

SAFETY IN NUMBERS

6 Steps to Preventing Pain Pump Pitfalls

atient-controlled analgesia (PCA) pumps caused more than 56,000 adverse events and 700 patient deaths between 2005 and 2009, according to FDA reports. To help prevent such incidents in the future, the Physician-Patient Alliance for Health & Safety (PPAHS) has issued a checklist (available for free download at tinyurl.com/b7f9pog) aiming to promote PCA pump safety, based on data and input collected from clinical professionals.

Here are 6 tasks that should accompany any pump initiation, refilling or programming change:

- Assess factors that may increase the risk of respiratory depression and adjust medication doses accordingly. These factors include obesity or low body weight; medication combinations (both opiates and non-opiates) that magnify opiates' sedative effects; asthma, chronic obstructive pulmonary disease, sleep apnea and other pre-existing conditions; advanced age.
- 2. Perform a pre-procedure cognitive assessment to determine whether the patient is capable of participating in pain management. For example, elderly patients with symptoms of dementia or pediatric patients may not be suitable candidates for PCA pump use.
- Educate the patient and provide him with information on proper operation of the PCA pump. Provide the patient's caretaker(s) with the same information.

- 4. Double-check the details. Two providers should independently review, verify and confirm the following: patient ID; allergies appearing on the medication administration record; drug selection and concentration; completion of any necessary dose adjustments; the PCA pump's settings; and the integrity of the catheter inserted into the patient and the tubing connection to the pump. Empower all providers to speak up if they spot an inconsistency.
- 5. In your facility, monitor the patient with both pulse oximetry and capnography.
- Assess and document the patient's condition before post-surgical discharge.

— Michael Wong, JD

Mr. Wong (mwong@ppahs.org) is the founder and executive director of the Physician-Patient Alliance for Health & Safety, a founding member of the American Board of Patient Safety and a member of the Journal of Patient Compliance editorial board.

Association of Nurse Anesthetists.

"First, access to the medications you need," she says. "Drug shortages have had a severe effect, and the compounding pharmacies that fill your pumps may have access that you don't have." Second, patient safety. "Any time you're preparing precise amounts, there's the potential for error. There's also the issue of sterility." Of course, "not all compounding pharmacies are equal," so be sure to determine that the one you'll depend on for your pumps is high-quality and complies with all safety regulations.