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## **Staffing Excellence: Moving from Retrospective To Prospective Management of Risk**

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# Staffing Excellence: Moving from Retrospective To Prospective Management of Risk

## EXECUTIVE SUMMARY

- ▶ Our complex health care system will not be error free for the foreseeable future.
- ▶ Certain interventions must be put into place to manage that risk, and staffing effectiveness is a critical part of clinical risk management.
- ▶ Application of research and practice can create a basis for a proactive risk management plan, and will build in an essential feedback loop to leadership.
- ▶ Pay for performance initiatives by the Centers for Medicare & Medicaid Services and other payers are creating further incentive to get to zero errors faster.
- ▶ By implementing what we know about staffing and avoidable errors, we are in a very good position to meet the challenges to create a safe health care system.

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**P**ATIENT SAFETY SCIENCE HAS matured since the landmark Institute of Medicine report in 1998 (Kohn, Corrigan, & Donaldson, 2000). Recent articles have outlined successful ways to address patient care error, such as the recognition of the roles systems, latent defects, critical defects, and organizational and operations management (Leape, 2009). Four contextual factors are suggested in patient safety research: (a) external factors; (b) organizational structural characteristics; (c) teamwork, leadership, and patient safety culture; and (d) management tools (Shekelle et al., 2011). These frameworks and analyses allow health care providers to review sources of error more effectively, leading to effective action.

Although patient safety science has improved care, continued significant patient care error illustrates that a safe patient care environment will not fully occur in years, and perhaps not in a lifetime. Until then, errors will occur, and interventions must be developed to detect and prevent those errors. Effective staffing is one such intervention, and perhaps one of the best risk management practices available. The purpose

of this article is to explore the integration of staffing into risk management practices.

## Prospective Risk Management For Staffing Excellence

Prospective and retrospective analyses are two risk management methods that can be used to understand and prevent error. Proactive risk management puts controls in place so the RN is protected from working in situations that create unsafe working situations. For example, nurses working 12 hours or more had increased reported errors, stemming in part from fatigue (Scott, Rogers, Hwang, & Zhang, 2006). Fatigue after a double shift was one of the root causes in a well-known event where a young mother died after receiving an epidural infusion peripherally (Smetzer, Baker, Byrne, & Cohen, 2010). Other situations known to place RNs and patients in a high-risk situation can be a high ratio of novice to expert nurses on the night shift of a complicated unit, new residents starting in July, and a chaotic unit in which there is little teamwork and collaboration between nurses and other professions. Proactive risk management examines the research in areas

such as these, implements the evidence into the staffing plans, and prevents harm by implementing available evidence quickly as it becomes available.

Evidence provides common frameworks on which to teach and build effective staffing. Expected patient census, specialized skills needed, skill mix of nurses, and a formal acuity system are useful in determining staffing for an intensive care unit (Kirchoff & Dahl, 2006). Another framework proposed considers organizational culture; models, standards, and policies; evidence and data; environment; participation; collaboration with finance; continual improvement; professional development; technology; and innovation as best practices (Douglas, 2008).

From a proactive risk management perspective, two points are particularly important. First, safe and effective nurse staffing must be seen as the responsibility of everyone in the organization, not just those in nursing. Human resource hiring practices and policies, along with the support of other departments such as pharmacy, finance, and logistics, must work together collaboratively to produce quality patient outcomes. The point is that effective staffing is everyone's responsibility and does not rest just with the staffing office, nurse manager, or shift coordinator.

Second, within nursing, every staff nurse must be aware of the principals of effective staffing and proactive patient safety. By empowering the front-line staff to become actively involved and empowered through education and support about patient safety and staffing, staff quickly learn they can make significant advances in preventing harm to patients and staff (Kerfoot, Rapala, Ebright, & Rogers, 2006).

### **Retrospective Risk Management And Staffing Excellence**

Retrospective risk management is a method to analyze near misses

and actual events, to understand why the event happened, and to determine what needs to be done in terms of prevention. Traditionally, retrospective risk management is aimed at reducing the financial risk to the organization by working to reduce the liability to the organization. Now, retrospective clinical risk management uses analytical tools and evidence to analyze events to proactively change practice. In the past, retrospective risk management looked to find the single defect that caused the event – usually a health care professional – and often used discipline or “counseling” to solve the issue. However, events occur due to complex interactions between the caregiver; the situation on the unit at the time; the system in which the nurse practices; the extreme variability between patients, nurses, and other health care providers; competency; and many other factors – in short a complex work environment where the frontline caregivers juggle many decisions and factors in the course of a day (Ebright, Patterson, Chalko, & Render, 2003). The responsibility for the error rests with many people who are responsible for the system within which the event occurred, from leadership to the front line.

The review of sentinel events provides an organization with retrospective staffing information. A sentinel event is defined as “an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof” (The Joint Commission, 2011). When a potential sentinel event occurs in the hospital setting, accredited organizations conduct a root cause analysis, which is a process traditionally found in engineering. In the root cause analysis, a series of questions designed to determine the root causes of an event are employed. The Joint Commission’s “Framework for a Root Cause Analysis and Action Plan in Response to a

Sentinel Event” (The Joint Commission, 2009) has several questions regarding staffing, in particular:

- To what degree [is] staff properly qualified and currently competent for their responsibilities?
- How did actual staffing compare with ideal levels?
- What are the plans for dealing with contingencies that would tend to reduce effective staffing levels?
- To what degree is staff performance in the operant process(es) addressed?

