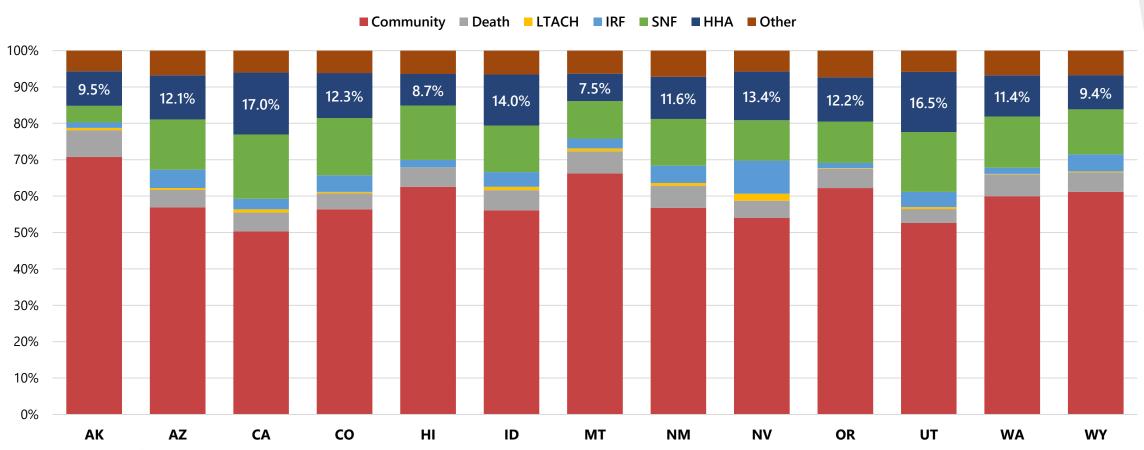


Chart 3.3: Total Medicare Post-Acute Care Expenditures, Billions of Dollars, 2004-2020

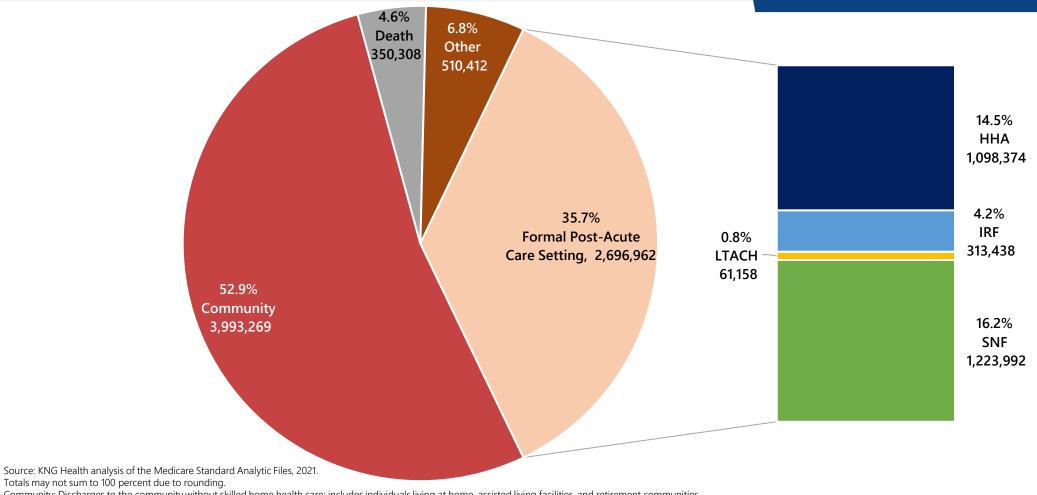
### Role of Home Health in Post-Acute Care Market



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



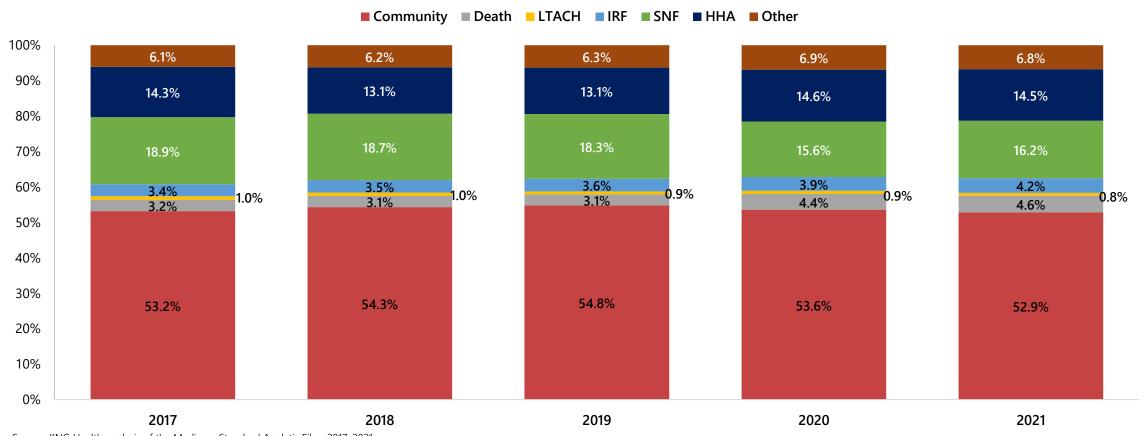
Community: Discharges to the community without skilled home health care; includes individuals living at home, assisted living facilities, and retirement communities.

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.

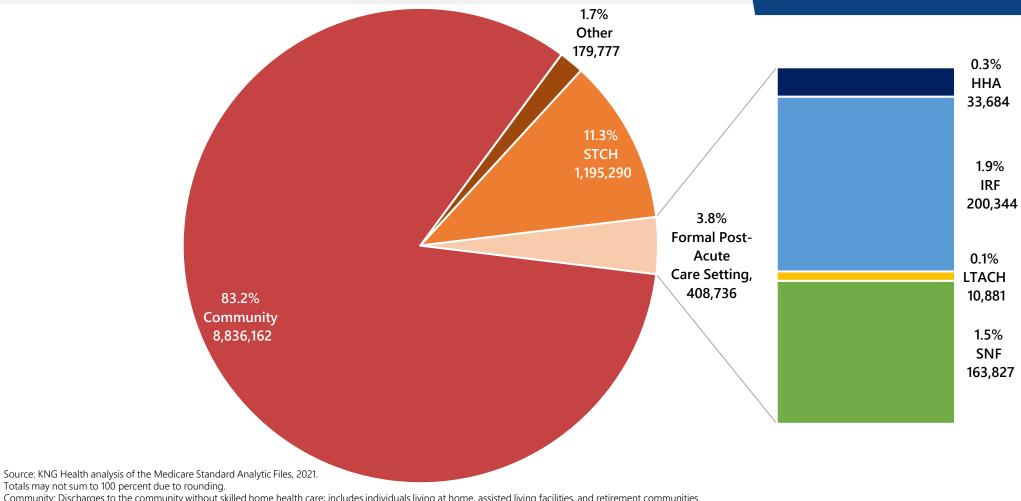
Community: Discharges to the community without skilled home health care; includes individuals living at home, assisted living facilities, and retirement communities.

