NHIF
National Home Infusion Foundation

Status at Discharge Benchmarking Guide

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Introduction

Benchmarking in the health care industry collects measurable performance data to develop quality standards based on aggregating information from a wide range of providers. When multiple providers participate, it adds context for comparing results from one location to standards determined through reporting from locations across the entire industry. National benchmarks are the gold standard for measuring individual performance, and reporting over time encourages continuous quality improvement. Applying benchmarking in home infusion is a process of identifying where action can be specifically directed and monitored.

NHIF Benchmarking Programs

- Status at Discharge
- Patient Satisfaction
- 30-Day Hospital Readmission Rate

Types of Benchmarking

Internal Benchmarking

Internal benchmarking is used when providers compare 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

External Benchmarking

External benchmarking establishes context 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.

Role of NHIF

NHIF is a not-for-profit 501(c)(3) affiliate of the National Home Infusion Association. The mission of NHIF is to advance infusion practice through research, leadership, and education programs. Benchmarking programs are funded and administered through NHIF as a research initiative. Data submitted from individual organizations is used following all aspects of the Ethics Code of the American Association of Public Opinion Researchers, thereby protecting respondent confidentiality. Data received by NHIF is de-identified, and 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 retains ownership of all raw data and benchmarks.

Data De-identification

A unique data participation code (DPC) is assigned to each location using a third party to de-identify the provider with their data. Data is submitted using a secure data entry portal available through registration by the provider entering a new password and using their DPC code. The DPC code and password-protected data entry portal maintain provider privacy. Provider data is anonymous to NHIA/NHIF.

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

Status at Discharge Benchmark Metric

Purpose

NHIF proposes this metric as a baseline for other clinical outcome data. Discharge data will be used to validate data from other benchmarking metrics.

Individual providers will 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.

Benchmarking Metric Definition

The percentage of patients discharged from infusion therapy for standardized discharge reasons

Metric category: Core Metric

Total quarterly minimum number of patient cases for determining participation in benchmarks:

Individual locations = 20; or
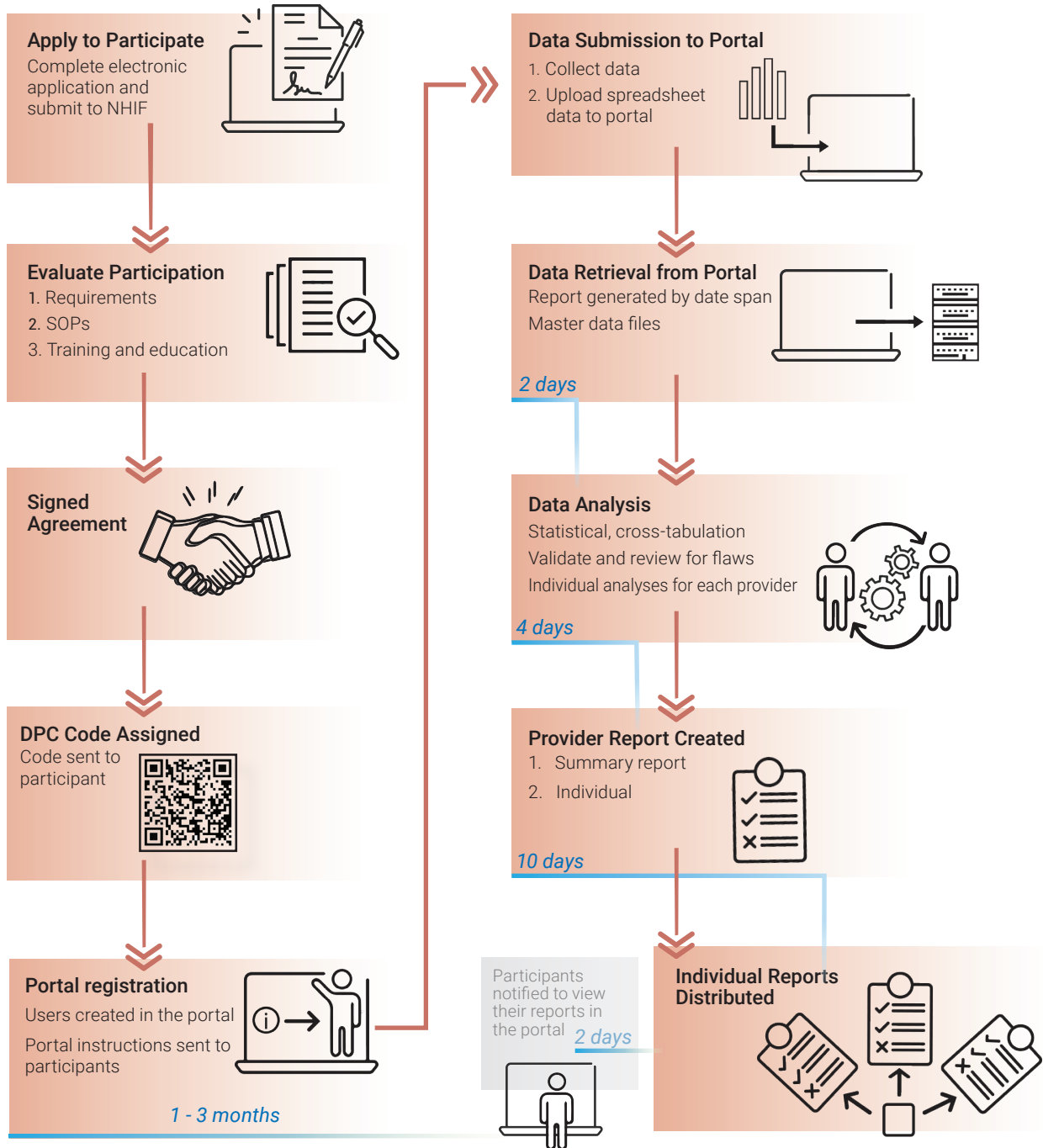
Quarterly Patient sample size = 1000

