

Making Headway with Standardizing Definitions for Alternate-Site Infusion Data Collection

—Results from the 2012 NHIA Data Definitions Survey

by Nancy Kramer, R.N., B.S.N., CRNI®, NHIA Vice President of Clinical Affairs



Nancy Kramer, R.N., B.S.N., CRNI®

In 2010, more than 280 individually licensed home infusion pharmacy locations responded to the Phase I NHIA Provider Survey, the first official data collection effort in our multi-year NHIA Industry-Wide Data Initiative. We learned a great deal from that survey, not only about the size and scope of our industry, as well as providers' willingness to share and interest in receiving aggregate data, but also about the challenge of collecting and benchmarking data across a wide range of provider organizations. We discovered that even those data points that seem simple—such as how many patients received infusion therapy from your pharmacy in the last calendar year—become incredibly complex when you start to collect the data from a variety of different information systems and perspectives!

The **2012 NHIA Data Definitions Survey** (launched in the second half of 2012) was the logical next step in our multi-phase data effort, and 25% of our company members took that step with us (a favorable response rate for a survey of this type). It is our provider member companies seeking to compare their financial, operational and, ultimately, clinical performance against industry-specific aggregate results, that must drive the standardization of key metric definitions for the alternate-site infusion field. According to this survey's results, the majority of respondents were not only in agreement with our proposed standardized definitions, but were already collecting data basically in accordance with those definitions—and when asked, were willing to report such data in the next comprehensive provider survey.

2012 Data Definitions Survey Results

With a goal of standardizing key data metrics across the industry, the NHIA Data Initiative Work Group set about creating a set of proposed data definitions for key demographic, financial, operational, human resource-related and outcomes metrics. Then, in the **2012 NHIA Data Definitions Survey**, we asked providers three basic questions in response to most of the proposed definitions:

1. Does your company agree with the proposed definition?
2. Is your company reporting system capable of providing this data in accordance with the proposed definition?
3. Is your company willing to provide this data in a future NHIA data initiative survey? (**Note:** this question was only asked for those measures not previously defined and collected in the **2010 NHIA Provider Survey**)

The NHIA provider organizations that answered the call for standardized definitions, reflected a productive mix of respondents from single-site, multi-site and national providers (see **Table 1** on page 17)—yielding the most representative sample of the NHIA provider membership, as a whole, that we have received via our survey efforts to date.

Table 2 (An Excerpt of the 2012 NHIA Data Definitions Survey Results on pages 18-19) provides a detailed summary of several of the data definitions for key metrics proposed by the Data Initiative Work Group—and the degree to which survey respondents agreed with them. Additional information gathered in the survey, including provider comments and rationale, can soon be found in the complete **2012 NHIA Data Definitions Survey Analysis Report** that is scheduled to be posted to the NHIA Industry-Wide Data Initiative website

Table 1—2012 Data Definitions Survey Response Rate

2012 NHIA Data Definitions Survey Response Rate	Survey Responses		Membership Response Rate	
	# Completed Surveys	% Completed Surveys	# Companies Reported/ Total Members	% Member Companies Reported
Single-Sites	74	83%	74/320	23%
Multi-Sites	12	13%	12/33	36%
National	3	3%	3/4	75%
Total	89	100%	89/357	25%



standardized data definitions into the next comprehensive NHIA provider survey (our “Phase II Provider Survey,” now under development), we are simultaneously exploring how to automate even more of the survey data collection via an expanded data collector tool, similar to the one developed by Rock-Pond Solutions for the 2010 NHIA Phase I Provider Survey. Simplifying data collection, while increasing our confidence in the validity and comparability of the results, is a key goal for the NHIA Phase II Provider Survey—which, once completed and launched, will further expand the meaningful collection scope of significant demographic, financial, operational, human resource-related and clinical outcomes metrics.

If you are not yet involved in these efforts, or you have questions about this vital data initiative, please contact NHIA today via **Kristen.santaromi-**

(www.nhia.org/data) later in the second quarter of 2013.

The **2012 NHIA Data Definitions Survey** demonstrates our industry’s readiness to advance the field through the uniform collection and reporting of key performance measures. The next crucial step is provider-adoption of these definitions, by not only creating efficient data collection procedures but also educating all staff involved in the process. As more provider companies consider how their staff can utilize software systems to collect, store and report these key elements

of data, our ability to engage in industry-wide benchmarking will grow. In order to strengthen our vital aggregate data and publish evidence of the effectiveness of alternate-site infusion therapy, **provider companies in our field—you and your organization—must first collectively adopt common definitions that will allow comparison of results.**

Next Phase of the NHIA Industry-Wide Data Initiative—The Phase II NHIA Provider Survey

As we strive to incorporate these

Make plans to attend *the* BIG EVENT!



Tuesday, April 9, 2013 | 7:30 to 11:00 pm
Hilton Anatole | The Verandah Club | 2nd Floor, Shelbourn Room

DRINKS • HORS D’OEUVRES • NETWORK • PRIZES

Visit CPR+ booth #311 or MSD booth #517 to learn about our exclusive supply chain management integration and pick up your VIP tickets.