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



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, LTACH = long-term acute care hospital, and STCH = short-term acute care hospital Other: Hospice, a different inpatient hospital, or other inpatient hospitals such as inpatient psychiatric facilities.





THROUGH RESEARCH.

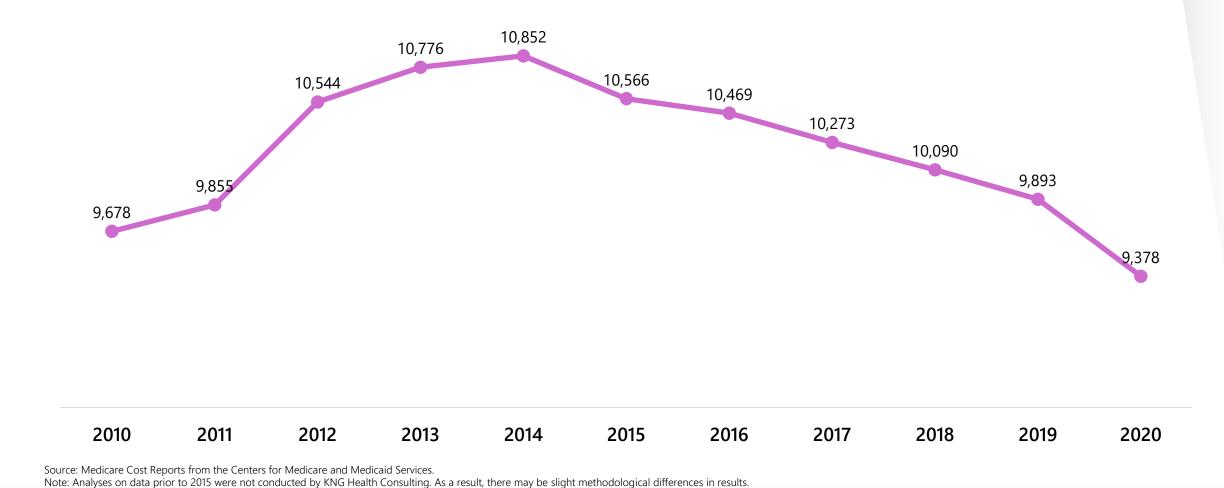
#### Organizational Trends in Home Health

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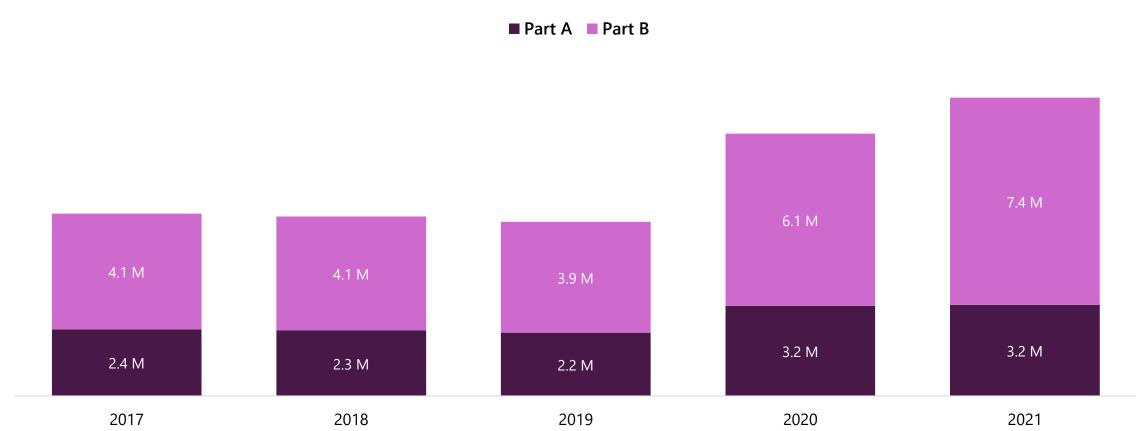
#### Chart 4.1: Number of Medicare Certified Free-Standing Home Health Agencies, 2010-2020

### 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



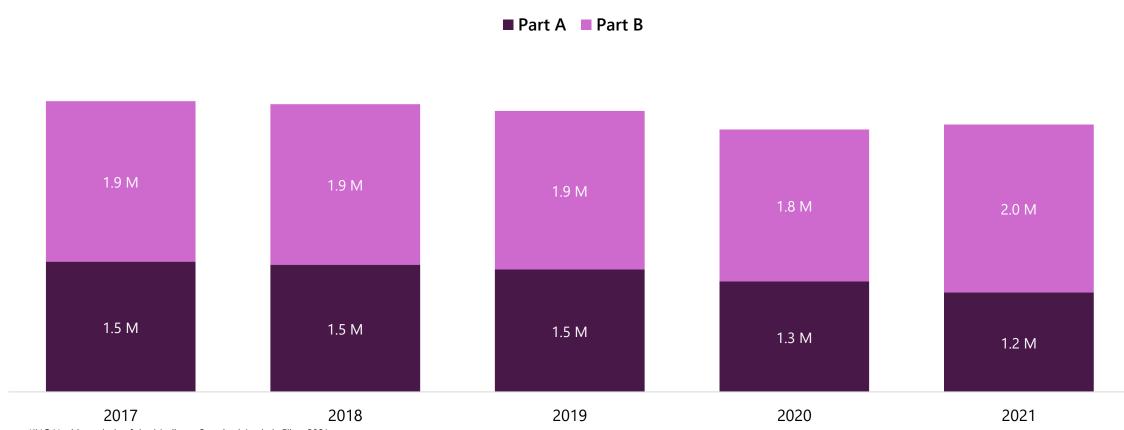
Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

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

Note: Part A home health episode is defined as a home health claim with a claim value code of "62." Part B home health episode is defined as a home health claim 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



