Overview

Purpose
The purpose of this 2019 Home Health Care CAHPS Chartbook is to provide a state- and CMS-region-level summary of recent (2017-2018) home health care experiences among Medicare beneficiaries. The information in this Chartbook reflects the responses of people who answered the Home Health Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) survey. The HHCAHPS Survey data are publicly reported on Medicare’s Care Compare website (https://www.medicare.gov/care-compare/).

Data and Methods
Chartbook measures were designed to report the highest, middle, and lowest quartiles of average agency performance by state and CMS region. All measures were adjusted for respondent characteristics that affect response, as is done for the publicly reported data.

Chartbook measures are derived from the publicly reported top-box measures, and are defined as follows:

- **Overall Rating**: The chartbook Overall Rating score is an average of all of the HHA-level Overall Rating scores in the state/region, where the HHA-level score is the percentage of the HHA’s survey respondents who gave the HHA a rating of 9 or 10 out of 10 (top-box).

- **Willingness to Recommend**: The chartbook Willingness to Recommend score is an average of all of the HHA-level Willingness to Recommend scores in the state/region, where the HHA-level score is the percentage of the HHA’s survey respondents who responded “definitely yes” that they would recommend the agency.

- **The three chartbook Composite measure scores are an average of all of the HHA-level composite scores in the state/region. The HHA-level score is based on the HHA’s survey respondents’ responses to the questions that make up the composite.**

- **Star Rating**: The chartbook Star Rating measure reflects the percentage of HHAs in the state/region with a 5-star rating, which incorporates performance on four of the publicly reported measures.

Results
HHCAHPS measures generally reflect positive care experiences, with moderate variation across states and regions.

Across the six state-level maps presented, states that were ever included in the top quartile, and the number of times included, were Alabama (6), Alaska (1), Arkansas (6), Hawaii (1), Iowa (2), Kentucky (5), Louisiana (6), Mississippi (6), Missouri (3), Maine (5), New Hampshire (2), North Carolina (6), North Dakota (6), Oklahoma (5), Pennsylvania (2), Puerto Rico (1), South Carolina (5), South Dakota (2), Tennessee (5), Texas (1), Vermont (1), and West Virginia (6).

Across the six region-level maps presented, regions ever appearing in the top quartile, and the number of times appearing, were Zone 4 (5) in the southeast United States, Zone 6 (5) in the South Central United States, and Zone 7 (2) in the middle United States.

The majority of respondents were at least 75 years of age, with almost 34% aged 75 to 84 and almost 26% aged 85 or older. Twelve percent of respondents were under age 65. Respondents were about 60% female, and mostly non-Hispanic white. Most had at least a high school diploma or GED, were in fair or poor general health, and were in excellent or very good mental or emotional health. Less than 10% had dementia or schizophrenia, about a third lived alone, most answered survey questions themselves instead of having a proxy, and nearly all completed the survey in English.

Implications
Focusing on states/CMS regions in the top quartile emphasizes a high target for quality and the importance of continued improvement by HHAs in patient care and processes.

Geographic data on home health agency performance could be helpful in understanding where targeted initiatives to improve quality could be focused.

More research is needed to understand what characteristics drive better or worse care experiences at the state- or CMS region- level.

It is worth pointing out that patients' evaluations of home health services are not the only measure of quality that CMS reports. Other sources of quality information include the clinical measures reported on the Medicare Care Compare website (https://www.medicare.gov/care-compare/).
How to Interpret Chartbook Measure Results

<table>
<thead>
<tr>
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<th>Publicly Reported Measures</th>
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</thead>
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<td><strong>State/CMS Region Level</strong></td>
<td><strong>Home Health Agency (HHA) Level</strong></td>
</tr>
<tr>
<td>Overall Rating: Average of all HHA-level Overall Rating scores in the state/CMS region</td>
<td>Overall Rating % of survey respondents who rated each HHA 9 or 10 on a scale from 0 (lowest) to 10 (highest)</td>
</tr>
<tr>
<td>Willingness to Recommend: Average of all HHA-level Willingness to Recommend scores in the state/CMS region</td>
<td>Willingness to Recommend % of survey respondents who answered “Definitely yes” they would recommend HHA</td>
</tr>
<tr>
<td>Composite Measures of all HHA-level composite scores in the state/CMS region</td>
<td>Composite Measures HHA-level case-mix adjusted linear mean scores</td>
</tr>
<tr>
<td>Star Rating: % of HHAs in the state/CMS region that received highest star rating</td>
<td>Star Rating: Summary measure of HHA’s performance across 4 publicly reported measures</td>
</tr>
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</table>

How to Interpret State (Locality)-level Results

- For the state-level Overall Rating map (page 1), we averaged all HHA-level Overall Rating scores—which reflect the percentage of respondents in each agency who gave the agency a top-box score of 9 or 10 out of 10—to create a state-level Overall Rating score. Then, the states were grouped into quartiles, with the bottom quartile reflecting states with the lowest Overall Rating score and the top quartile reflecting states with the highest Overall Rating score.

