Making the Case for Patient Care Decisions
—Evidence-Based Health Care in Home Infusion is Achievable!
by Nancy Kramer, R.N., B.S.N., CRNI®, NHIA Vice President of Clinical Affairs

It’s a typical Friday night, one hour before closing, and the phone rings—a new referral for four weeks of IV antibiotics, being discharged this evening with the next dose due on Saturday at 8:00 am. The patient lives in a rural area, approximately 75 miles from the pharmacy, and has a peripherally inserted central catheter (PICC). How do you respond? With a well-oiled team that jumps into high gear to verify insurance benefits; check drug inventory; coordinate nursing visits with a local home health agency; and contact the patient to clinically assess the appropriateness of therapy based on the patient’s medication profile, current/past medical history, home situation and ability/interest in providing self-care.

As mentioned previously, a typical Friday night. But as the care for this patient comes together, a challenge emerges: the prescription calls for a saline-only flush for the PICC, which your organization’s experience has shown to be problematic for home-based patients. The physician’s agent is fairly insistent that the hospital from which the patient is being discharged has successfully transitioned all central venous access device care to saline-only flushes, and the prescribing physician wants to continue this at home. In your experience, accepting this order means being prepared to return to the pharmacy after-hours to contact the physician, obtain a prescription for alteplase, dispense the prescription, ship it to the patient’s home, and notify the home health agency of the potential need for up to two additional nursing visits to instill/withdraw the alteplase in an attempt to restore catheter patency—all with no assurance that the procedure will be fully covered by the patient’s insurance plan. The alternatives—a patient trip to the emergency room for alteplase instillation, or an occluded PICC that must be replaced, or a proactive order for heparin lock. Which of the above scenarios is the most cost-effective and least risky for the patient?

How do you make your case for a heparin lock? What “proof” do you have that a heparin lock for a home-based PICC presents less risk of complications and adverse effects for the patient than a saline flush? This month’s CE article is a great place to start. As authors Lyons and Phalen point out in their “Evidentiary Review of Flushing Protocols in Home Care Patients with Peripherally Inserted Central Catheters” (see page 32), evidence of safety and effectiveness of saline-only flushing for PICCs in the home is lacking. For providers to make their case for heparin, organizational outcomes can be shared, along with this evidentiary review, to help make your “evidence-based” case for heparin lock.

Let’s Revisit This Critical Concept

Every provider, individually, must make their case for a particular practice that has become the standard in our industry. Why? Because we lack published evidence all providers could reference when making their case. Nearly every study concludes with a statement calling for “more research” on the subject in order to definitively make the case for or against a particular practice. That research, in the home care setting, is simply not happening for a variety of reasons, including high costs of conducting clinical research and difficulty obtaining a statistically significant sample size. How, then, do we go about closing our evidence gap? This question is central to the ongoing NHIA Industry-Wide Data Initiative (visit www.nhia.org/data for more), and one we have taken the first steps to address with our recent 2012 NHIA Data Definitions Survey.

In our 2010 NHIA Provider Survey, we learned that a majority of home
infusion pharmacies are collecting outcomes data on similar subjects, including adverse drug reactions (98%); catheter infections (97%); unscheduled hospitalizations (87%); and catheter occlusions (80%), just to name a few. We also learned in that survey that data collected from multiple providers is only comparable when the key data elements are defined consistently from one provider to the next. Before we can share such vital aggregate data and publish our evidence, we must begin at the beginning—we have to adopt common definitions that will allow comparison of results.

Our Collective Quest For Common Definitions
The 2012 NHIA Data Definitions Survey, conducted this past summer, was created to evaluate the industry’s response to a series of proposed data definitions for a wide variety of key data elements—from industry demographics to financial and human resource metrics, to clinical outcomes. For each proposed data definition in the survey, we asked providers three questions:
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?