Can't attend, visit www.cprplus.com/msd or www.msdonline.com/cprplus.

ta@nhia.org or 703-838-2661. One day, a national normative database for alternate-site infusion benchmarking and the development of field-specific best practices will be attained—and the achievement of that goal starts

right now, with you and your company adopting these standardized definitions. It is essential that as many member companies as possible support the future of the field (and, in the process, their own organization and patients)

by committing now to adopting our industry’s standardized data definitions, and to participating in the NHIA Phase II Provider Survey! ■

**Table 2—NHIA Industry-Wide Data Initiative
AN EXCERPT OF THE 2012 NHIA DATA DEFINITIONS SURVEY RESULTS:
Provider Agreement with Standardized Definitions**

DATA ELEMENT	PROPOSED DEFINITION	PERCENT OF PROVIDERS WHO...		
		Agree with the definition	Are able to report the data	Are willing to report the data in the next survey
SELECTED FINANCE DATA DEFINITIONS				
Net Infusion Revenue	Refers to the gross revenue* minus the contractual allowance** and discounts*** for infusion services only (includes all drugs, supplies, equipment and professional services required to deliver infusion therapy). * Gross Revenue - Gross revenue is defined as the sum of the list price for all items and services received by the patient. ** Contractual Allowance - The difference between the contracted rate with an insurance company and the gross revenue billed is referred to as a contractual allowance, *** Discounts - The difference between list price for all items and services and the amount billed to the payer/patient on claims, due to managed care or other agreements to discount price.	94%	91%	80%
Bad Debt Expense as a % of Net Revenue	Bad debt expense as a percentage of net revenue is calculated by taking bad debt expense for a specified period of time, divided by net revenue from the same period of time (multiplied by 100 to convert to a percent).	97%	90%	87%
Days Sales Outstanding (DSO)	DSO is calculated by taking the infusion service accounts receivable balance divided by average daily net revenue (as defined in the survey) over the most recent three month period.	94%	82%	89%
SELECTED HUMAN RESOURCES/OPERATIONS DATA DEFINITIONS				
Pharmacy Cost per Rx Dispensed	This calculation is based on Pharmacy salaries and benefits and the # of prescriptions dispensed. Divide total pharmacy costs by the number of prescriptions dispensed over the reporting period. These costs do not include overhead allocation.	76%	65%	79%
Cost per RN Visit	This calculation accumulates all field RN costs in a specified time period, and divides by the number of RN visits made in the same time period. Depending on staffing compensation models and company policy for use of vehicles, the costs included in this calculation may vary. These costs do not include overhead allocation. At a minimum, the following costs should be included (if applicable): <ul style="list-style-type: none"> • RN wages, taxes, and benefits • Mileage associated with RN visits • Expenses associated with company vehicles such as auto repairs, maintenance, gasoline • Depreciation on vehicles • Payments made to agencies for nursing visits (only if contracted visits are included in denominator) 	88%	53%	61%

DATA ELEMENT	PROPOSED DEFINITION	PERCENT OF PROVIDERS WHO...		
		Agree with the definition	Are able to report the data	Are willing to report the data in the next survey
SELECTED OUTCOMES DATA DEFINITIONS				
Adverse Drug Reaction (ADR)	"A response to a drug which is noxious and unintended and which occurs at doses normally used in man for prophylaxis, diagnosis, or therapy of disease or for modification of physiological function." (WHO Technical Report 498, 1972) WHO classification system to describe ADR severity: Serious, Severe, Moderate or Mild	99%	91%	90%
Catheter-Related Blood Stream Infection (CR-BSI)	Suspected CR-BSI: <ul style="list-style-type: none"> Patient has an IV catheter in place for at least 48 hours, and is exhibiting one or more clinical signs of infection (fever, chills, hypotension), and has no apparent source for the BSI except the catheter. Confirmed CR-BSI: <ul style="list-style-type: none"> At least one positive peripheral blood culture. If available, simultaneous quantitative blood culture from the catheter and a peripheral site with a >5:1 ratio of catheter to peripheral (e.g. the catheter sample grows at least 5 times the number of organisms compared to the peripheral sample). If available, differential time to positivity of > 2 hours catheter to peripheral blood culture (catheter culture appeared "positive" at least two hours before peripheral blood showed growth of the same organism). 	89%	54%	70%
Unscheduled Hospitalization	Applies when an active patient requires an unplanned stay of more than 23 hours in an acute care facility for any reason	98%	75%	75%
RELATED Unscheduled Hospitalization	A hospitalization associated directly with the IV medication, IV catheter or the condition being treated with IV therapy.	99%	63%	66%
UNRELATED Unscheduled Hospitalization	A hospitalization to treat a condition or event NOT associated with the IV medication, IV catheter or the condition being treated with IV therapy.	99%	63%	66%
Emergency Room Visit	Any visit to an acute care facility for immediate treatment resulting in a stay of less than 23 hours that occurred in an active patient for any reason.	100%	47%	54%
RELATED Emergency Room Visit	An emergency room visit associated directly with the IV medication, IV catheter or the condition being treated with IV therapy.	97%	42%	49%
UNRELATED Emergency Room Visit	An emergency room visit to treat a condition or event NOT associated with the IV medication, IV catheter or the condition being treated with IV therapy.	97%	42%	49%
Therapy Complete at Discharge	Applies to any patient who administered all prescribed doses at the time of discharge. <ul style="list-style-type: none"> Rule #1: Patients count as having completed therapy even if there were interruptions for adverse events, hospitalizations or catheter events. Rule #2: The designation "Therapy Complete" does not factor in progress toward specific therapy goals or continuation of oral antibiotics after cessation of IV treatment. 	94%	80%	79%