- The states with the highest state-level Overall Rating scores are shaded the darkest blue, with state-level scores ranging from 86.1 to 88.6%. For specific state-level scores, please see the accompanying Excel data file, [https://homehealthcahps.org/General-Information/Chartbook](https://homehealthcahps.org/General-Information/Chartbook). North Carolina (for example) had a state-level Overall Rating score of 87.2%.

How to Interpret CMS Region-level Results

- On the Care of Patients map (page 9), we averaged all of the state-level composite scores in a given CMS region to create a CMS region-level composite score. Then, the regions were grouped into quartiles, with the bottom quartile reflecting regions with the lowest score and the top quartile reflecting states with the highest score.

- The CMS region-level Care of Patients composite score ranged from 85.8 to 89.4%. The highest scoring one-fourth of regions ranged from 88.8 to 89.4%, which are shaded in dark blue. CMS Region Zone 6 (for example) had an average Care of Patients composite score of 89.3%, which falls within this range. For specific CMS region-level composite scores, please see the accompanying Excel data file, [https://homehealthcahps.org/General-Information/Chartbook](https://homehealthcahps.org/General-Information/Chartbook).
STATE LEVEL
Overall Rating

• To measure their overall experience of home health care, people were asked to rate their care from their home health care providers on a scale of 0 to 10, where 0 is the worst home health care possible and 10 is the best home health care possible.

• The publicly reported agency-level top-box measure provides the percentage of respondents who rated their home health care as a 9 or 10.

• This map shows whether the state-level average agency percentage for the measure falls in the highest, two middle, or lowest quartiles across all states and localities analyzed. All results have been adjusted for respondent characteristics.

• The state-level Overall Rating results ranged from 73.0%–88.6%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
STATE LEVEL
Willingness to Recommend Agency

- When asked about their willingness to recommend their home health agency to their family or friends, respondents can answer “Definitely no,” “Probably no,” “Probably yes,” or “Definitely yes.”
- The publicly reported agency-level top-box measure provides the percentage of respondents who answered, “Definitely yes.”
- The state-level Willingness to Recommend results ranged from 54.5%–86.8%, reflecting generally high satisfaction with care.*

- This map shows whether the state-level average agency percentage for the measure falls in the highest, two middle, or lowest quartiles across all states and localities analyzed. All results have been adjusted for respondent characteristics.

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
STATE LEVEL

Care of Patients Composite

- The publicly reported Care of Patients composite score is calculated to assess how well home health staff are meeting peoples’ expectations for delivering care in a professional way.
- This composite measure is comprised of four questions on the HHCAHPS Survey.
- This map shows whether this percentage for the measure falls in the highest, two middle, or lowest quartiles across all states and localities analyzed. All results have been adjusted for respondent characteristics.
- The state-level results ranged from 79.2%–91.9%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
STATE LEVEL
Communications between Providers and Patients Composite

- The publicly reported Communications between Providers and Patients composite score is calculated to assess how well home health staff are communicating with people receiving home health care.
- This composite measure is comprised of six questions on the HHCAHPS Survey.

• This map shows whether this percentage for the measure falls in the highest, two middle, or lowest quartiles across all states and localities analyzed. All results have been adjusted for respondent characteristics.
• The state-level results ranged from 72.9%–89.5%, reflecting generally high satisfaction with care.*

Legend
- Top Quartile (87.1–89.5%)
- Middle Two Quartiles (84.0–87.0%)
- Bottom Quartile (72.9–83.9%)

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
The publicly reported Specific Care Issues composite score is calculated to assess how well home health staff are meeting specific care needs of people receiving home health care, including discussing medicines, pain, and home safety with them.

This composite measure is comprised of seven questions on the HHCAHPS Survey.

This map shows whether this percentage for the measure falls in the highest, two middle, or lowest quartiles across all states and localities analyzed. All results have been adjusted for respondent characteristics.

The state-level results ranged from 70.4%–88.5%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
Home health agencies receive a summary star rating to help people more easily compare experiences of care across agencies. The publicly reported summary star is a simple average of the following four publicly reported measures: Overall Rating, Care of Patients Composite, Communications between Providers and Patients Composite, and Specific Care Issues Composite.

The measure calculated for use in this map differs from the publicly reported measure in that it is the percentage of agencies in each state/locality with a 5-star summary star rating, which is the highest rating.

This map shows whether this percentage falls in the highest, two middle, or lowest quartiles across all states and localities analyzed. All results have been adjusted for respondent characteristics.