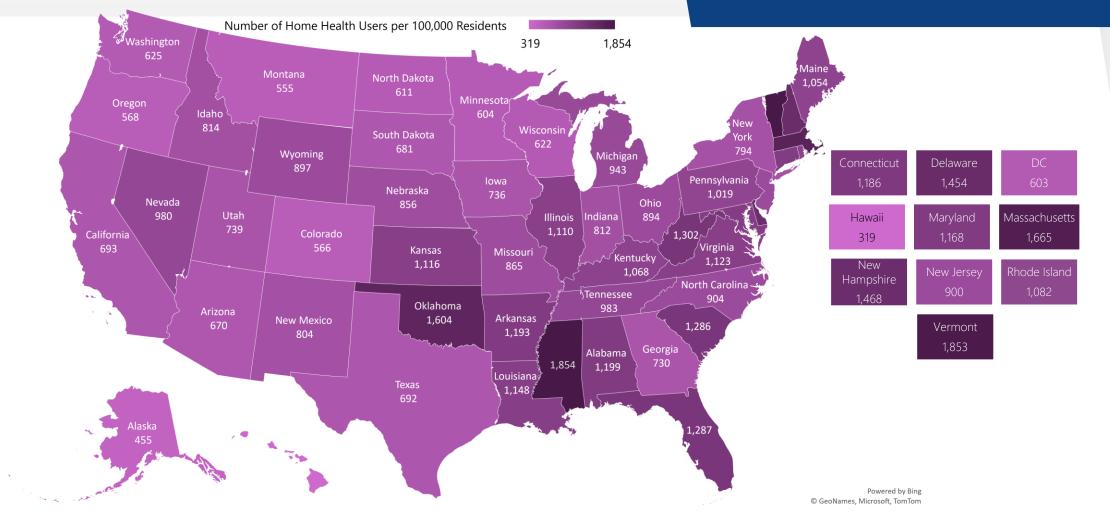
Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

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

Note: Part A home health episode is defined as a home health claim with a claim value code of "62." Part B home health episode is defined as a home health claim 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

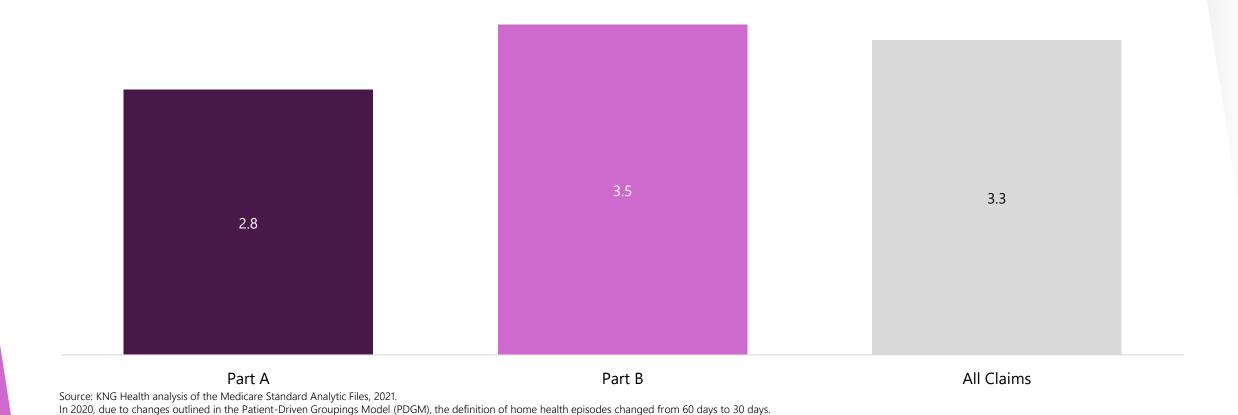
### Organizational Trends in Home Health



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

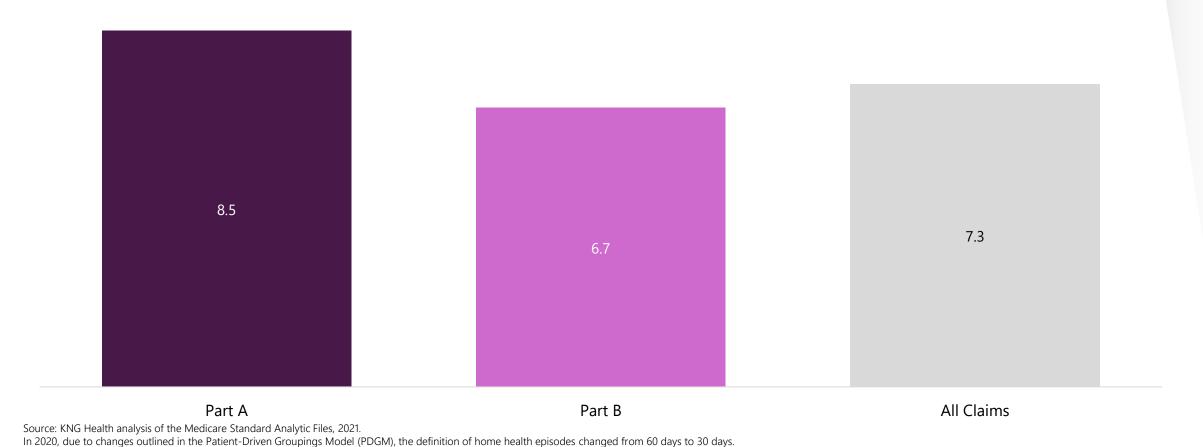
### Organizational Trends in Home Health



Note: Part A home health episode is defined as a home health claim with a claim value code of "62." Part B home health episode is defined as a home health claim 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



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

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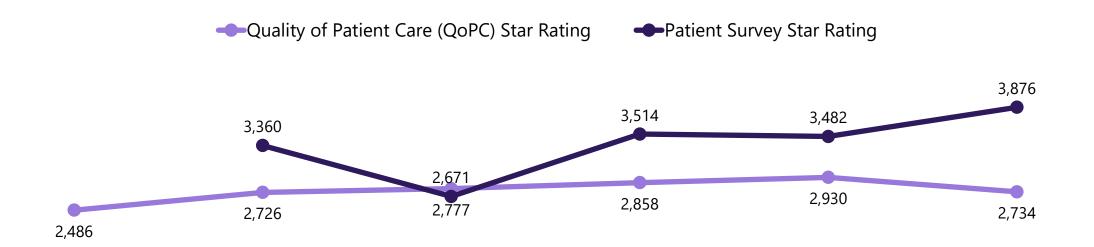
#### Quality of Home Health Care

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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.

