Home Infusion Patient Satisfaction Benchmarking Program

Open Access
Results for Sample Months: January - March 2019
Remarks from Connie Sullivan  
President and CEO

Establishing national quality standards using validated data has been a goal of the National Home Infusion Association (NHIA) for over a decade. I am thrilled that the countless hours invested by our dedicated volunteer members of the Outcomes Task Force to create national quality standards are coming to fruition with the publication of this initial report. Measurement of patient satisfaction is ubiquitous in the push toward improving quality across the health care spectrum, thus NHIF chose to make this the first industry-wide benchmarking initiative. My sincere thanks goes out to the providers who participated in this initial effort. As we continue to expand upon our benchmarking and quality data initiatives, providers and industry stakeholders will gain new insights into how home and specialty infusion services are impacting patients’ lives. Providers can then use the data to focus on ongoing quality improvement efforts.

About National Home Infusion Foundation

The National Home Infusion Foundation (NHIF) is a nonprofit organization supporting the enhancement of home infusion patient care and outcomes through leadership, research, and education. NHIF has led the effort to create a standardized, validated survey instrument, and a process for anonymized submission and third-party data analysis. The resulting data accurately and objectively reflects the first benchmarks regarding how patients perceive the performance of the home and specialty infusion industry.

About Strategic Healthcare Programs

Strategic Healthcare Programs (SHP), an affiliate of Managed Health Care Associates, Inc. (MHA), is a leader in data analytics and benchmarking that drive daily clinical and operational decisions. Our solutions bring real-time data to post-acute providers, hospitals, physician groups, and ACOs to better coordinate quality care and improve patient outcomes. Since 1996, SHP has helped more than 6,500 organizations nationwide raise the bar for health care performance. For more information, visit: https://www.shpdata.com.
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1.1. Program Overview

The primary aim of the *Home Infusion Patient Satisfaction Benchmarking Program* is to measure how patients perceive the performance of home and specialty infusion services.

Benchmarking is vital to the continued growth of the home and specialty infusion industry because it involves translating subjective results into meaningful, quantifiable, and actionable data. At the provider level, system gaps can be determined, allowing for the development of an effective action plan for quality improvement. A critical voice in the success of health care is that of the patient. This voice is so critical, that measuring and reporting patient satisfaction has been deemed a mandatory requirement for all Accountable Care Organization (ACOs) and Medicare providers. As a result, patient satisfaction collection and data benchmarking became a priority program for the NHIF.
1.2. Validation

To participate in the patient satisfaction benchmarking program home infusion providers are required to use the NHIF validated and standardized Uniform Home Infusion Patient Satisfaction Survey tool to collect data. This survey was developed by NHIF using a 15-member expert panel with Delphi methodology to validate and establish consensus for the survey questions. The panel rated, modified, and added questions during three iterations of the survey review process.

Important to the survey development was the pilot test that included a phone interview with patients who completed the survey. This determined the clarity of the questions and subsequent internal validity. Modifications were made based on feedback from the patient subjects. Finally, test-retest methodology was used to determine survey reliability. This involved patients completing the survey twice, one week apart. When the surveys were analyzed for similarity, a correlation coefficient of 0.90 was produced, indicating a strong relationship between the first and second administration of the survey. As a result, the reliability of the NHIF survey questions was proven. Survey reliability is the consistency or the degree to which the questions used in the survey elicit the same information each time they are used under the same condition.