The state-level results ranged from 0%–40.0%, reflecting substantial variation on this measure. The 5-star rating is the highest rating to achieve, and home health agencies wanting to achieve this rating will need to continue to improve on all aspects of their care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.

Note: Guam is not included in this map since none of the agencies in Guam met the criteria for receiving star ratings (i.e., a minimum of 40 completed interviews per agency).
To measure their overall experience of home health care, people were asked to rate their care from their home health care providers on a scale of 0 to 10, where 0 is the worst home health care possible and 10 is the best home health care possible.

The publicly reported agency-level top-box measure provides the percentage of respondents who rated their home health care as a 9 or 10.

This map shows whether the CMS region-level average agency percentage for the measure falls in the highest, two middle, or lowest quartiles across all CMS regions analyzed. All results have been adjusted for respondent characteristics.

The region-level results ranged from 80.2%–85.7%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
CMS REGIONAL LEVEL

Willingness to Recommend Agency

- When asked about their willingness to recommend their home health agency to their family or friends, respondents can answer “Definitely no,” “Probably no,” “Probably yes,” or “Definitely yes.”
- The publicly reported agency-level top-box measure provides the percentage of respondents who answered, “Definitely yes.”
- This map shows whether the CMS region-level average agency percentage for the measure falls in the highest, two middle, or lowest quartiles across all CMS regions analyzed. All results have been adjusted for respondent characteristics.
- The region-level results ranged from 74.3%–80.2%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
• The publicly reported Care of Patients composite score is calculated to assess how well home health staff are meeting peoples' expectations for delivering care in a professional way.

• This composite measure is comprised of four questions on the HHCAHPS Survey.

• This map shows whether this percentage for the measure falls in the highest, two middle, or lowest quartiles across all CMS regions analyzed. All results have been adjusted for respondent characteristics.

• The region-level results ranged from 85.8%–89.4%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
CMS REGIONAL LEVEL
Communications between Providers and Patients Composite

- The publicly reported Communications between Providers and Patients composite score is calculated to assess how well home health staff are communicating with people receiving home health care.
- This composite measure is comprised of six questions on the HHCAHPS Survey.
- This map shows whether this percentage for the measure falls in the highest, two middle, or lowest quartiles across all CMS regions analyzed. All results have been adjusted for respondent characteristics.
- The region-level results ranged from 83.0%–86.5%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
The publicly reported Specific Care Issues composite score is calculated to assess how well home health staff are meeting specific care needs of people receiving home health care, including discussing medicines, pain, and home safety with them.

This composite measure is comprised of seven questions on the HHCAHPS Survey.

This map shows whether this percentage for the measure falls in the highest, two middle, or lowest quartiles across all CMS regions analyzed. All results have been adjusted for respondent characteristics.

The region-level results ranged from 80.1%–85.1%, reflecting generally high satisfaction with care.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
Home health agencies receive a summary star rating to help people more easily compare experiences of care across agencies. The publicly reported summary star is a simple average of the following four publicly reported measures: Overall Rating, Care of Patients Composite, Communications between Providers and Patients Composite, and Specific Care Issues Composite.

The measure calculated for use in this map differs from the publicly reported measure in that it is the percentage of agencies in each CMS region with a 5-star summary star rating, which is the highest rating.

This map shows whether this percentage falls in the highest, two middle, or lowest quartiles across all CMS regions analyzed. All results have been adjusted for respondent characteristics.

The regional results ranged from 1.9%–20.4%, reflecting substantial variation on this measure. The 5-star rating is the highest rating to achieve, and home health agencies wanting to achieve this rating will need to continue to improve on all aspects of their care. The percentages shown include regions that have no or very few 5-star agencies, which lowers the average percentage for that region.*

* Results are based on RTI International analysis of responses to the HHCAHPS Survey from July 2017 to June 2018.
Characteristics of Home Health Patients in Chartbook Maps