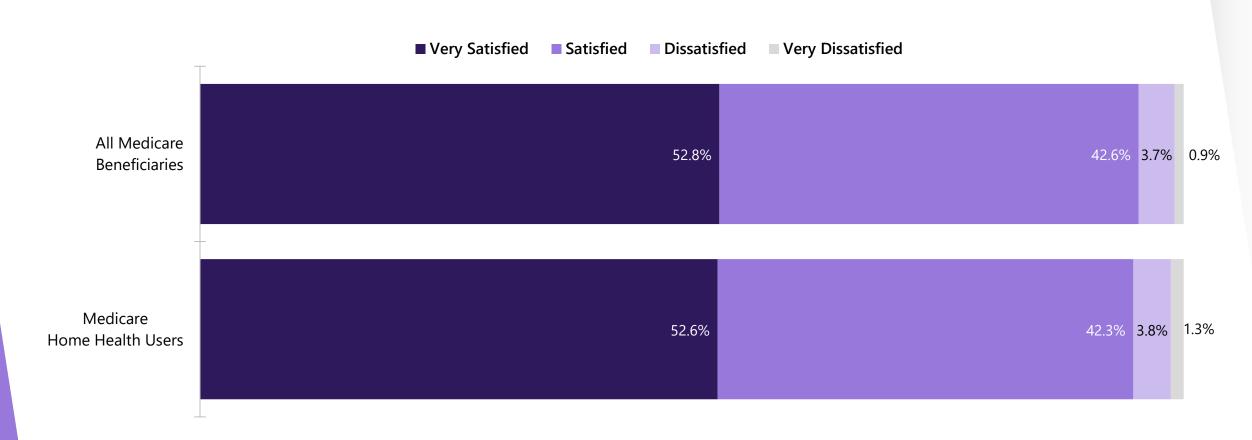
Note: The Quality of Patient Care (QoPC) Star Rating is based on OASIS assessments and Medicare claims data. Collection for this measure began in 2015. The Patient Survey Star Ratings are based on the Home Health CAHPS Survey. Collection for this measure began in 2016.

Note: Home Health Care Compare data and Home Health CAHPS Survey data are based on annual October refresh.

<sup>\*</sup> 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

| 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   |
|   |       |       |       |       |       |       |       |

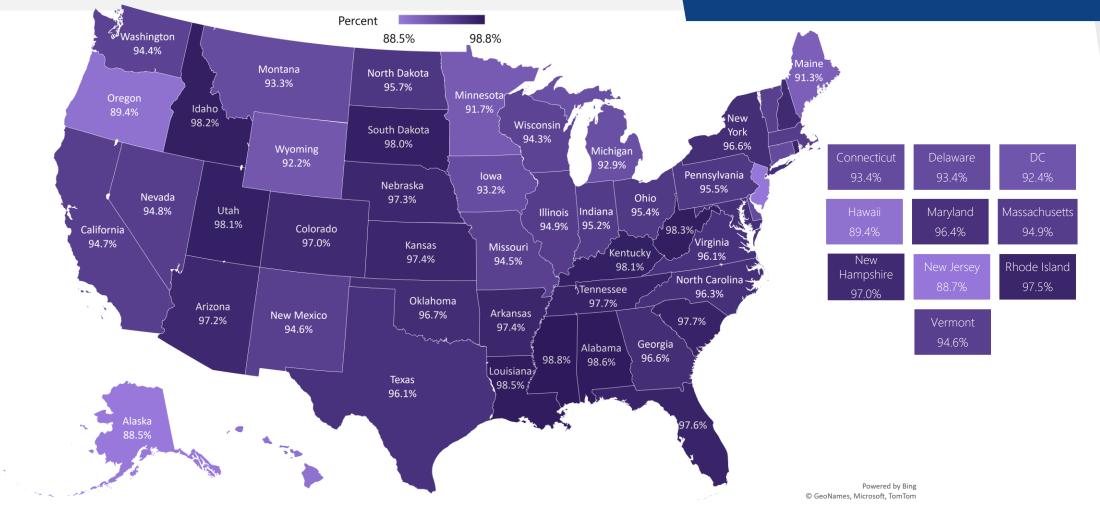
Source: KNG Health analysis of Home Health Care Compare Data, 2015-2021.

Note: Home Health Care Compare data are based on annual October refresh.

<sup>\*</sup>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



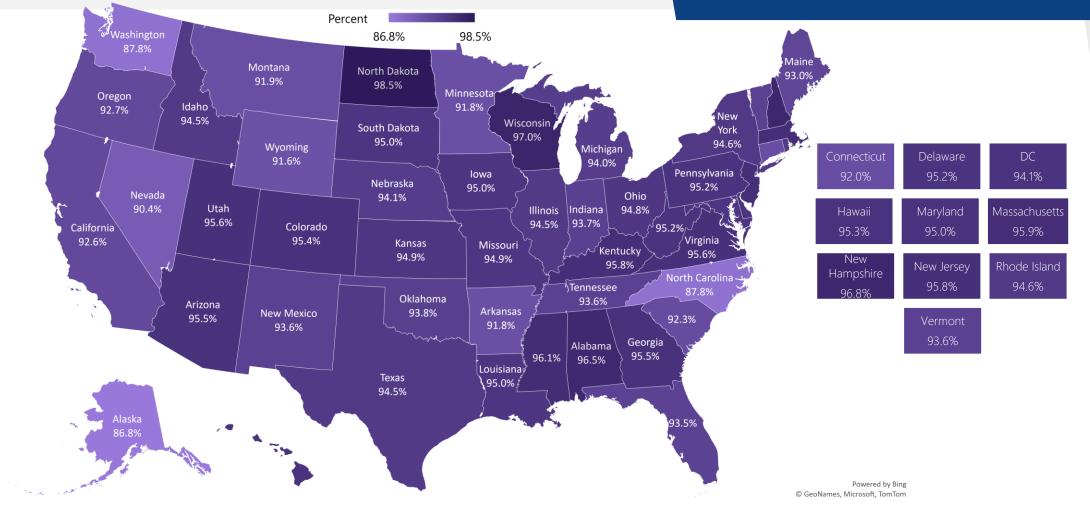
Source: KNG Health analysis of Home Health Care Compare Data, 2020.

Note: Home Health Care Compare data are based on annual October refresh.

<sup>\*</sup>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

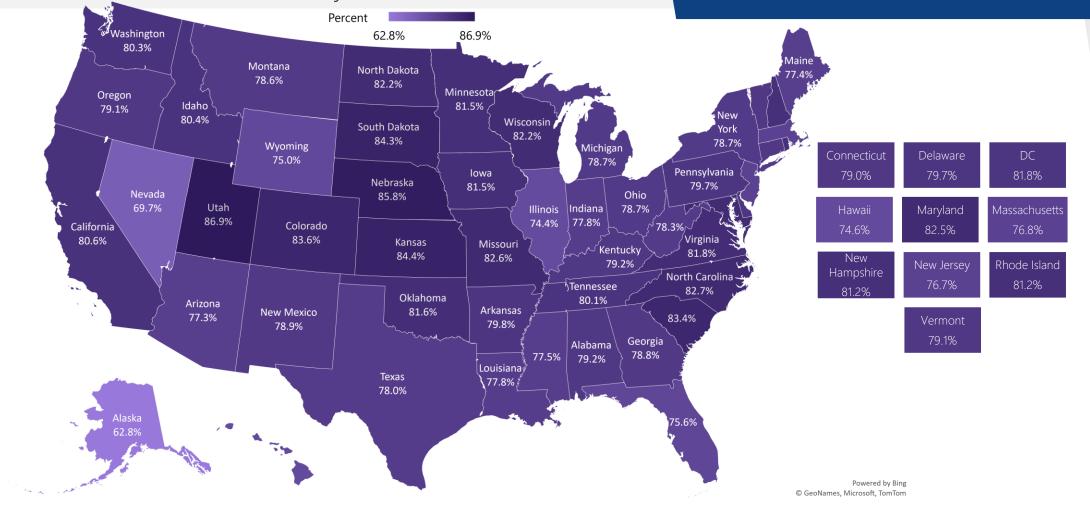


Source: KNG Health analysis of Home Health Care Compare Data, 2020. Note: Home Health Care Compare data are based on annual October refresh.

