

Status at Discharge Benchmarking Guide

Connie Sullivan, BSPHarm

CEO and President

National Home Infusion Foundation

Danell Haines, Ph.D.

D.J. Haines Research Consulting

Ryan Garst, PharmD, MBA

Senior Director of Clinical Services

National Home Infusion Association

November 2019

rev. January 2020



National Home Infusion Foundation

National Home Infusion Foundation

Introduction and Purpose

The popularity and effectiveness of benchmarking is widespread with business and management researchers referring to it as a fundamental tool for continuous improvement. Benchmarking is not just seeking to make changes, but to add value and provide a competitive advantage for participating organizations. Due to a plethora of documented research on the positive impact of benchmarking, the National Home Infusion Foundation (NHIF) is committed to creating programs will foster quality improvement, as well as generate confidence and investment in the home and specialty infusion industry.

A benchmark is a point of reference for a measurement. Sometimes this benchmark becomes a standard or a norm. The process of benchmarking involves comparing one's own performance metrics to industry standards. Without the ability to compare results, data from an individual organization lacks context. To determine how a score, a rating, an outcome, or another form of measurement within the home infusion industry compares, there is a need to collect uniform data from multiple providers. Examples of data that may be of interest in benchmarking could include therapy outcomes, patient satisfaction, and staffing numbers, just to name a few. To ensure valid comparisons and thus actionable results, this data needs to be reported using a standardized and validated instrument. Data submitted by various providers using standardized instruments, forms, and definitions can be used to determine averages/norms within the industry. These norms are then used to compare against individual providers. This will allow an individual organization to determine if their data exceeds or falls below the norms and to what degree. If an organization falls below a standard, then interventions to rectify the gap can then be developed and progress can be tracked to determine the effectiveness of the actions taken. Overall, benchmarking makes data more actionable by identifying performance gaps and acknowledging industry best practices.

The benchmarking process creates a standard to which providers can aspire to during goal setting. Benchmarking can also involve setting a specific level of performance that an industry wants to reach or compare against. Equally important, benchmarks allow the comparison of data between similar organizations. Organizational similarities can include location, revenue, and/or service characteristics. Providers that implement action plans based on the benchmarking outcomes will be able to optimize their efforts to improve performance.

Types of Benchmarking

Internal Benchmarks

Internal benchmarking is used when providers want to compare and contrast their historical performance, such as comparing one year's data with another. This process allows providers to track, analyze, and trend their performance over time, or compare different locations within the same organization.

National Home Infusion Foundation

External Benchmarking

External benchmarking establishes a frame of reference for judging results. It is a tool that provides key information on how one provider's service measures up against other "similar" providers. Without this added context, providers lack the perspective of what constitutes good performance. There are three types of external benchmarking as described below.

- National/Industry Benchmarks – These benchmarks are established by aggregating data from a wide range of providers for a particular metric. National benchmarks are the gold standard for measuring individual performance to a industry norm.
- Local Peer Comparable – These benchmarks are most insightful when they are formulated with a group of providers that closely match in characteristics. To achieve this goal, data will be collected about the participating locations.
- Best-in-class Comparable – This is data collected from providers that have won awards or otherwise been recognized for being a high performer in a specific benchmark.

Role of NHIF and Strategic Healthcare Programs

NHIF is a not-for-profit, 501(c)(3) affiliate of the National Home Infusion Association. The mission of NHIF is to advance the field of home infusion through research, leadership and education programs. Benchmarking programs will be funded and administered through NHIF as a research initiative. Data submitted from individual organizations will be used in accordance with all aspects of the Ethics Code of the American Association of Public Opinion Researchers (AAPOR), thereby protecting respondent confidentiality. Data received by NHIF (via a third-party data administrator) will be de-identified, therefore NHIF will never have the ability to associate the raw, extracted data with any individual provider who participates in benchmarking. NHIF will not sell or otherwise provide participating location contact information to anyone, and will retain ownership of all raw data and benchmarks.