- Patient characteristics data are either self-reported by patients or collected from HHA administrative data. The patient data collected include age, gender, race, ethnicity, education, health status/diagnoses, living arrangement, proxy status, and survey language.
- The majority of respondents were at least 75 years of age, with almost 34% aged 75 to 84 and almost 26% aged 85 or older. Twelve percent of respondents were under age 65. Patients were about 60% female, and mostly non-Hispanic white. Most had at least a high school diploma or GED, were in fair or poor general health, and were in excellent or very good mental or emotional health. Less than 10% had dementia or schizophrenia, about a third lived alone, most answered survey questions themselves instead of having a proxy, and nearly all completed the survey in English.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>Age 18-49</td>
<td>2.1</td>
</tr>
<tr>
<td>Age 50-64</td>
<td>9.9</td>
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<tr>
<td>Age 65-74</td>
<td>28.3</td>
</tr>
<tr>
<td>Age 75-84</td>
<td>33.8</td>
</tr>
<tr>
<td>Age 85+</td>
<td>25.9</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61.2</td>
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<tr>
<td>Male</td>
<td>38.8</td>
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<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>84.1</td>
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<tr>
<td>Black</td>
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<tr>
<td>Asian</td>
<td>1.7</td>
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<tr>
<td>Native Hawaiian/ Pacific Islander</td>
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<tr>
<td>American Indian</td>
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<tr>
<td>Multiple races</td>
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<tr>
<td><strong>Ethnicity</strong></td>
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<td>Hispanic</td>
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<tr>
<td>Not Hispanic</td>
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<tr>
<td><strong>Educational attainment</strong></td>
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<tr>
<td>Less than 8th grade</td>
<td>7.5</td>
</tr>
<tr>
<td>Some high school</td>
<td>10.0</td>
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<tr>
<td>High school or GED</td>
<td>34.8</td>
</tr>
<tr>
<td><strong>Living arrangement</strong></td>
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</tr>
<tr>
<td>Patient lives alone</td>
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<tr>
<td><strong>Self-reported general health</strong></td>
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<tr>
<td>Excellent or very good</td>
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<tr>
<td>Good</td>
<td>32.5</td>
</tr>
<tr>
<td>Fair or poor</td>
<td>40.5</td>
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<tr>
<td><strong>Self-reported mental or emotional health</strong></td>
<td></td>
</tr>
<tr>
<td>Excellent or very good</td>
<td>46.5</td>
</tr>
<tr>
<td>Good</td>
<td>31.3</td>
</tr>
<tr>
<td>Fair or poor</td>
<td>22.2</td>
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<tr>
<td><strong>Diagnoses of concern</strong></td>
<td></td>
</tr>
<tr>
<td>Dementia/cognitive impairment</td>
<td>7.8</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>0.7</td>
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<tr>
<td><strong>Proxy status</strong></td>
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<tr>
<td>Proxy</td>
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<tr>
<td><strong>Survey language</strong></td>
<td></td>
</tr>
<tr>
<td>Non-English survey</td>
<td>2.4</td>
</tr>
</tbody>
</table>

* Rows do not add to 100% because some respondents did not report this information.

NOTE: Analyses based on Overall Rating regression sample, n = 261,270.
Data and Methods

This chartbook was prepared by the HHCAHPS Coordination Team, RTI International, under Contract # HHSM-500-2017-00091G.

The HHCAHPS Survey instrument was designed to measure the experiences of people receiving home health care from Medicare-certified home health agencies. The survey is designed to meet the following three broad goals:

- To produce comparable data on the patient’s perspective that allows objective and meaningful comparisons between home health agencies on domains that are important to consumers.
- To create incentives for agencies to improve their quality of care through publicly reporting survey results.
- To enhance public accountability in health care by increasing the transparency of the quality of care provided in return for public investment.

Data were included for participating publicly reported home health agencies in each state or locality. A total of 7,808 out of 11,385 home health agencies participated in HHCAHPS during this reporting period. Those agencies that did not participate were exempt due to their size, due to being newly certified, or they chose not to participate. We included only people who received at least two skilled-care home visits.

HHCAHPS Survey results are published quarterly and include each HHA’s most recent four quarters of data. This chartbook shows averages of four quarters of publicly reported data (July 2017 through June 2018) aggregated at the state and regional levels (link to archived public data: https://homehealthcahps.org/General-Information/Archived-Publicly-Reported-Data).

Publicly reported “top-box” measures are calculated using the methods reported here. All measures are on a 0-100 scale.

One chartbook measure is modified from its publicly reported version.

The Summary Star measure is the percentage of home health agencies (at the state or region level) with a 5-star rating. This measure is not the same as the measure presented in the publicly reported data.

Outcomes are adjusted for patient age, education, self-reported overall health and mental/emotional health, diagnoses of schizophrenia and dementia, whether the patient lives alone, whether the survey was answered by a proxy, and the language in which the survey was completed.

We calculated the 25th and 75th percentiles for each chartbook measure and divided states/regions into three categories:

- Top quartile: 75th to 100th percentile
- Middle quartiles: 25th to 75th percentile
- Bottom quartile: 0 to 25th percentile

Percentages shown in the map legends correspond to the adjusted statewide or CMS regional mean percentage of HHCAHPS agencies on each measure. For example, for the state-level Overall Rating measure 86.1-88.6% of beneficiaries rated their care as 9 or 10 out of 10 in states in the top quartile.
Additional Information

For more information about Home Health Care CAHPS, visit https://homehealthcahps.org/

For a PDF file of this report and/or an Excel file with the underlying data for each map, visit https://homehealthcahps.org/General-Information/Chartbook.


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