<sup>\*</sup>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



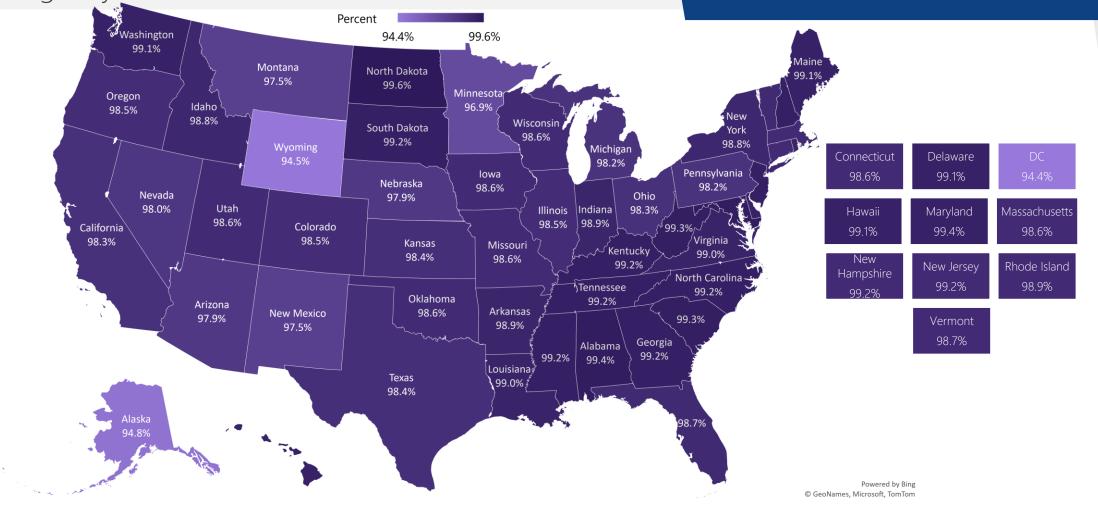
Source: KNG Health analysis of Home Health Care Compare Data, 2020.

Note: Home Health Care Compare data are based on annual October refresh.

\*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



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

Note: Home Health Care Compare data are based on annual October refresh.

<sup>\*</sup>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.





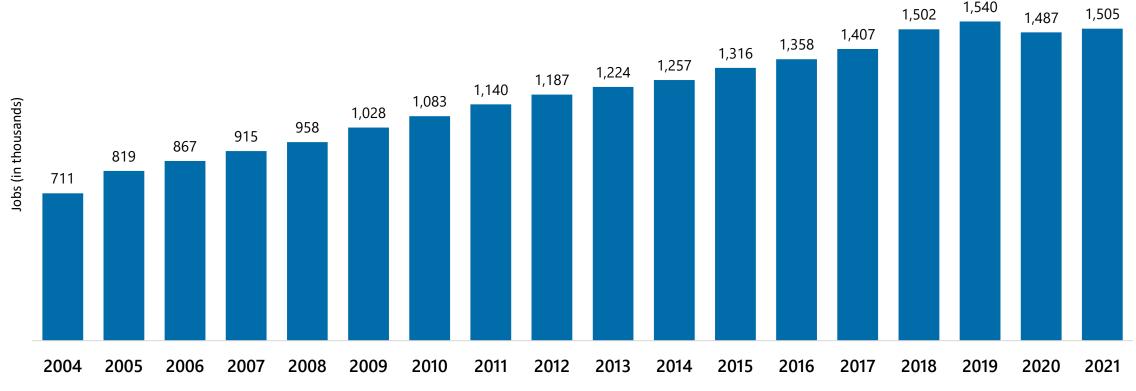
ADVANCING HOME CARE THROUGH RESEARCH.

# Economic Contributions of Home Health Agencies

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### Economic Contributions of Home Health Agencies

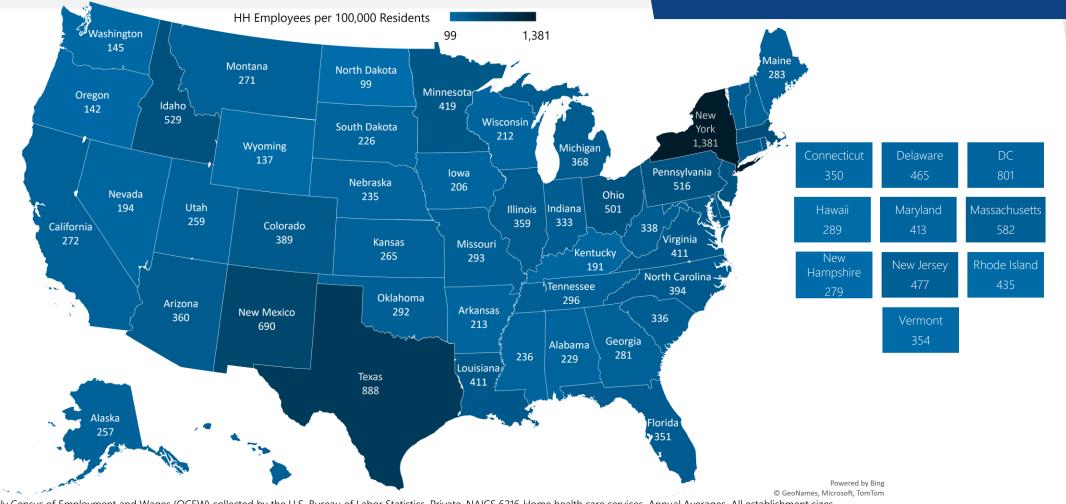


Source: Quarterly Census of Employment and Wages (QCEW) collected by the U.S. Bureau of Labor Statistics. Private, NAICS 6216 Home health care services. Annual Averages, All establishment sizes.

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<br>Number of HH              | Multiplier for          | Estimated Jobs Created      |
|----------------------|--|-------------------------|-----------------------------|
| State                | Employees <sup>1</sup>                 | Employment <sup>2</sup> | by HH Industry <sup>3</sup> |
| 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                      |

<sup>1.</sup> 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. 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 <sup>1</sup> | Multiplier for<br>Employment <sup>2</sup> | Estimated Jobs Created<br>by HH Industry <sup>3</sup> |
|------------------|---|---|---|
| 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<br>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   |

<sup>2.</sup> U.S. Bureau of Economic Analysis multipliers, 2020.