Providers were also required to validate their sample populations, which ensured that survey data was only collected for a defined population of patients who received infused therapies at home. This was necessary because most providers sample a much broader mix of patients, such as patients who use self-injectable or enteral products, who may not meet the home infusion patient criteria. Patients represented in the industry-wide benchmarks were either: 1) discharged patients who were active to the home infusion provider for seven or more days and received at least one infusion treatment at home, or 2) active home infusion patients who had been on service for at least six months. Infusion treatment means the administration of a drug through an intravenous (IV) or subcutaneous (SC) catheter. Catheter care patients were included in these benchmarking results.
1.3. Comparing Individual Data to the Industry Benchmarks

Providers who want to compare their data to the nationally published benchmarks must use the standard NHIF survey questions and meet the NHIF program requirements (see box). While many providers ask patient satisfaction questions that are similar to the validated questions on their internally developed surveys, comparisons from non-valid surveys cannot be made to these benchmarks. While reviewing satisfaction surveys developed by individual providers, the NHIF study team found that most survey questions contained multiple interpretations and had vague terminology. Additionally, there were more than 15 types of rating scales used across the surveys reviewed, making provider-to-provider comparisons invalid. To allow for the universal comparison of home infusion patient satisfaction data, it is incumbent that all participating providers used the same set of patient satisfaction survey questions. This requirement ensures that benchmarking results are valid. Providers that satisfied the benchmarking participation criteria received an NHIF Data Validation Certificate and insignia that may be displayed on the individual location-based reports and materials.

**Patient Satisfaction Benchmarking Program Requirements**

Home infusion providers represented in these results met the following criteria:

1. Utilized the unmodified *Uniform Home Infusion Patient Satisfaction Survey* published by NHIF.
2. Utilized a third-party administrator to issue and collect survey data. (Waived for 2019.)
3. Made a paper version of the survey available to all patients either as the standard survey upon request.
4. Submitted to NHIF an organizational policy describing the survey procedures and methods for identifying benchmarking-eligible patients and exclusions.
5. Signed the NHIF and/or Strategic Healthcare Programs (SHP) participation agreements.
6. Completed the "Home Infusion Location Benchmarking Profile" survey.
1.4. Participation

Benchmarking was done at the individual home infusion location level. Each location received a Data Participation Code (DPC) from SHP, the third-party data analytics partner. This code was submitted with each transaction to enable the data administrator and NHIF to track and confirm data transfers in an anonymous manner. There was no fee for provider members of NHIA who wanted to participate in benchmarking.

This report includes survey and demographic data from 35 home infusion provider locations. Most locations (60.0%) were multi-site organizations, not affiliated with a hospital or acute care system while 22.5% were affiliated with a hospital or acute care system. The remaining locations (17.5%) were single-site organizations.

Results are based on an analysis from the 1,369 completed and returned surveys representing 6,958 patients who received home infusion services between January and March of 2019. As noted in Table 1, there were 40 providers who participated in the program. Four providers had no returned surveys in January and March while five had no returned surveys in February. Overall, this accounts for the 35 providers who contributed completed surveys.

To ensure the integrity of the benchmarking data, the data was processed and de-identified by SHP, a third-party survey administrator, prior to being forwarded to NHIF to be analyzed and reported.

+1,369
Completed and returned surveys
1.5. Return Rates

The average number of completed surveys submitted by each provider was 34.23. As shown in Table 1, the overall survey return rate for the quarter was 19.68% with the monthly return rates also shown. Overall, both monthly and quarterly return rates are acceptable since on average the standard return rate for external surveys is 10-15%.

<table>
<thead>
<tr>
<th>Month</th>
<th>Surveys Administered</th>
<th>Surveys Received</th>
<th>Return Rate</th>
<th>Number of Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>2,321</td>
<td>465</td>
<td>20.03%</td>
<td>39</td>
</tr>
<tr>
<td>February</td>
<td>2,299</td>
<td>471</td>
<td>20.49%</td>
<td>40</td>
</tr>
<tr>
<td>March</td>
<td>2,338</td>
<td>433</td>
<td>18.52%</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>6,958</td>
<td>1,369</td>
<td>19.68%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Table 1. Quarter 1, 2019 Sample Size and Return Rate

Survey Return Rate

<table>
<thead>
<tr>
<th>Month</th>
<th>Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>20.03%</td>
</tr>
<tr>
<td>February</td>
<td>20.04%</td>
</tr>
<tr>
<td>March</td>
<td>18.52%</td>
</tr>
<tr>
<td>Return Rate Q1</td>
<td>19.68%</td>
</tr>
</tbody>
</table>

Return Rate Q1 Benchmark

19.68%
1.6. Patient Demographics

Patient demographic data supplied by SHP included age, gender, active versus discharge status, and therapy type. Analysis of patient demographic data shows that the average age of the responding patient was 60.19 (SD=18.37) years with a range of 1-93 years. The percentage of males and females was 56.2% and 43.8%, respectively while the comparison of active versus discharged patients shows that 55.8% were active while 44.2% were discharged.