The results, while still being analyzed given that the survey just ended on August 30, are initially very promising—and exciting! Not only did 25% of NHIA member providers respond to the survey, but the mix of respondents across national, multi-site and single-site providers was the most representative of our industry, as a whole, that we’ve received to date. Data relevance depends not only on common definitions, but also on the degree to which it reflects the wide range of industry providers. Engaging all provider types in future NHIA Surveys is essential to ensuring our data results are representative of our industry as a whole, and not just one particular provider type or geographic area.

Making The Data Collection Leap—Methodically And Carefully
So now, how do we, as an industry, make the leap from “willingness to provide data” to actually collecting that data and sharing it in an accurate, aggregate, de-identified format? The answer: very methodically and carefully. We must ensure not only uniform acceptance and adoption of common industry definitions, but also a method of data collection that is resistant to provider-bias and documentation inconsistencies. For example, in our Data Definitions Survey, we asked providers about the collection of unscheduled hospitalization data. A full 99% of survey respondents agreed with our definition for Related and Unrelated Unscheduled Hospitalization—and 62% indicated that they are able to report on this data today. However, we also acknowledged in the survey that some hospitalizations occur without the provider’s knowledge and the challenge this presents in terms of keeping information systems/medical records current with all hospitalization data. Given this reality, we asked providers to estimate the number of unscheduled hospitalizations they believe they capture in their information systems for every 10 such hospitalizations that actually occur.

The average estimate is 5.8 hospitalizations captured for every 10 that actually occur. If we were to collect unscheduled hospitalization data
from providers’ information systems today, we could estimate the data is under-reporting actual hospitalizations by approximately 42%. If we attempt to gather and report this data in the aggregate, individual providers who are better at capturing hospitalization data in their information systems would appear to have a bigger issue with patient hospitalizations when compared to the aggregate, than those providers who are not as diligent at ensuring all such hospitalizations are captured in their software. Clearly, such challenges with accurately capturing and reporting this type of data must—and will—one first be overcome before meaningful data collection, aggregate reporting and industry-wide benchmarking can be accomplished. Being mindful of these issues, we will methodically collaborate to pursue a productive, accurate outcome.

**Why Work To Accurately Collect And Report Industry-Specific Data, Such As Unscheduled Hospitalizations?**

Connie Sullivan makes the case for this important undertaking in her article “Creating and Defining Value Through Data: Utilization, Quality Outcomes, and Benchmarking” (see page 18)—the imperative to demonstrate quality care and value is being driven by evolving value-based reimbursement methodologies, with the Centers for Medicare & Medicaid Services (CMS) already taking the lead in the acute care setting. The focus is shifting beyond episodic care, or “getting it right while the patient is under your direct care,” to include quality transitions of care in which re-hospitalizations are avoided as a result of effective patient care transitions from the hospital to home and other sites of care. In this health care delivery paradigm, home infusion providers play a critical role in keeping patients home to complete therapy, and avoiding preventable unscheduled re-hospitalizations. How do we achieve this? Best practices may eventually be derived from our outcomes data, but first we must start at the beginning, which is the accurate capture and reporting of unscheduled hospitalizations.

If the capture and reporting of critical data elements seems daunting and overwhelming, then consider this: just three short years ago, our industry had no mechanism at all in place for any data capture—and today, through the NHIA Data Initiative, we stand ready to expand on an industry-wide data collection process that is breaking new ground with each step we take. Working together, we can accomplish the collection, aggregation and reporting of data that will inform the care our patients should receive to achieve the best outcomes, and validate the value our services bring to the health care continuum. Just as Rome wasn’t built in a day, the NHIA Industry-Wide Data Initiative will take time, perseverance and patience—in addition to active participation from our industry’s providers and other stakeholders. If you are not yet involved in these efforts, or you have questions about this vital data initiative, please contact NHIA today via Kristen.Santaromita@nhia.org or 703-838-2661.

Evidence-based health care in home infusion is, indeed, achievable—if we continue to collaborate together down this amazing path we’ve already productively embarked upon! 🌟

**Nancy Kramer, R.N., B.S.N.,CRNI® is NHIA’s Vice President of Clinical Affairs. She can be reached at: nancy.kramer@nhia.org**