<sup>3</sup> KNG Health Analysis

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

#### **Economic Contributions of** Home Health Agencies

| Estimated Home<br>Health Total Wages <sup>1</sup> | Multiplier<br>for Earnings <sup>2</sup>  | Estimated Impact of HH<br>Payroll on Labor Income <sup>3</sup>   |
|---|--|--|
| \$613,875,815                                     | 1.4972   | \$919,094,848  |
| \$47,546,913                                      | 1.3674   | \$65,015,652   |
| \$933,974,525                                     | 1.6049   | \$1,498,935,680  |
| \$274,419,346                                     | 1.4316   | \$392,858,720  |
| \$5,071,890,984                                   | 1.5952   | \$8,090,680,320  |
| \$958,675,958                                     | 1.6439   | \$1,575,967,488  |
| \$663,055,350                                     | 1.4808   | \$981,852,352  |
| \$209,564,043                                     | 1.3959   | \$292,530,464  |
| \$197,354,641                                     | 1.1756   | \$232,010,128  |
| \$3,477,467,036                                   | 1.6025   | \$5,572,640,768  |
| \$1,159,547,950                                   | 1.6564   | \$1,920,675,200  |
| \$168,150,445                                     | 1.4944   | \$251,284,032  |
| \$263,026,760                                     | 1.4740   | \$387,701,440  |
| \$1,659,483,319                                   | 1.6787   | \$2,785,774,592  |
| \$838,150,498                                     | 1.5556   | \$1,303,826,944  |
| \$297,649,078                                     | 1.4202   | \$422,721,216  |
| \$308,719,839                                     | 1.4789   | \$456,565,760  |
| \$453,525,302                                     | 1.4935   | \$677,340,032  |
| \$718,498,076                                     | 1.4910   | \$1,071,280,640  |
| \$180,998,758                                     | 1.4835   | \$268,511,648  |
| \$1,034,111,024                                   | 1.5177   | \$1,569,470,208  |
| \$1,875,637,379                                   | 1.5214   | \$2,853,594,624  |
| \$1,487,629,138                                   | 1.5646   | \$2,327,544,576  |
| \$808,249,804                                     | 1.5663   | \$1,265,961,728  |
|   | \$613,875,815 \$47,546,913 \$933,974,525 \$274,419,346 \$5,071,890,984 \$958,675,958 \$663,055,350 \$209,564,043 \$197,354,641 \$3,477,467,036 \$1,159,547,950 \$168,150,445 \$263,026,760 \$1,659,483,319 \$838,150,498 \$297,649,078 \$308,719,839 \$453,525,302 \$718,498,076 \$180,998,758 \$1,034,111,024 \$1,875,637,379 \$1,487,629,138 | \$613,875,815 \$47,546,913 \$1.3674 \$933,974,525 \$1.6049 \$274,419,346 \$1.4316 \$5,071,890,984 \$209,564,043 \$1.3959 \$197,354,641 \$1.1756 \$3,477,467,036 \$1.6025 \$1,159,547,950 \$1.6564 \$168,150,445 \$1.4944 \$263,026,760 \$1,4740 \$1,659,483,319 \$1.6787 \$838,150,498 \$297,649,078 \$1.4202 \$308,719,839 \$453,525,302 \$1.4935 \$718,498,076 \$1.805,998,758 \$1.875,637,379 \$1.5214 \$1,487,629,138 \$1.5666 |

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. The QWEC does not include wage data for HHA contractors, but the multiplier is intended to account for such wages.

| State            | Estimated Home<br>Health Total Wages <sup>1</sup> | Multiplier for<br>Earnings <sup>2</sup> | Estimated Impact of HH<br>Payroll on Labor Income <sup>3</sup> |
|------------------|---|---|--|
| 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<br>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   |

<sup>2.</sup> U.S. Bureau of Economic Analysis multipliers, 2020.

#### Table 6.3: Impact of Home Health (HH) on Output by State, 2020

### Economic Contributions of Home Health Agencies

| State                | Estimated Home<br>Health Expenditures <sup>1</sup> | Multiplier for<br>Output <sup>2</sup> | Estimated Impact of HH<br>Spending on Output <sup>3</sup> |
|----------------------|--|---------------------------------------|---|
| 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   |

<sup>1.</sup> 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<br>Health Expenditures <sup>1</sup> | Multiplier for<br>Output <sup>2</sup> | Estimated Impact of HH<br>Spending on Output <sup>3</sup> |
|------------------|--|---------------------------------------|---|
| 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<br>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  |

<sup>2.</sup> U.S. Bureau of Economic Analysis multipliers, 2020.

<sup>3.</sup> KNG Health Analysis.





THROUGH RESEARCH.

#### Health Outcomes of Home Health Users

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#### 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<br>Readmitted Within 30 Days | % of Skilled Nursing Facility Users<br>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%  |  |

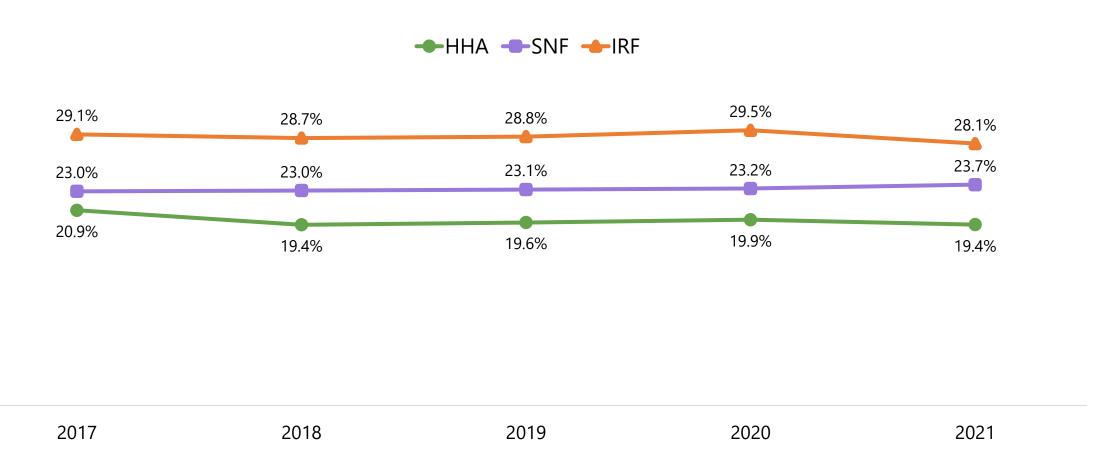
Source: KNG Health analysis of the Medicare Standard Analytic Files, 2021.