Participation Criteria

Providers participating in the status at discharge benchmark must:

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

    NHIF published standardized therapy categories to facilitate consistent analysis of benchmarking results by therapy type. In addition, this requirement ensures providers can quickly identify patients eligible for inclusion in the benchmarking metric. (Table 1: Required Data Elements)

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.* These definitions ensure consistent application of the standardized Discharge Reasons.

    *   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 use 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.

3. Adopt, collect, and report data using the NHIF categories for access device type.

    NHIF published standardized categories for access device types. This metric requires providers to classify access devices according to the NHIF standard definitions to facilitate analysis that may identify trends in access device utilization related to unplanned hospitalizations. (Table 1: Required Data Elements)

4. Adopt an organizational policy describing the methods for identifying eligible patients and exclusions, conducting employee training, and designing data collection procedures.
   - The organizational policy outlines the data sources (e.g., reports used for identifying eligible and excluded patients, patient demographic information, and unplanned hospitalization events, reasons, and outcomes.)
   - Identifies procedures for training employees on the standard definitions.
   - Identifies procedures for internal review and validation of data.

5. **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 venous access device or subcutaneous access device.
   - The inclusion of enteral patients is optional.

6. **Exclusion Criteria:**
   - Catheter care patients
   - Patients using self-injectable medications that do not require an access device for administration
   - Hospice patients

7. Agree to submit data for all eligible patients.

8. Sign the NHIF participation agreements as applicable.

Benchmarking Process

Apply to Participate
Complete electronic application and submit to NHIF

Evaluate Participation
1. Requirements
2. SOPs
3. Training and education

Signed Agreement

DPC Code Assigned
Code sent to participant

Portal registration
Users created in the portal

Portal instructions sent to participants

1 - 3 months

Data Submission to Portal
1. Collect data
2. Upload spreadsheet data to portal

Data Retrieval from Portal
Report generated by date span
Master data files

2 days

Data Analysis
Statistical, cross-tabulation
Validate and review for flaws
Individual analyses for each provider

4 days

Provider Report Created
1. Summary report
2. Individual

10 days

Participants notified to view their reports in the portal *2 days*

Individual Reports Distributed

NHIF Benchmarking Data Submission Timeline

Quarter	Enrollment Deadlines	Sample Months	Data Collection Deadlines	Data Submission Deadlines	Report Available
Q1	Dec 15	January	Feb 15	Apr 30	May 31
		February	Mar 15		
		March	Apr 15		
Q2	Mar 15	April	May 15	Jul 30	Aug 31
		May	Jun 15		
		June	Jul 15		
Q3	Jun 15	July	Aug 15	Oct 31	Nov 30
		August	Sep 15		
		September	Oct 15		
Q4	Sep 15	October	Nov 15	Jan 31	Feb 28
		November	Dec 15		
		December	Jan 15		

Data Collection and Reporting

1. Required Data Elements (Table 1) will be coded and entered in an Excel® spreadsheet. A formatted spreadsheet is provided and includes the data elements listed in Table 1. In addition to this table providing the data elements it provides information on how the data will be coded. In most cases, a number, that refers to a given response, will be entered into the data cell.

