Pittsburgh Regional Healthcare Initiative
Reprinted from *PRHI Executive Summary*, October 2002
Naida Grunden, editor

Medication Safety

The Full MedMARx

In last month's Special Edition of the PRHI Executive Summary (available at www.prhi.org), hypothetical essays envisioned the future of the initiative. One vision was of unbridled success (Is Health Care's Elixir in Pittsburgh?, page 5). The question remains, "Can we get there from here?"

Over the past six months, PRHI Field Managers have begun working in all 39 partner hospitals in an effort to accelerate the region's progress toward the goal: ZERO hospital-acquired infections and medication errors. Initially, their work has focused on making intensive use of NNIS* and MedMARx**, to establish common definitions and a region-wide database. In the process, they have learned that both systems provide valuable tools for region-wide problem solving as well. "It's not added-on work," says Pharmacist Robert Weber. "This reporting is already required. Having hospitals report this way makes the most of what they're already doing."

Collaboration jump-starts the effort

Through PRHI's vigorous committees, the region's hospitals have come together to create common definitions for medication errors. They are collaborating on regional problem solving for central line insertion, MRSA colonization prevention, fentanyl patch prescribing and safe abbreviation use. The collaboration is revolutionary and the problem solving will be invaluable. But alone, it will not be enough.

Translating numbers into people

Most hospital executives and trustees are accustomed to reviewing medication errors aggregated over time, such as percent of errors per doses dispensed, or errors per patient day. Looking at data from this distance puts reviewers at a big disadvantage. Here's why: in the table below, ***left***, the number of errors per units dispensed looks infinitesimal.

Yet if we translate these blips in the radar to "Number of Patients Affected," a new picture emerges on the table below, right.

Errors: reporting = learning

When errors are buried, the opportunity to learn from them is lost. Learning and improvement can only take place when employees feel professionally safe, and when top hospital management creates a blame-free, non-punitive environment along with the expectation that every error will be reported.

Introducing MedMARx in its full capability into such an environment could prove to be a quantum leap toward the goal of zero medication errors. Complete, real-time MedMARx reporting can not only point to errors, but to why each one occurred. It is not uncommon for 70% of a caregiver's time to be spent gathering information and materials they need to do their work, or removing obstacles to complying with established procedures. Daily use of the full MedMARx system will bring these important problems to the surface, where they can be remedied.

It's not added work: reporting this way makes the most of the work hospitals are already required to do.

—Pharmacist Robert Weber, PRHI Medication Safety Advisory Committee

This kind of learning leads to action that prevents recurrence—not just at one hospital, but potentially region-wide. (NNIS is also evolving real-time capabilities. Until then, nosocomial infection related errors can also be captured in the MedMARx system.)

To turn MedMARx into the most powerful, real-time learning tool in the patient safety arsenal, a hospital would deploy it as a web-based, hospital-wide system, ensuring that every day:

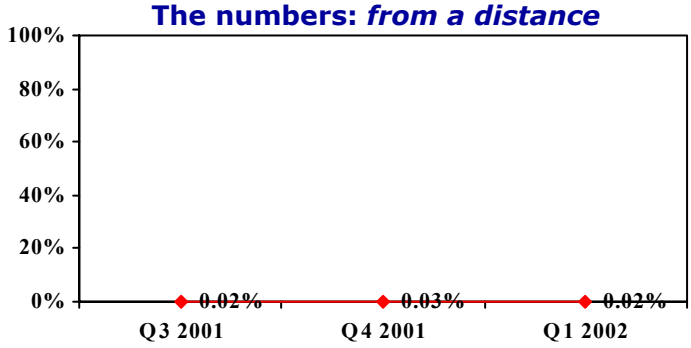
- Incidents are reported by those who discover them
- Investigation and action are done by those responsible
- Leadership reviews incidents to break barriers and allocate resources
- All directors review to be alerted to potential vulnerabilities in their departments

PRHI field staff are delivering this message to hospital leaders and stand ready to help those ready to accelerate their patient safety learning.

For further information on how PRHI can help member hospitals make the most of the MedMARx system's capabilities, contact Annette Mich, PRHI Field Director, at 412-594-2570 or *mich@jhf.org*.

Medication Errors Per Units Dispensed (28 PRHI hospitals, partial data)

The numbers: *from a distance*



The numbers: *up close*

4,360 reported medication errors affecting Thousands of patients and Hundreds of caregivers

*NNIS=National Nosocomial Infection Surveillance System, a product of the Centers for Disease Control and Prevention
**MedMARx=medication error reporting system, a product of U.S. Pharmacopoeia

Centre City Tower
650 Smithfield Street, Suite 2150
Pittsburgh, PA 15222
Phone: 412-535-0292
Fax: 412-535-0295
Website: **w w w . p r h i . o r g**