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

<sup>\*</sup>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

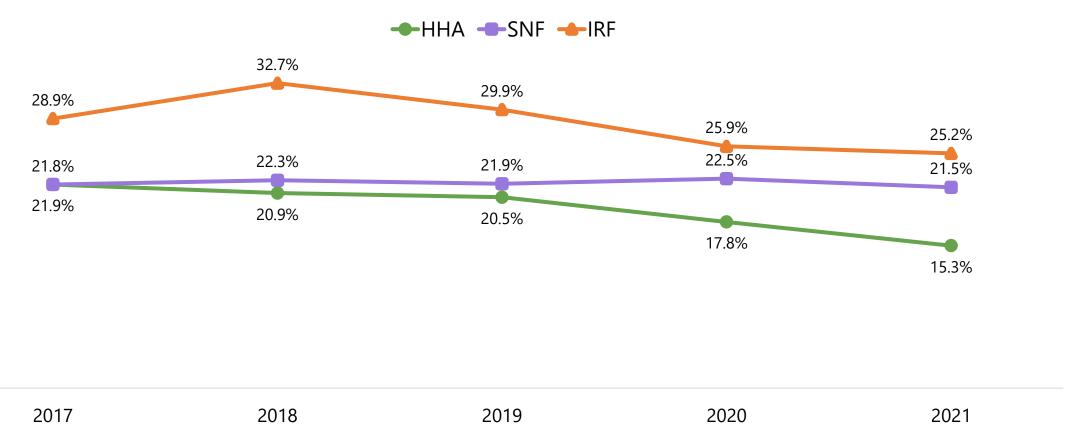
#### Health Outcomes of Home Health Users



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.

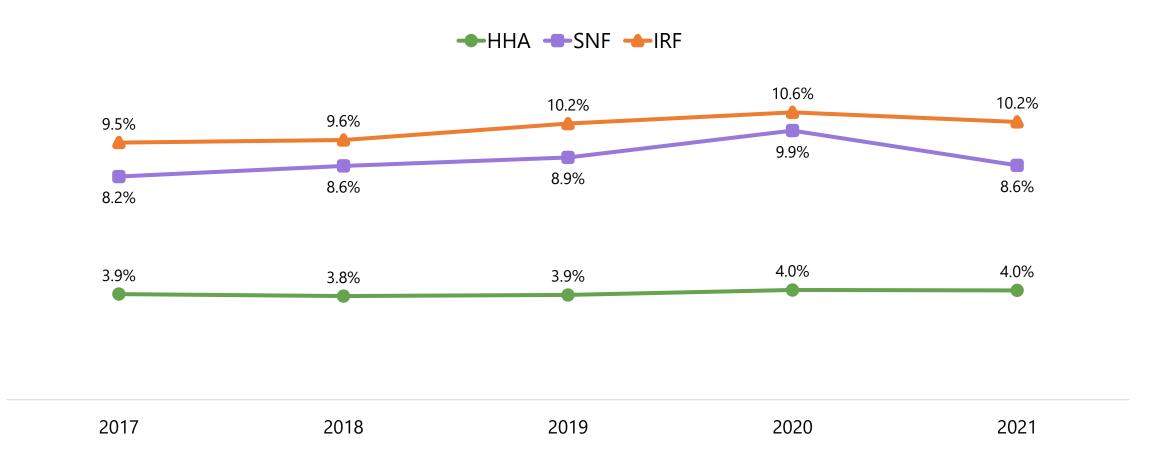
HHA = home health agency, SNF = skilled nursing facility, and IRF = inpatient rehabilitation facility

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   |
|   |       |       |       |       |       |       |       |

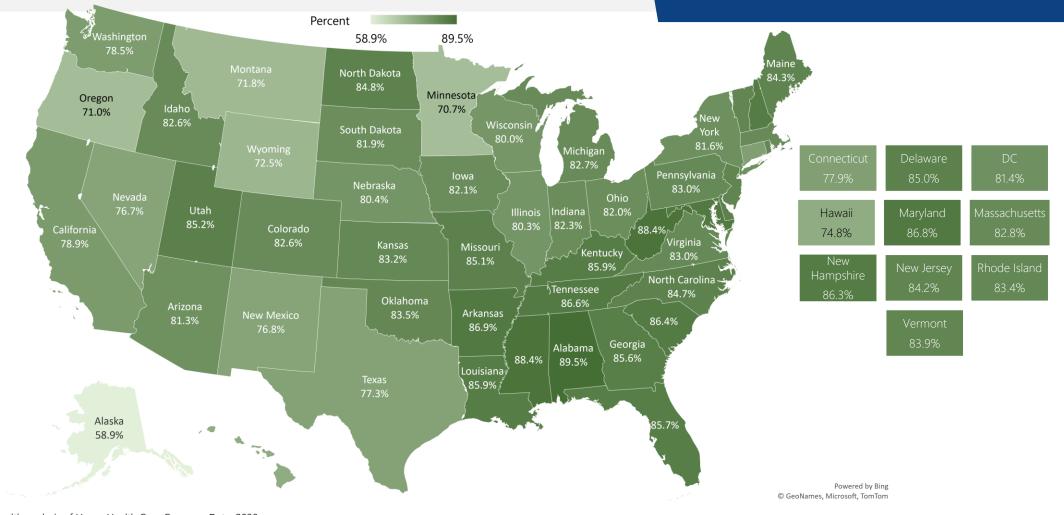
Source: KNG Health analysis of Home Health Care Compare Data, 2015-2021.

Note: Home Health Care Compare data is based on annual October refresh.

<sup>\*</sup>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 7.3: Performance on "How Often Patients Got Better at Bathing" by State, 2020\*

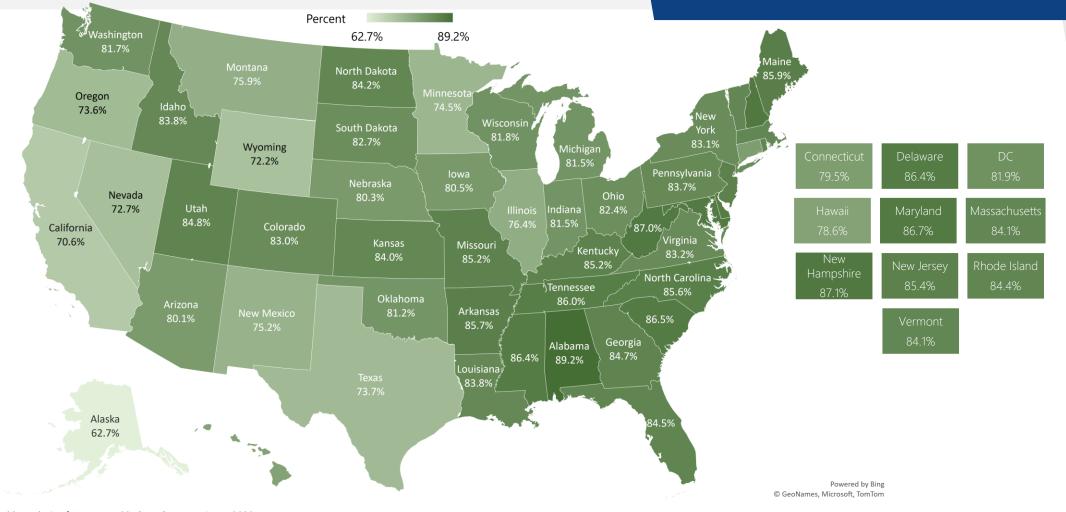
### Health Outcomes of Home Health Users



