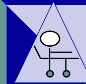

Pittsburgh Regional Healthcare Initiative

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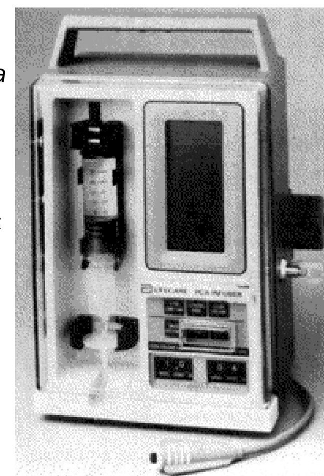
Naida Grunden, editor

Medication Error Reporting

Could patient-controlled analgesia be safer?

In one groundbreaking session May 14, PRHI's Medication Safety Advisory Group convened healthcare professionals from 28 hospitals to discuss the use of patient-controlled analgesia (PCA) pumps, and the medications they deliver.



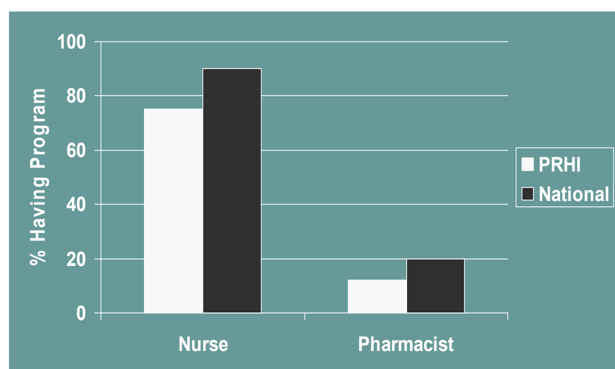
The PRHI summit focused on patient controlled analgesia pumps and the medications they deliver. Over 90 pain management experts discussed how to improve PCA's safety and efficacy for patients.

Co-chairing the Advisory Group is Robert J. Weber, RPh, MS, Executive Director of Pharmacy for UPMC and Department Chair, University of Pittsburgh School of Pharmacy. He kicked off the session with some striking facts garnered from 2002 national and regional MedMARx data. The regional data came from 33 of the region's 37 hospitals.

But how would 95 pain management experts "discuss" the findings, let alone reach consensus on recommended practices for eliminating PCA-related errors?

With help from a state-of-the-art electronic audience response system, the group held a vigorous, wide-ranging discussion and reached consensus on 25 of the 26 recommended regional practices. And they did it all in one meeting.

Who completes a PCA Competency Program?



Opportunity for improvement: Nationally and locally, more nurses than pharmacists complete specific training in PCA competency. This was one of several findings presented at the PCA conference that showed the way for regional improvement.

Just the facts

Nationally, narcotics used for pain management account for 13.4% of the serious (E through I) errors reported in the MedMARx system: in Southwestern Pennsylvania, the rate is 20.5%. Other local PCA-related findings:

✧ Narcotics account for 20% of serious PCA-related errors (those capable of actual patient harm).

✧ Morphine is involved over 80% of the time.

✧ Mix-ups between the drugs morphine and meperidine cause at least 50% of reported errors.

✧ Causes include incorrect use of PCA pumps, mistakes in dosing and use; and product mix-ups.

The following conclusions flowed from the data:

✧ Safety can be improved by eliminating meperidine PCA; standardizing morphine concentration; and increasing familiarity with hydromorphone.

✧ Consensus must be nursing driven.

Sue Skledar, RPh, MPH, of the University of Pittsburgh School of Pharmacy, presented information gathered from a regional and national PCA survey that highlighted several opportunities for the Pittsburgh region to improve its policies and practices around patient controlled analgesia.

The remainder of the conference was devoted to discussing and voting on 26 recommended practices and policies. Colleen Dunwoody, RN, MS, led this group of 95 experts as they discussed and voted on which practices would result in the "safest possible patient environment."

Over the summer, PRHI plans to work with participating hospitals to collect additional data around PCA related errors and to provide tools for the Medication Safety Regional Working Group members to use during implementation.

In November 2003, the next PCA conference will:

- ✧ Examine the status of recommended PCA practices in our region.
- ✧ Relate that information to MedMARx data.
- ✧ Expand the conversation to PCA pump manufacturers and human factors engineers.
- ✧ Examine ways to incorporate patient safety practices into medical, nursing and pharmaceutical education programs.

SYNOPSIS: 25 PCA SAFE PRACTICE GUIDELINES

Conference attendees discussed and voted to adopt guidelines in the following general areas.

Area	Topic	Number of guidelines accepted
Safe Prescribing and Monitoring	Standard order forms, drug choice, and standard concentration	9
Safe Dispensing	Pharmacist review, drug storage and proper labeling	5
Safe Administration	Medication administration records, pump programming, and proper tubing	5
Patient-specific Safety Measures	Education, pendant buttons, patient use and PCA by proxy	5
Healthcare Professional Education	Continuing education and competency	1

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