

Staffing and Patient Safety

In 2003, the Minnesota Legislature passed the Minnesota Adverse Health Care Events reporting law (Minnesota Statutes, sections 144.7063-144.7069). This law requires Minnesota hospitals and ambulatory surgical centers to report to the Minnesota Department of Health whenever one of 28 serious reportable events, including surgery or an invasive procedure on the wrong patient or wrong body part, a foreign object retained after surgery or an invasive procedure, or a fall, medication error, or burn resulting in serious disability or death, occurs.

During the 2008 legislative session, in response to concerns that inadequate nurse staffing might be contributing to some of these events, the Minnesota Department of Health was directed to “consult with hospitals, RN staff nurses, and quality assurance staff working in facilities that report under Minnesota Statutes, section 144.7065, subdivision 8, and other stakeholders, taking into account geographic balance, to define and develop questions related to staffing for inclusion in the root cause analysis tool required under that subdivision.”

In response to this charge, MDH convened a workgroup in the fall of 2009. Workgroup participants included representatives from large, mid-size and small hospitals throughout the state, the Minnesota Board of Nursing, the Minnesota Nurses Association, the Minnesota Hospital Association, the University of Minnesota, Stratis Health, and other stakeholder organizations, with workgroup member positions ranging from front-line nursing staff to quality/patient safety officers to nursing managers and other roles.

The charge to the workgroup included the following goals:

1. To develop an understanding of what Minnesota data show about the role of staffing in adverse events;
2. To discuss staffing-related factors that may contribute to adverse events, and how these factors interact;
3. To develop an understanding about how staffing decisions are made, and how the contribution of staffing to adverse events is evaluated as part of the root cause analysis or investigation process;
4. To develop questions that would enable facilities to more accurately determine whether staffing has been a factor in a reportable adverse event, and that would aid in thoroughly evaluating the role of staffing in an event.

Workgroup Discussion

While staffing is an issue that concerned all group members, the group generally agreed that staffing-related issues emerge relatively rarely as contributing factors or root causes for reportable adverse health events, and that these events are much more often related to flawed processes or protocols than to an insufficient number of nurses or other staff on duty at the time of the event. At the same time, however, the group acknowledged that when staffing issues do exist, they can have a significant influence on work environment, work flow, and safety. As one workgroup participant phrased it, staffing can be a symptom of larger system issues, and is often a starting rather than an ending point in the analysis of an event.

The workgroup’s discussion highlighted the difficulty of determining whether staffing levels were adequate for safety at the time of an event:



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- The process of defining the appropriate staffing level for a unit should involve a consideration of average acuity levels, experience of staff, budget, and other issues. But staffing grids cannot reflect all patient contact that nurses and other staff have during a shift, and they often cannot capture issues such as time pressure or organizational culture that may impact workload.
- Organizational leaders also need to look beyond staffing numbers to discover whether nurses or other staff are doing work to cover for other roles, particularly in smaller rural hospitals where nurses may ‘wear many hats.’ Retrospective reviews of staffing levels should also include, where possible, patient safety indicators such as fall, pressure ulcer, or infection rates.
- Mechanisms should be in place to obtain staff feedback on staffing levels, including documentation of requests for additional staff.
- A distinction should be made between events whose time can be pinpointed, like patient falls, and events such as pressure ulcers, which develop over the course of hours, days or weeks and may not be linked to staffing on a particular shift. The analysis of longer-term events needs to include a discussion of staffing levels and roles over time.

Workgroup Recommendations

The workgroup recommended that three questions be added to the set of triage questions that facilities should ask whenever a reportable event occurs. These questions should be included in the root cause analysis for every reportable event. In addition to their potential implication for staffing levels, the responses to

these questions may also point to other system issues that the facility needs to address. Facilities should also consider asking these questions when investigating other serious events or near misses that are not reportable under Minnesota’s adverse health care events reporting law.

Recommended Questions

Note: For the purposes of these questions, staffing includes not only the number of staff on duty at the time of the event, but also such considerations as competency, mix of credentials, skill/experience mix, and fatigue. Staffing questions refer to all disciplines potentially involved in the event, including nursing, pharmacy, medical, and other staff as appropriate.

1. Did staff who were involved in the event believe that staffing was appropriate to provide safe care?
 - a. If no, did staff who were involved in the event believe that staffing issues contributed to the event?
2. Did actual staffing deviate from the planned staffing at the time of the adverse event, or during key times that led up to the adverse event?
3. Were there any unexpected issues or incidents that occurred at the time of the adverse event, or during key times that led up to the adverse event?
 - a. If yes, did the unexpected issue/incident impact staffing or workload for staff involved in the adverse event?
 - b. If yes, did staff who were involved in the adverse event believe that this change in staffing or workload contributed to the adverse event?

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