**Average Age of Respondant**

![Chart showing gender distribution and average age](chart.png)
Benchmarks: Uniform Home Infusion Patient Satisfaction Survey Questions

Quarter 1 patient satisfaction data was from providers who had patients who were discharged from service January 2019-March 2019, or had been on service for at least six months. The composite categories are formed by combining data from questions that have similar themes. Seven composite categories are formed from the 22 data points on the patient satisfaction survey as indicated in the box below.

Most of the scores reported in this report are top box scores. Top box scoring method only accounts for the percentage of respondents who selected the highest-rated option for the given survey question. For example, if the survey response option included Highly Agree, Agree, Uncertain, Disagree, and Highly Disagree, the top box would be Highly Agree and the presented score would be the percentage of patients who chose this option. To determine a composite score for categories that include more than one survey question, the percentage of patients selecting the top box score for each survey question was totaled and divided by the number of survey questions in the composite. The composite range includes the lowest and highest individual provider benchmark score. Only providers with 15 or more returned surveys were used in the composite range calculations.

<table>
<thead>
<tr>
<th>Equipment &amp; Supplies</th>
<th>General Communication</th>
<th>Staff Courtesy</th>
<th>Staff Helpfulness</th>
<th>Instruction</th>
<th>Satisfied Overall</th>
<th>Would Recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite 1</td>
<td>Composite 2</td>
<td>Composite 3</td>
<td>Composite 4</td>
<td>Composite 5</td>
<td>Composite 6</td>
<td>Composite 7</td>
</tr>
<tr>
<td>Questions 1-3</td>
<td>Questions 4-7</td>
<td>Questions 8a-d</td>
<td>Questions 9a-d</td>
<td>Questions 10a-e</td>
<td>Question 11</td>
<td>Question 12</td>
</tr>
</tbody>
</table>
Composite 1: Equipment and Supplies

This composite was comprised of questions 1, 2, and 3 of the NHIF Uniform Home Infusion Patient Satisfaction Survey. Questions 1 and 2 had yes/no responses while question 3 used a 5-point Always-Never scale. The questions pertained to the delivery of pumps, medications, and supplies, as well as whether the pump worked properly. To accommodate patients who do not use a pump, there was also a not applicable (NA) response option. The questions in Composite 1 included the following:

Q1. The home infusion pump was clean when it was delivered.

Q2. The home infusion pump worked properly.

Q3. The home infusion medications and supplies arrived before I needed them.

The industry benchmark for Composite 1 represents the average of the top box scores for questions 1, 2, and 3. A benchmark composite score of 95.70% shows that patients are very satisfied with their home infusion equipment and the delivery of medications and supplies. The range is 83.77%-100% and represents the low and high composite score from the individual providers.
Composite 2: General Communication

This composite was from questions 4, 5, 6, and 7 of the satisfaction survey with the questions relating to the effectiveness of communication with the patient. Questions 4, 6, and 7 had yes/no responses while question 5 used a 5-point Always-Never scale. The questions in this composite included the following:

Q4. I knew who to call if I needed help with my home infusion therapy.

Q5. The response I received to phone calls for help on weekends or during evening hours met my needs.

Q6. The home infusion nurse or pharmacist informed me of the possible side effects of the home infusion medication.

Q7. I understood the explanation of my financial responsibilities for home infusion therapy.

Of the multiple question composites, this one received the lowest composite score (89.67%). Even so, the score is still very good. The range of the individual providers’ scores for this composite was 77.63%-95.45%. 