2. Data Portal Instructions for Use (Appendix D)
   a. Register for an online account.
   b. Access the portal website to register.
   c. Enter the assigned DPC code as the Username
   d. Registered DPC accounts require approval through NHIF and become available for access within 1-2 business days.

3. Each DPC account is linked to a portal folder containing any individual reports that have been created for that DPC code.

4. Use Data Collection and Submission Tool (Excel®) for collecting data to submit to the portal (see Table 1 and Appendix C).

5. File Naming Convention: DPC#monthyearDC Example: DPC is 123456, the file name for the July Status at Discharge would be 123456july2021DC.

6. Provider Report Access
   a. Located in the NHIF Benchmarking Data Portal (See Appendix A: Sample Provider Report and Appendix D: NHIF Benchmarking Data Portal Instructions)

Table 1: Required Data Elements

Patient Data	Field Description and Data Codes	Data Collection Column (for use with Excel®)	Excel® Column Letter
Data Participation Code	This field is the Data Participation Code (DPC) that was assigned to each participating location. Data analysis will be linked to this code. Data from multiple participating locations can be included in the same file as long as the DPC code for each location is entered into Column A.	dpc	A
Patient ID	This field is the unique ID assigned by the home infusion provider. Patient names should not be entered	patid	B
Sample Month	This field should be set to the first day of the sample month for submitting patient data. The format for date is MM/DD/YYYY. Example: If entering data for a patient that was discharged on October 7, 2021, the sample month would be entered as 10/01/2021.	sammon	C
Patient Age	This field should contain the patient's age in years, in digit format, on the date of initiation of services. Do not submit the patient date of birth in this column.	ptage	D
Patient Gender	This field contains patient gender. Valid values for this field are: 1 - Male 2 - Female M - Missing/Unknown	ptgen	E
Site of Care	This field contains the patient's site of care Valid values for this field are: 1. Home 2. Infusion Suite/Clinic	siteoc	F
Therapy	This field contains the patient's primary therapy type (for patients discharged from multiple therapies, submit a single primary therapy per patient): Valid values for this field are: 1. Anti-infective/antimicrobial (antibiotic, anti-fungal, anti-viral) 2. Parenteral nutrition 3. Enteral 4. Hydration 5. Pain 6. Inotropic 7. Antineoplastic chemotherapy 8. Immune globulin – IV 9. Immune globulin – SC 10. Bleeding disorder 11. Biologic – other (e.g., monoclonal antibodies, enzymes) 12. Other (non-biologic) (e.g., steroids, anti-emetic)	therapy	G

Table 1: Required Data Elements *(continued)*

Patient Data	Field Description and Data Codes	Data Collection Column (for use with Excel®)	Excel® Column Letter
Access Device	This field contains the type of access device used for the home infusion therapy (for patients with multiple access devices, report the primary access device for the therapy provided). Valid values for this field are: 1. Central Venous Catheter (CVC), tunneled, cuffed 2. Central Venous Catheter (CVC), non-tunneled 3. Implanted port 4. Intrathecal 5. Epidural 6. Peripheral (PIV) 7. Peripherally inserted central catheter (PICC) 8. Midline 9. Subcutaneous 10. Other (The write-in response will be in column "I")	acdevice	H
Access Device Other	This field contains the "other" write-in response for the type of access device used. Leave this column blank if there was no write-in response.	otherg	I
Enteral Access Device	If 3 (ENTERAL NUTRITION) was indicated as the therapy type in Column G of the Excel data entry file, indicate the type of access device that was used. Leave the data cell empty if enteral nutrition was not the therapy type. Valid values for this field are: 1. Nasogastric tubes (NGT) 2. Nasojejunal tube (NJT) 3. Percutaneous endoscopic either/or jejunostomy, gastrostomy (PEG) 4. Jejunostomy tube 5. Gastrostomy tube 6. Other	entaccd	J
Discharge Reason	This field contains the reason the patient was discharged. Valid values for this field are: 1. Therapy completed 2. Patient Expired 3. Unplanned hospitalization 4. Change in eligibility 5. Insufficient response/complication 6. Adverse drug reaction (ADR) 7. Access device related 8. Change infusion provider Other: (If this option is chosen, you must write-in column L what the "other" is)	dischrea	K

