What's New in the Patient Safety World

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Newborn Name Confusion

In our Patient Safety Tips of the Week November 17, 2009 "Switched Babies" and December 11, 2012 "Breastfeeding Mixup Again" we noted that one of the risk factors for these mixups are similar sounding names. Similar names are always an issue when it comes to wrong patient events but neonates may be even more at risk. In our May 20, 2008 Patient Safety Tip of the Week "CPOE Unintended Consequences – Are Wrong Patient Errors More Common?" we noted you would be surprised to see how often patients with the same or very similar names may be hospitalized at the same time. Shojania (2003) described a near-miss related to patients having the same last name and noted that a survey on his medical service over a 3-month period showed patients with the same last names on 28% of the days. The problem is even more significant on neonatal units, where multiple births often lead to many patients with the same last name being hospitalized at the same time and medical record numbers being similar except for one digit. Gray et al (2006) found multiple patients with the same last names on 34% of all NICU days during a full calendar year, and similar sounding names on 9.7% of days. When similar-appearing medical records numbers were also included, not a single day occurred where there was no risk for patient misidentification. Both these studies were on relatively small services so one can anticipate that the risks of similar names is much higher when the entire hospitalized patient population is in the database.

Our June 26, 2012 Patient Safety Tip of the Week "Using Patient Photos to Reduce CPOE Errors") highlighted an intervention developed by Children's Hospital of Colorado (Hyman 2012) in which a patient verification prompt accompanied by photos of the patient reduced the frequency of wrong patient order entry errors. That may be helpful for older children and adults but, frankly, is not of much benefit in neonates.

In our July 17, 2012 Patient Safety Tip of the Week "More on Wrong-Patient CPOE" we discussed an elegant tool, the **retract-and-reorder** or **RAR tool**, that provides a quantitative estimate of how frequently wrong-patient CPOE may occur (Adelman 2013). Those authors developed a computer tool that identified instances where orders were entered on a patient, promptly retracted, and then entered on a different patient. In a validation study in a hospital they found the RAR tool had a 76.2% positive predictive value for identifying wrong patient errors (though obviously these errors were captured and corrected before reaching the patient).

Now the researchers have applied the RAR tool to assess the impact of a **change in naming conventions for newborns** (Adelman 2015). Hospitals need to create a name for each newborn promptly on delivery because the families often have not yet decided on a name for their baby. Most hospitals have used the nonspecific convention "Baby Boy" Jones or "Baby Girl" Jones. A suggested alternative uses a more specific naming convention. It uses the first name of the mother. For example, it might be "Wendysgirl Jones". Montefiore Medical Center switched to this new naming convention in its 2 NICU's in July 2013 and the RAR tool was used to measure the impact on wrong patient errors. **Wrong patient error rates** measured in the one year after implementation of the new more specific naming protocol were **36% fewer** than in the year prior to implementation.

For reasons not immediately clear, error rates were reduced even more for orders placed by housestaff (52% reduction) and orders placed on male patients (61% reduction).

Switch to the more specific neonatal naming convention was simple and effective and done without significant financial or labor cost and done with technology already present in most NICU's. Though the Montefiore study was not blinded and was potentially subject to the Hawthorne effect, the more specific naming convention is very promising. Validation at other NICU's would be the next logical step before adopting this convention in a more widespread fashion.

The authors note that they only studied the impact on order entry. They point out that mixing up names is also a potentially serious for reading imaging studies or pathology specimens, giving blood products, and may also be a factor in breastmilk mixups. So the potential for this new naming convention to avert wrong patient errors is substantial.

References:

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