Strategic Healthcare Programs (SHP), an affiliate of Managed Healthcare Associates Inc. (MHA), is a data analytics and benchmarking company that supports post-acute care providers in their efforts to improve quality, patient satisfaction, and overall performance. SHP has a long history of collecting and benchmarking home infusion quality data. As a partner to NHIF, SHP is held to the same ethical standards and restrictions regarding ownership, confidentiality and data security; including shielding data from their affiliates. SHP offers support to NHIF by providing participants with a unique identification code that permits the anonymous submission of data and in some instances, collecting data directly for aggregation to NHIF. NHIF will the conduct the data analysis and determine the industry benchmarks

National Home Infusion Foundation

How to Participate

Participation in NHIF benchmarking is done at the individual home infusion location level. Multi-site organizations can evaluate each location's readiness to contribute validated data to the benchmarking program and phase-in participation if needed. Each home infusion location will be evaluated by NHIF for compliance with the benchmarking participation criteria prior to receiving their validation certificate. (See the section on Recognition of Validation.) Individual locations must receive authorization from the corporate entity/owner in order to participate in NHIF benchmarking programs. Upon signing the NHIF Participation Agreement, each location will receive a Data Participation Code (DPC). This code will be submitted with each transaction to enable the data administrator and NHIF to track and confirm data transfers in an anonymous manner. Only members of NHIA may participate in benchmarking.

Status at Discharge Benchmark Metric

Metric category: Required Core Metric.

*This metric is required in order to participate in any other clinical benchmarking programs (i.e. 30-Day Hospital Readmission).

Total quarterly minimum participation to report the benchmark:

Individual locations = 20

Patient sample size = 750

Purpose

NHIF proposes this metric to serve as a baseline for other clinical outcome data that will eventually be included in the benchmarking program. Information provided from this metric will inform what additional clinical outcome data should be pursued. Discharge data will also be used to validate data from other benchmarking metrics. Providers will be required to contribute data to this metric in order to participate in all other benchmarking metrics that report clinical outcomes. (Note: This metric is not required for participation in patient satisfaction benchmarking.)

Individual providers will be able to use this data to quantify success rates associated with various home infusion therapies and patient populations. Providers can use this data to investigate and modify their clinical practice to reduce patient discharges due to unplanned hospitalizations, adverse reactions, and other therapy-related complications.

Participation Criteria

Providers wishing to participate in the Status at Discharge Benchmark must:

1. Adopt, collect, and report data according to the NHIF standard therapy categories.

Standardized therapy categories were published by NHIF in October of 2018 to facilitate consistent analysis of benchmarking results by therapy type. This data will be analyzed and reported by therapy category. (See Appendix A for a list of standardized therapy categories.)

National Home Infusion Foundation

2. Adopt, collect, and report data according to the standard NHIF discharge reason categories for individual patients.

- NHIF benchmarking metrics require participating providers to follow the **Standard Definitions for Patient Outcome Data Elements** published in 2016 and revised in October of 2019. These definitions ensure consistent application of the standardized Discharge Reasons. (See Appendix C)
- (Note: NHIF has also made proposed revisions to the standard Discharge Reasons to facilitate benchmarking. Please also review the proposed revisions to these definitions, which are also published on the NHIF website.)
- For example, the assignment of “Therapy Complete” as a discharge reason must have a consistent meaning across all providers participating in the benchmarking program.
- Providers may still utilize more detailed reason codes within their software programs to categorize patient discharges as long as data can be consolidated to the broader reason in the NHIF definitions for reporting in the benchmarking program.
- For example: A provider may want to collect more specific data relate to the NHIF reason “Change in Eligibility.” Providers may break this category down into more detailed reasons such as, unsafe home environment, loss of IV access, or unable to adhere to the home infusion regimen; however, NHIF would only collect the data under the broader standard definition reason.

3. Adopt an organizational policy describing the methods for identifying benchmarking eligible patients and exclusions, employee training plan, and data collection procedures.

- The organizational policy outlines the sources of data (e.g. reports used for identifying eligible and excluded patients, patient demographic information, and discharge status.)
- Identifies procedures for training employees on the standard definitions.
- Identifies procedures for internal review and validation of data.