Table 1: Required Data Elements *(continued)*

Patient Data	Field Description and Data Codes	Data Collection Column (for use with Excel®)	Excel® Column Letter
Discharge Reason Other	This field contains the "other" write-in response for the reason the patient was discharged. Leave this column blank if there was no write-in response.	otherj	L
Adverse Drug Reaction Severity	If the reason for patient discharge was "6" (Adverse drug reaction) for Column K, select the severity of the ADR. If the reason for discharge was not ADR leave this data cell blank. Valid values for this field are: 1. Mild (An experience that is usually transient and requires no special treatment or intervention.) 2. Moderate (An experience that is alleviated with simple therapeutic treatments.) 3. Severe (An experience that requires therapeutic intervention. If hospitalization is required for treatment it becomes a serious adverse event.) 4. Serious (Any adverse event resulting in any of the following outcomes: Death, a life-threatening condition, inpatient hospitalization or prolongation of existing hospitalization, persistent or significant disability/incapacity, or a congenital anomaly/birth defect.)	adrtype	M

Revision History

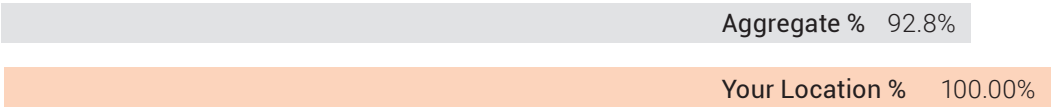|	
12/31/2021	Content reorganized. Table of Contents added. Gender added to the data collection. Removed catheter care therapy from the data collection. New column added to the data collection to provide a free text option for "other" as a discharge reason. Enteral access devices updated to incorporate "percutaneous endoscopic either/or jejunostomy, gastrostomy (PEG)." Data collection and reporting instructions incorporated.
1/1/2020	Updated
11/1/2019	New

Appendix A: Sample Provider Report

Quarter 2 2021 Results: *4/1/2021 - 6/30/2021*
Location results: DPC

I. Benchmark for % of Patients Receiving Anti-infective Therapies Achieving "Therapy Completed" Status at Discharge

	Aggregate Sample Size	Your Location
DPC Sample Size	973	62

Status at Discharge Benchmark Metric	Aggregate %	Your Location %
Therapy Completed (%): Anti-infectives	92.81%	100.00%

Therapy Completed Anti-infective
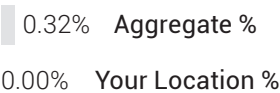
Aggregate %	92.8%
Your Location %	100.00%

II. Benchmark for % of Patients Discharged Due to an Adverse Drug Reaction (all therapies)

	Aggregate Sample Size	Your Location
DPC Sample Size	1,239	70

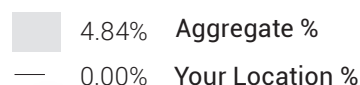| Status at Discharge Benchmark Metric	Aggregate %	Your Location %
Patients Discharged Due to an Adverse Reaction (all therapies)	0.32	0.00

Adverse Drug Reaction

0.32% Aggregate %

0.00% Your Location %

III. Benchmark for % of Patients Discharged Due to an Unplanned Hospitalization (all therapies)

	Aggregate Sample Size	Your Location
DPC Sample Size	1,239	70

Status at Discharge Benchmark Metric	Aggregate %	Your Location %
Patients Discharged Due to an Unplanned Hospitalization (all therapies)	4.84	0.00

Unplanned Hospitalization

▢	4.84%	Aggregate %
—	0.00%	Your Location %

Appendix B: Discharge Reasons and Standard Definitions for Patient Outcome Data Elements

1. Therapy Complete applies to any patient who is discharged from services because they no longer require infusion therapy.
   a. A patient for whom a physician order is received to end infusion treatment.
   b. An anti-infective patient completes a course of IV therapy and then switches to oral medication.
   c. A parenteral nutrition patient that converts to an oral diet.

2. Patient Expired

3. Unplanned Hospitalization

4. Change in Eligibility includes, but is not limited to:
   a. An unsafe home environment, lack of caregiver support, reimbursement challenges, lack of desire for home treatment, or noncompliant with home treatment orders.
   b. A patient who changes insurance plans requires infusions in another care site such as an outpatient clinic or physician's office.
   c. A patient who transfers to a skilled facility due to a lack of caregiver support in the home setting.

5. Insufficient Response/Complication includes a worsening of the condition or symptoms being treated with infusion therapy.
   a. A patient with osteomyelitis requires amputation after receiving several weeks of treatment with parenteral antimicrobials without improvement.

