Alarms and Nurse to Patient Ratios

As much as I enjoyed the technical aspects of the article by Korniewicz and colleagues,1 it did seem to beg the question, “Who’s even there to hear the alarm?” An adequate alarm system does not make up for the inadequate staffing patterns that are so prevalent in intensive care units across the United States.

The article mentioned the 23 injury and death reports associated with mechanical ventilation. Why isn’t a patient who is dependent on a ventilator assigned one nurse to care for him or her, as is the case in England? Wouldn’t we be better patient advocates if we argued for safe staffing instead of better alarms?

Richard Perkins, RN
Memphis, Tennessee

Financial Disclosures
None reported.

References

Response:

Thank you for your thoughtful critique of our article1 associated with clinical alarms. Your point about “safe staffing” continues to be a major concern in the United States, especially because the nurse workforce continues to decrease due to aging, alternate career opportunities for women, and governing issues associated with the hospital work environment.

In fact, the US government recently predicted that, by 2020, nurse and physician retirements will contribute to a shortage of approximately 24,000 doctors and nearly 1 million nurses.2 These workforce shortage projections have been built around the current healthcare system, which suggests that health industry leaders need to make changes in the workforce environment.

However, you should note that our survey ranked “inadequate staff to respond to alarms as they occur” as the fourth most important issue in approving alarms. Although the survey stated that staffing was not the key issue, we all know that inadequate critical care staffing is often reported. The study points to recommendations for improved care management and use of newer technologies, such as smart alarm integrators and annunciators, for which clinicians needn’t be there to hear the alarm.

The Joint Commission reported 23 deaths related to ventilator alarms and mentioned inadequate training (87%) as the prime staffing issue, with 35% of the deaths related to inadequate staffing (root cause analysis).3 The recommendations of the Joint Commission and the American Association of Respiratory Care do not state the need for 1:1 ratios for nursing care of ventilated patients; they recommend only “reviewing staffing process to ensure effective staffing for ventilator patients at all times.”

Alarms are not foolproof, of course, so staff diligence and direct observation are key ingredients for improving patient care. Ultimately, a well-designed alarm system—including care management, smart device design, use of assistive technologies, and appropriate healthcare environments—can improve patient care where critical alarms are used.

Perhaps such technologies can assist the current situation, in which there is a clear nursing shortage.

Denise M. Korniewicz, RN, PhD
Tovey Clark, MS, CCE
Miami, Florida, and Burlington, Vermont

Financial Disclosures
None reported.

References

Quality Improvement or Research? A Report From The Trenches

I applaud Drs Morris and Dracup1 for focusing attention on the dilemma of discerning whether a quality improvement (QI) study conducted in a healthcare setting should be regarded and scrutinized as research covered under 45 CFR (Code of Federal Regulations) 46.2 I believe that the Hastings Center Special Report3 cited by the authors would be particularly helpful to QI administrators in both academic and nonacademic healthcare organizations.
Our hospital has completed its first year of administering a QI-IRB following nearly all of the recommendations from the special report authored by Baily et al. The QI-IRB contains some of the same members of our research IRB, but it is distinguished by members whose expertise lies both in clinical research and QI.

Because we work diligently to ensure that all of our QI studies are systematic inquiries, some degree of overlap always exists between QI and research activities in our setting. We are part of a healthcare network, a Qualis (Medicare) network, and are bound to employ efficient processes, so we hope that some of our findings will be sufficiently generalizable that sharing with other organizations may contribute to improvements in clinical operations at other sites. Thus, once again, the overlap between our QI activities and the federal definition of human research looms over our activities.

Providing a specialized ethics oversight body for QI studies has helped enrich our QI culture without inhibiting QI activities. QI study teams feel less isolated from the greater body of the organization. Some team members have expressed relief that they understand how the QI process can be enriched by sharing the study goals, processes, and findings with patients and families.

LOWELL WISE, RN, DNSc
Boise, Idaho

FINANCIAL DISCLOSURES
None reported.

REFERENCES
Quality Improvement or Research? A Report From the Trenches
Lowell Wise

Am J Crit Care 2008;17 98-99
Copyright © 2008 by the American Association of Critical-Care Nurses
Published online http://ajcc.aacnjournals.org/

Personal use only. For copyright permission information:
http://ajcc.aacnjournals.org/cgi/external_ref?link_type=PERMISSIONDIRECT

Subscription Information
http://ajcc.aacnjournals.org/subscriptions/

Information for authors
http://ajcc.aacnjournals.org/misc/ifora.xhtml

Submit a manuscript
http://www.editorialmanager.com/ajcc

Email alerts
http://ajcc.aacnjournals.org/subscriptions/etoc.xhtml