89.67%

Range: 77.63-95.45%
Composite 3: Staff Courtesy

This composite incorporates the results from question 8 which had four parts (a-d). The four scores were averaged to determine the composite score. The questions addressed the courteousness of four different home infusion staff and was patient scored using a 5-point Always-Never scale. The questions in this composite included the following:

Q8a. The delivery staff was courteous.
Q8b. The billing staff was courteous.
Q8c. The pharmacy staff was courteous.
Q8d. The nursing staff was courteous.

A composite score of 92.17% shows that patients perceive home infusion personnel as being courteous. The range of the individual providers’ average scores for this composite was 81.90%-100%.
Composite 4: Staff Helpfulness

This composite category was similar to composite 3 but addressed staff helpfulness instead of courtesy. The question also had four parts (a-d) with the average of the scores from the four questions comprising the composite score. Patients scored these questions using a 5-point Always-Never scale. The questions in this composite included the following:

Q9a. The delivery staff was helpful.
Q9b. The billing staff was helpful.
Q9c. The pharmacy staff was helpful.
Q9d. The nursing staff was helpful.

The composite score for staff helpfulness (92.92%) was very comparable to staff courtesy (92.17). Both scores showed that home infusion personnel are viewed in a very positive manner. The range of the individual providers’ composite scores was 82.48%-100%.
2.5. Composite 5: Patient Instruction

The focus of this composite was the patient’s understanding of instructions, which is extremely important to the success of home infusion. The composite score was the average score of the five parts (a, b, c, d, and e) of question 10. Knowing how patients perceive their understanding of instructions is important in all areas of health care, especially home infusion. All five questions in this category had a primary response option of either “yes” or “no.” This response option provided data that was the most conclusive and thus actionable.

Q10a. I understood the instructions provided for how to wash my hands.

Q10b. I understood the instructions provided for how to give home infusion medication(s).

Q10c. I understood the instructions provided for how to care for the IV catheter.

Q10d. I understood the instructions provided for how to store the home infusion medication(s).

Q10e. I understood the instructions provided for how to use the home infusion pump.

This composite category received the highest patient top box rating (98.64%). This score provides evidence that patients do understand home infusion instructions. Much of the success of home infusion hinges on this patient understanding. This data should reassure home infusion staff who provide instructions to patients. The range of the individual providers’ composite scores was 87.88%-100%.
Composites 6 and 7: Overall Satisfaction & Would Recommend

Two patient satisfaction questions most often asked and benchmarked in health care are Question 11, “I was satisfied with the overall quality of the services provided” and Question 12, “I would recommend this home infusion company to my family and friends.” As observed in Table 2 these questions received top box responses from 79.96% and 77.73% of patient respondents, respectively. Worth noting is that the top two boxes (Strongly Agree and Agree) are favorable responses for these two questions. If the top two boxes were calculated, the results for Question 11 would be 97.47% and for Question 12 would be 96.34%. Overall, the data confirms that there is a high rate of patient satisfaction with the home infusion experience.

Q11. I was satisfied with the overall quality of the services provided.

Q12. I would recommend this home infusion company to my family and friends.

Table 2. Composite Results for Questions 11 and 12

<table>
<thead>
<tr>
<th></th>
<th>Benchmark Top 2 Boxes %</th>
<th>Benchmark Top Box %</th>
<th>Top Box Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfied Overall (Q 11)</strong></td>
<td>97.47%</td>
<td>79.96%</td>
<td>61.93 – 92.94</td>
</tr>
<tr>
<td><strong>Would Recommend (Q 12)</strong></td>
<td>96.34%</td>
<td>77.73%</td>
<td>61.95 – 92.91</td>
</tr>
</tbody>
</table>