4. Agree to submit data for all eligible patients.

5. Sign the NHIF and SHP participation agreements as applicable.

Benchmarking Metric

Metric Definition: Data will be reported as a percentage of patients discharged from infusion therapy for the following reasons:

- Therapy Completed

National Home Infusion Foundation

- Expired
- Unplanned Hospital Readmission
- Change in Eligibility
- Insufficient Response/Complication
- Adverse Drug Reaction (ADR)
- Access Device Related
- Changed Infusion Provider
- Other

Numerator: Patients discharged by reason

Denominator: Total patients discharged during the benchmarking sample interval.

Examples:

Numerator: Total patients on antimicrobial therapy discharged with the reason “Therapy Complete” = 700

Denominator: Total patients on antimicrobial therapy discharged in the sample month = 750

Benchmark for Therapy Complete = 0.933 (93.33%)

*Results will be cross-tabulated by therapy category, access device, and age.

Numerator: Total patients on antimicrobial therapy discharged with the reason ADR = 35

Denominator: Total patients on antimicrobial therapy discharged in the sample month = 750

Benchmark for ADR = 0.0467 (4.67%)

Reporting Interval: Quarterly

Definitions:

To ensure valid comparisons and thus actionable results, all data needs to be reported using standardized terminology and definitions. Participants in the program must agree to adopt the standard definition for each of the following discharge reasons.

Therapy Complete applies to any patient who is discharged from services because they no longer require infusion therapy. This discharge status is applied to patients that have completed the infusion therapy according to the prescribers orders and have achieved sufficient clinical improvement.

The following are examples of patients who are considered “Therapy Complete” at the time of discharge:

- A patient for whom a physician order is received to end infusion treatment.

National Home Infusion Foundation

- An anti-infective patient that fulfills the prescribed course of IV therapy and then switches to an oral medication.
- A parenteral nutrition patient that converts to an oral diet.

Change in eligibility includes, but is not limited to., unsafe home environment, lack of caregiver support, reimbursement challenges, lack of desire for home treatment or unable to comply with treatment orders.

Examples of patients discharged because of a change in eligibility include:

- A patient who changes insurance plans requiring infusions to be give in another site of care such as a hospital outpatient clinic or physician office.
- A patient who transfers to a skilled facility due to a lack of caregiver support in the home setting.

Insufficient Response includes an exacerbation of the condition and/or symptoms being treated with home infusion therapy.

Example of a patient who would be discharged because of an insufficient response to therapy:

- A patient with osteomyelitis requires amputation after receiving several weeks of treatment with parenteral antimicrobials without improvement.

Changed Infusion Provider refers primarily to situations where the current infusion provider is unable to meet the patient's needs.

Examples:

- The patient requires a drug that cannot be acquired due to sole source distribution or shortages.
- A patient who moves outside of the infusion provider's service area.
- The patient elects to use a different home infusion provider or different infusion care setting.
- The infusion provider is not in network with the patient's payer source.

Inclusion Criteria:

- Any patient that was active to the infusion provider for four (4) or more days and received at least one infusion treatment at home or in the infusion suite/clinic. *Infusion treatment means the administration of a drug or nutrition product using a catheter or access device.
- The inclusion of enteral patients is optional.

Exclusion Criteria:

- Catheter care patients

National Home Infusion Foundation

- Patients using self-injectable medications that do not require a catheter for administration
- Hospice patients

Required Data Elements:

- Patient identifier (unique patient ID assigned by the provider location)
- Patient age
- Site of care (i.e. home, infusion suite/clinic)
- Discharge reason
- Therapy category
- Access device type
- For patients with ADR as the discharge reason, severity of ADR

Recognition of Validation

Locations that satisfy the benchmarking participation criteria will receive an NHIF Data Validation Certificate and insignia. The insignia may be printed on the individual location-based reports and materials to indicate the location's data has been independently verified to comply with NHIF standards.



Data Collection and Reporting

NHIF intends to publish industry benchmarks on a quarterly basis according to the calendar year (e.g., January to December) once the participation thresholds are met. Likewise, data will be collected from participating locations on a quarterly basis. A location must be able to submit data for the entire quarter to participate in any given benchmarking interval. The definitions below describe the various timeframes for collecting and reporting data.

Sample Month is the month in which a patient becomes eligible for reporting due to being discharged from infusion services.