6. Adverse Drug Reaction (ADR)

7. Access Device Related

8. Changed Infusion Provider refers primarily to situations where the current infusion provider is unable to meet the patient's needs.
   a. The patient requires a drug that cannot be acquired due to sole source distribution or shortages.
   b. A patient who moves outside of the infusion provider's service area.
   c. The patient elects to use a different infusion provider or infusion care setting.

9. Other (free text entry field)

Appendix C: Sample Data Collection and Submission Tool (Excel®)

Sample Data Collection Tool

dpc	patid	sammon	ptage	ptgend	siteoc	therapy	acdevice	otherg	entaccd	dischrea	otherj	adrtype
123456	65579	09/01/2021	75	2	1	2	1			6		1

Appendix D: Creating and Accessing the NHIF Portal

Creating/Accessing Your NHIF Portal Account

Use the link below to create and access your NHIF Portal account.
** If you have already registered for your account skip to page 3.

NHIF Benchmarking Portal

NHIF
National Home Infusion Foundation

Login

Username

Password

☐ Remember Me

Sign in

》 Register   Forgot your password?

If this is the first time accessing the NHIF Portal you will need to register for an account.

Click the Register link, your **Username** must be the personalized **DPC Code** that has been provided to you.

**NOTE: If your company has multiple locations/DPC codes participating in a NHIF program you will need to register each code separately.

The email address & password you enter when registering is your choice, that password will be required every time you log into your account.

Register

Username

> 123456

Email

> jennifer.lyons@nhia.org

Password

> ••••••

Confirm Password

> ••••••

Register

Sign in   **Forgot your password?**

Once you have registered a DPC account we will approve it on our end and link each DPC account to a folder that will contain all individual reports that have been created for that DPC code. All reports will be placed in this file; you will be able to log-in and access that folder and your reports anytime using the same portal link.

NHIF Benchmarking Portal

Login

Username

>

Password

>

Sign in

☐ Remember Me

Effective 3/1/2021 we will ask you to start using the portal to both access reports and to submit your data for any of the NHIF Benchmarking and Research programs.

Each DPC account will have a folder structure created by NHIF for Reports and Data Submissions, you only need to use the folders for the programs you are participating in.

NHIF Portal Folder Structure

- **DPC Folder 123456**
  - **NHIF Reports**
    - 30 Day HRA Reports
      - 2021 30 Day HRA Reports
    - Patient Satisfaction Reports
      - 2021 Pt Satisfaction Reports
    - Status at Discharge Reports
      - 2021 Status at Discharge Reports
  - **DPC Data Uploads**
    - 30 Day HRA Reports – Data Upload Files (HRA = Hospital Re-Admission)
      - 2021 30 Day HRA – Data Upload Files
    - Pt Satisfaction – Data Upload Files
      - 2021 Pt Satisfaction – Data Upload Files
    - Status at Discharge – Data Upload Files
      - 2021 Status at Discharge – Data Upload Files
    - Clinical Services Study – Data Upload Files
      - 2021 Clinical Services Study – Data Upload Files
    - Telehealth Study – Data Upload Files
      - 2021 Telehealth Study – Data Upload Files

Document Listing

Click on **"DPC Data Uploads"**

+ Manage Your Uploads

📁 DPC Data Uploads

📁 NHIF Reports

Document Listing

Click on the folder for the program for which you are submitting data — **ie: Pt**

+ Manage Your Uploads

⬅ Previous folder

📁 30 Day HRA – Data Upload Files

📁 Clinical Services Study – Data Upload Files

📁 Pt Satisfaction – Data Upload Files

📁 Status at Discharge – Data Upload Files

📁 Telehealth Study – Data Upload Files

Document Listing

Click on Folder for the Year/Qtr you are submitting for

← **Previous folder**

📁 **2021 Pt Satisfaction – Data Upload Files**

📁 **2021 Pt Satisfaction – Data Upload Files**

Document Listing

+ Manage Your Uploads

← **Previous folder**

📁 **Qtr 1 2021**

📁 **Qtr 2 2021**

Once you have chosen the folder where you want to put your data click the + "Add your file"

Manage Uploads

🏠 Start > DPC Data Uploads > Pt Satisfaction - Data Upload Files > 2021 Pt Satisfaction - Data Upload Files > **Qtr 2021**   🔍 ⬆ ⋮ 🔄

← **Previous folder**

Add your file   **+**

Select the files you want to upload, you will see them populate in the portal.

Manage Uploads

Once you have uploaded all of your file you log out of the Portal.