Key Finding: 97.5% of patients either Strongly Agreed or Agreed with the statement, “I was satisfied with the overall quality of the services provided.”
The data speaks for itself. According to Quarter 1, 2019 home infusion patient satisfaction data, home infusion patients are very satisfied with their home infusion experience. When asked if they would recommend their home infusion company, 96.3% “Strongly Agreed” or “Agreed” that they would. The survey data also indicates that home infusion staff are courteous and helpful. It can be concluded from the high composite score (98.64%) achieved for Composite 5 - Patient Instructions, that home infusion providers excel at teaching patients how to manage their home infusion therapies. Also receiving high marks from home infusion patients were questions pertaining to equipment and general communication. Finally, in the most important patient rated statement “I was satisfied with the overall quality of the services provided” nearly all, 97.47%, of the responding patients (n=1,369) indicated that they “Strongly Agreed” or “Agreed” with this statement.
Q1 Benchmarks at a Glance

Results are based on an analysis from the 1,369 completed and returned surveys representing 6,958 patients who received home infusion services between January and March of 2019. Most of the scores reported in this report are top box scores, reported in seven composite categories. The composites are formed by combining data from 22 questions with similar themes (see Table 3). The key take-away was the strong majority of patients indicating satisfaction with their home infusion services.

For participating providers this data is highly instructive. Comparing their own results to the benchmarks is helpful in two ways. When a provider’s satisfaction rates fall below the benchmark, data aids in the implementation of process improvements. When scores exceed the benchmark, participating providers can identify and lock-in best practices. In both cases, participation in the program allows for further monitoring as efforts continue.

<table>
<thead>
<tr>
<th>Composite Category &amp; Questions</th>
<th>Q1 Benchmark</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equipment &amp; Supplies 1. The home infusion pump was clean when it was delivered. 2. The home infusion pump worked properly. 3. The home infusion medications and supplies arrived before I needed them.</td>
<td>95.70%</td>
<td>83.77 – 100</td>
</tr>
<tr>
<td>2. General Communication 4. I knew who to call if I needed help with my home infusion therapy. 5. The response I received to phone calls for help on weekends or during evening hours met my needs. 6. The home infusion nurse or pharmacist informed me of the possible side effects of the home infusion medication. 7. I understood the explanation of my financial responsibilities for home infusion therapy.</td>
<td>89.67%</td>
<td>77.63 – 95.45</td>
</tr>
<tr>
<td>3. Staff Courtesy 8a. The delivery staff was always courteous. 8b. The pharmacy staff was always courteous. 8c. The pharmacy staff was always courteous. 8d. The nursing staff was always courteous.</td>
<td>92.17%</td>
<td>81.90 – 100</td>
</tr>
<tr>
<td>4. Staff Helpfulness 9a. The delivery staff was always helpful. 9b. The billing staff was always helpful. 9c. The pharmacy staff was always helpful. 9d. The nursing staff was always helpful.</td>
<td>92.92%</td>
<td>82.48 – 100</td>
</tr>
<tr>
<td>5. Patient Instructions 10a. Understood the instructions provided for how to wash my hands. 10b. Understood the instructions provided for how to give home infusion medication(s). 10c. Understood the instructions provided for how to care for the IV catheter. 10d. Understood the instructions provided for how to store the home infusion medication(s). 10e. Understood the instructions for how to use the home infusion pump.</td>
<td>98.64%</td>
<td>87.88 – 100</td>
</tr>
<tr>
<td>6. Satisfied Overall 11. I was satisfied with the overall quality of the services provided.</td>
<td>97.47%</td>
<td>61.93 – 92.94</td>
</tr>
<tr>
<td>7. Would Recommend 12. I would recommend this home infusion company to my family and friends.</td>
<td>96.34%</td>
<td>61.95 – 92.91</td>
</tr>
</tbody>
</table>

In the coming year, NHIF plans to expand this program to include additional patient outcome metrics. If your organization is not already participating, now is the perfect time to get involved. Go to www.nhia.org/nhif/patient-satisfaction.cfm to learn more and sign up.
The National Home Infusion Foundation is most grateful to these companies for their support.

Enrollment for Q4 2019 is currently open.

To learn more about how to participate in Patient Satisfaction Benchmarking contact Jennifer Lyons at Jennifer.lyons@nhia.org.