These are the trickiest questions in the root cause analysis framework, and are frequently misinterpreted. Using the questions to the fullest extent can yield information vital to staffing.

There are two prerequisites to consider in regard to staffing prior to conducting a root cause analysis. First, in the root cause analysis query about staff, the intent is for consideration of all staff. There is an inclination to focus on nursing staff, but this means the full multidisciplinary team, including physicians. For the purposes of this discussion, however, the focus is nursing. Second, root cause analysis facilitators are often from the hospital quality or risk management department. Care must be taken to ensure the root cause analysis facilitator understands the nuances of nurse staffing and application of research, or collaborate with an appropriate nursing colleague who is credentialed in staffing and staffing research.

The first question, “To what degree [is] staff properly qualified and currently competent for their responsibilities?”, is designed to determine whether staff have sufficient training to do the job at hand. To answer this question effectively, the reviewer must determine if the staff member has completed and is up to date on all training. One should also query the developmental level of the nurse, in particular, whether the

nurse is a novice or an expert. Is a newly minted graduate nurse qualified and competent to be charge nurse on a busy medical-surgical unit on an off-shift? Additionally, a nurse who has many years of experience, and shifts practice from one area, such as obstetrics, to an adult intensive care unit, is considered a novice.

The question "How does staffing compare to normal levels" frequently draws the response of staffing "normal," or "properly staffed as per staffing plan." This is a question where the application of nursing evidence is very important. Consider the following:

- The novice-to-expert ratio on the unit, and for the particular shift in which the event occurred.
- The educational level of the staff: licensed vocational/practical nurses, support staff as well as 2, 3, and baccalaureate-prepared nurses. Research indicates baccalaureate-prepared nurses have better patient outcomes in general (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002).
- Staffing fluctuations over the course of the shift. For example, not every shift may meet target staffing (Needleman et al., 2011).
- Patient turnover per shift. Significant patient turnover per shift can increase patient mortality (Needleman et al., 2011).
- Nursing turnover and vacancy rate on the unit. Determine if the nurses are permanent unit members, agency nurses, or pulled from other units.
- Staffing of other disciplines on the unit. For example, for a medication error, look at pharmacy staffing and how this interrelates with nurses. In many smaller institutions a nurse may act as the emergency night shift pharmacist; or one pharmacist may be working the night shift, responsible for the entire hospital.

- Physician availability is a component of staffing. Determine whether hospitalists and/or if physicians are readily available for consultation.

These points should be analyzed over the course of time and are indications of a healthy unit.

The third question, "What are the plans for dealing with contingencies that would tend to reduce effective staffing levels?", triggers responses of how to staff the unit when someone calls in sick. However, even when properly staffed, situations may arise causing a fluctuation in staffing that may affect patient outcomes. The complex health care environment is shifting rapidly; one nurse accompanying a patient to a procedure will alter staffing during the time spent off the unit. These situations cause opportunities for adverse events.

The fourth point, the degree to which staff performance in the operant process is addressed, is often misinterpreted. Simply, if the process is the assessment and treatment of a particular population, one must look to see how the organization supports staff members caring for that population. If the event involves the assessment of a bariatric patient, determine if the staff is trained and competent in this area. This often occurs when a patient is placed on a floor that is off-service; for example, an obstetrical patient in an adult intensive care unit. In this example, obstetrical staff should be on hand to help with patient assessment and staff support. Addressing this issue is challenging, as an organization must prioritize education for staff. Thus, a solid foundation of critical thinking is important.

The effect of fatigue on the staff and the expanding literature on this subject should be addressed in a root cause analysis. Areas to explore include:

- Hours staff worked in your own organization, including in different units. In some set-

tings, shifts are hard to track across a system.

- Any employment of the employee outside your organization that leads to fatigue.
- Any personal situation causing fatigue.

This analysis supports The Joint Commission Standard PI.0201.01, which states when a hospital "identifies undesirable patterns, trends, or variations in its performance related to the safety or quality of care (for example, as identified in the analysis of data or a single undesirable event), it includes the adequacy of staffing, including nurse staffing, as a possible cause" (The Joint Commission, 2010). The Joint Commission suggests hospitals also review processes that involve workflow, competency assessment, credentialing, staff supervision, and orientation and training as part of the staffing analysis and impact on errors. When a problem is identified, leadership is informed and a course of action identified. The Joint Commission further requires that at least once a year, the leaders for system patient safety review a written report on any noted staffing issues as a result of the review (The Joint Commission, 2010).

## Summary

Our complex health care system will not be error free for the foreseeable future. Certain interventions must be put into place to manage risk, and staffing effectiveness is a critical part of clinical risk management. Application of research and practice can create a basis for a proactive risk management plan, and will build in an essential feedback loop to leadership. Pay for performance initiatives by the Centers for Medicare & Medicaid Services and other payers are creating further incentive to get to zero errors faster. By implementing what we know about staffing and avoidable errors, we are in a very good position to meet the challenges to create a safe health care system. \$

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## ADDITIONAL READING

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