Benchmarking Interval is a three (3) month period during which an organization may participate in benchmarking and for which a national standard will be published. The calendar year is divided into four (4) intervals as follows: January to March, April to June, July to September, and October to December.

Program Timelines

Locations may begin applying for participation in the Status at Discharge benchmarking program starting in May of 2020 for the first data collection interval beginning October 1, 2020. Locations may apply to participate in a

National Home Infusion Foundation

benchmarking interval once they can submit data for the entire interval (3 months). The application deadline for each benchmarking interval is the 15th day of the month prior to the start of the interval (E.g., for the interval of January 1, 2021, to March 31, 2021, the deadline for applications is December 15, 2020).

Pilot

A pilot study to test the program participation criteria and target timelines will be conducted from May 1, 2020 to July 31, 2020. Organizations interested in participating in the pilot study may inquire by sending an email to NHIFdata@nhia.org. The deadline to apply for participation in the pilot is March 31, 2020.

Questions

Inquiries about this project may be directed to NHIFdata@nhia.org.

Appendix A

Standard Therapy Categories for NHIF Benchmarking Programs

- Anti-infective/antimicrobial (antibiotics, anti-fungals, anti-virals)
- Parenteral nutrition
- Enteral Nutrition
- Hydration
- Pain
- Inotropic
- Anti-neoplastic chemotherapy
- Immune globulin – IV
- Immune globulin – SC
- Bleeding disorder
- Biologic - other (e.g. monoclonal antibodies, enzymes)
- Other (non-biologic) (e.g. steroids, anti-emetic)
- Catheter care

Appendix B

Standard Access Device Categories for NHIF Benchmarking Programs

Infusion Therapy Access Devices

- Central Venous Catheter (CVC), tunneled, cuffed
- Central Venous Catheter (CVC), non-tunneled
- Implanted port
- Intrathecal
- Epidural
- Peripheral (PIV)
- Peripherally inserted central catheter (PICC)
- Midline
- Subcutaneous
- Other: _____

Enteral Nutrition Access Devices:

- Nasogastric tubes (NGT)
- Nasojejunal tube (NJT)
- Jejunostomy tube
 - Examples:
 - Percutaneous endoscopic jejunostomy (PEG-J)
 - Surgical jejunostomy (JEJ)
- Gastrostomy tube
 - Examples:
 - Percutaneous endoscopic gastrostomy tubes (PEG)
 - Radiologically inserted gastrostomy (RIG)

Appendix C

NHIF Discharge Reasons

- Therapy Complete
- Expired
- Unplanned Hospitalization
- Change in eligibility
- Insufficient response/ complication
- Adverse Drug Reaction
- Access Device Related
- Changed Infusion Provider
- Other:

Additional Information:

Therapy Complete applies to any patient who is discharged from services because they no longer require infusion therapy. Usually, this discharge status is applied to patients that have completed the infusion therapy according to the prescribers orders and have achieved sufficient clinical improvement.

The following are examples of patients who are considered “Therapy Complete” at the time of discharge:

- A patient for whom a physician order is received to end infusion treatment.
- An anti-infective patient that completes a course of IV therapy and then switches to an oral medication.
- A parenteral nutrition patient that converts to an oral diet.

Change in eligibility includes, but is not limited to: unsafe home environment, lack of caregiver support, reimbursement challenges, lack of desire for home treatment or unable to comply with home treatment orders.

Examples of patients discharged because of a change in eligibility include:

- A patient who changes insurance plans requiring infusions to be give in another site of care such as an outpatient clinic or physician office.
- A patient who transfers to a skilled facility due to a lack of caregiver support in the home setting.

Insufficient Response includes an exacerbation of the condition and/or symptoms being treated with infusion therapy.

Example of a patient who would be discharged because of an insufficient response to therapy:

- A patient with osteomyelitis requires amputation of a limb after receiving several weeks of treatment with parenteral antimicrobials without improvement.

Changed Infusion Provider refers primarily to situations where the current infusion provider is unable to meet the patient's needs.

Examples:

- The patient requires a drug that cannot be acquired due to sole source distribution or shortages.
- A patient who moves outside of the infusion provider's service area.
- The patient elects to use a different infusion provider or infusion care setting.