Computerized Drug Orders Can Reduce Hospital Errors

BY JOYCE FRIEDEN Associate Editor, Practice Trends

WASHINGTON — Aiming for computerization of physician order entry at health care institutions isn't the right course to take, Dr. Stephen T. Lawless said at a health care congress sponsored by the Wall Street Journal and CNBC.

"That's the wrong goal," said Dr. Lawless, chief knowledge and quality officer at Nemours, a Wilmington, Del., pediatric subspecialty practice with about 1 million patient encounters per year. "The right goal is NPOE—*no* physician order entry. Just tell us what you want and we'll have the best person [enter] it for you."

With this caveat, computerized order entry still remains an important tool in reducing medication errors, said Dr. Lawless, also professor of pediatrics at Jefferson Medical College, Philadelphia.

He said that the hospital where he practices—the Alfred I. DuPont Hospital for Children, Wilmington—partnered with a large pharmacy chain and asked the pharmacy to find the errors in the hospital's handwritten prescriptions.

Of handwritten prescriptions, 35%-40% had errors, he said. "Of those, 53% had legibility problems, 36% had issues with completeness, and 11% had content errors."

The hospital's use of electronic prescribing has eliminated legibility errors, but that still leaves the other half of the errors to be resolved, he said. That's where the "decision support" piece comes in, which has encountered some resistance from providers. "We're forcing people by saying, 'You've picked this drug at this time, at this dose, at this range. Thank you very much.' It's very hard to make people do that."

Dr. Lawless said measures such as checklists are resisted by the medical community because "we all think it's about health care professionals being industrialized. I'm saying it's [about] health care craftsmen fighting being professionalized."

Continued from previous page

cedures, or assist with surgery. But the growing number of practicing PAs has meant an overall increase in their presence during this same period.

In 1999, 3% of the 15,000 or so respondents said they practiced in general surgery and 17% in surgical subspecialties. A total of 44% said they performed invasive procedures, and 25% said they assisted with surgery. In the 2004 survey, 3% of the 20,500 respondents said they practiced in general surgery and 21% in surgical subspecialties; 42% performed invasive procedures, and 26.5% assisted with surgery.

Judith Zaczek, a certified physician assistant (PA-C) in the ob.gyn. department at Oakwood Hospital and Medical Center in Dearborn, Mich., believes there has been a trend toward more PAs replacing residents in the OR.

At her facility there are 16 residents total per year, with 4 on the ob.gyn. service. But there are three PAs and two midwives to help with the 6,000 deliveries per year. The attending physicians are happy to have the help, Ms. Zaczek said. "I think they've seen what continuity of care is, and they appreciate that."

Dr. Prager agrees that advanced practice PAs and nurse-practitioners are invaluable to a surgical team because they know the routines and are committed and efficient. At the University of Michigan Hospital, four PAs provide first and second assistance for cardiothoracic surgery. They are more skilled in harvesting arteries endoscopically than the junior-level residents, he said.

An advanced practice team of 10 PAs and nurse-practitioners manages the floor, generally covering 30-32 patients and freeing residents from rounds. Dr. Prager sees this as a boon to both the hospital, which gets more efficient patient care, and the residents, who spend more time on education.

A similar evolution has taken place at St. Joseph Mercy Hospital in Ann Arbor. Before workweek restrictions were in place, the cardiothoracic service had seven PAs. With the reduction in residents' hours, the hospital had to double that number to cover critical care 24 hours a day, 7 days a week, and to assist both during and after operations, said LaWaun Hance, a PA-C and education coordinator for the cardiothoracic PA residency program at St. Joseph.

The PAs provide first and second assists, including endoscopic vein harvest, and if necessary they open or close the chest, said Ms. Hance.