<sup>\*</sup>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\*

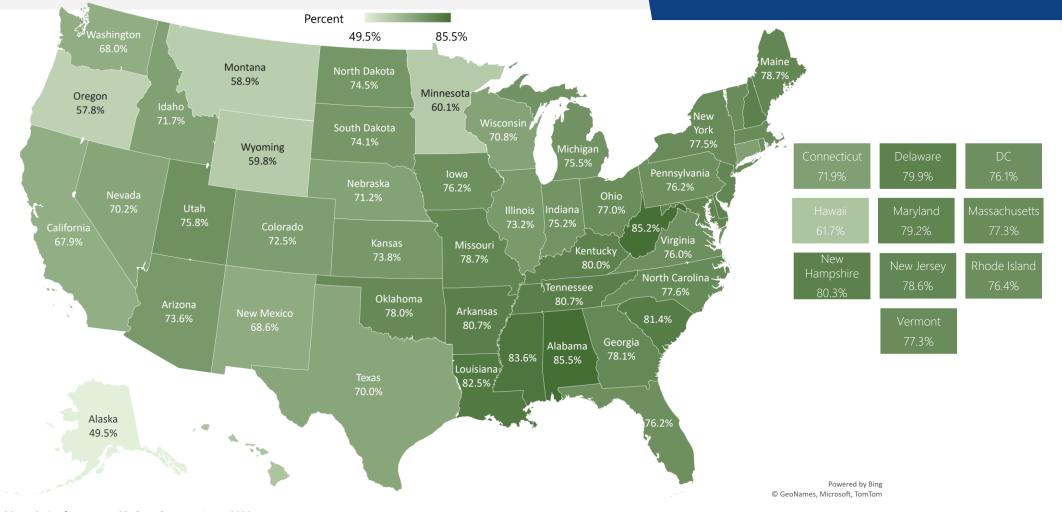
## Health Outcomes of Home Health Users



<sup>\*</sup>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\*

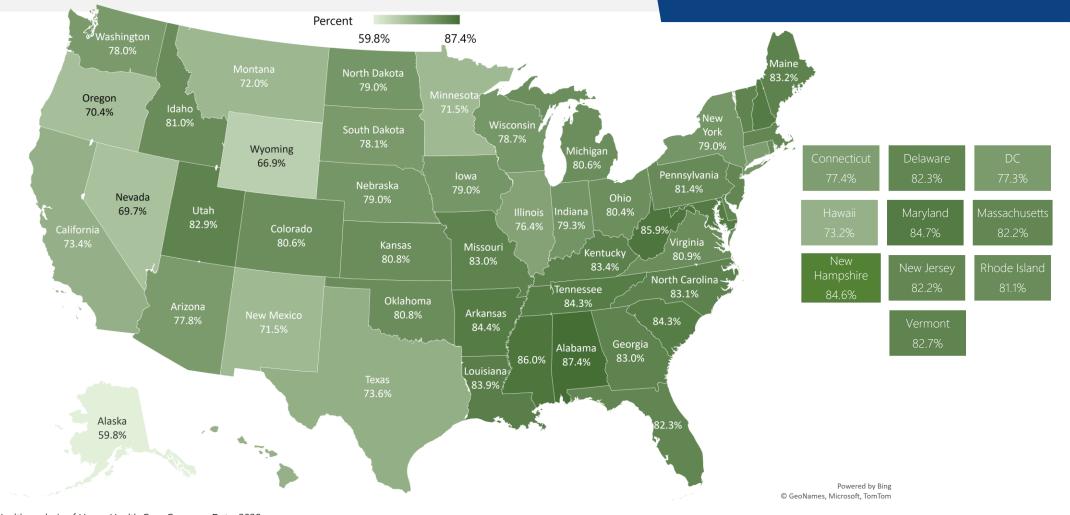
## Health Outcomes of Home Health Users



<sup>\*</sup>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\*

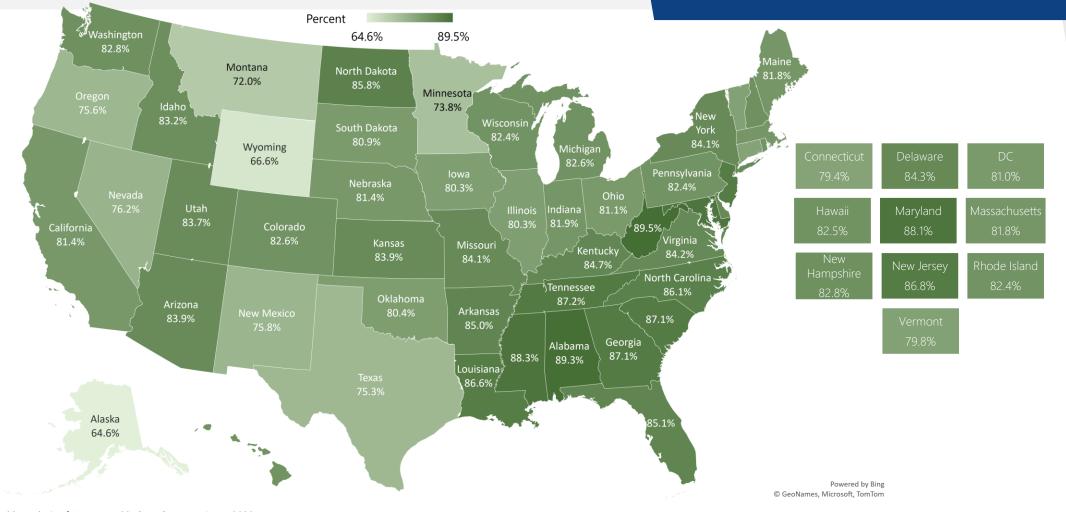
## Health Outcomes of Home Health Users



<sup>\*</sup>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



<sup>\*</sup>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

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#### **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 2015-2023 Q1 100% Home Health Agency Standard Analytic LDS, 2015-2023 Q1 100% Inpatient Standard Analytic File, and 2015-2023 Q1 100% Skilled Nursing Standard Analytic LDS (SNF SAF) were used to examine:
  - the clinical profile of traditional Medicare 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 traditional Medicare home health users.
- 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.<sup>1</sup>

<sup>1.</sup> 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.

