

Developing a Knowledge Base for RN Stacking: A Critical Patient Safety Strategy for Nursing Care Delivery

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Abstract

Preliminary research by these investigators identified a critical safety-related aspect of registered nurse (RN) work not previously addressed in the literature, nor taught in schools of nursing. Called "stacking" it is a workload management strategy for adapting and coping with the demands of workplace variability and complexity. Stacking was found to be universal among studied RNs. Stacking, an essentially invisible aspect of RN work, represents the dynamic list of multiple "to-be-done" tasks that RNs deal with in the context of actual workload management, and the appropriate cognitive and behavioral management of that list to deliver safe and appropriate care. As such, stacking is a type of failure-sensitive strategy used by RNs to forestall potential paths to failure in the midst of operational system gaps. In contrast to novices, experienced RNs demonstrated an essential ability to deliver safe care through continuous prioritizing and reprioritizing of care delivery goals and timelines, adjusting desired goal outcomes, and abandoning some goals when necessary and without adverse consequences. One solution to the existing national nursing shortage is to recruit large numbers of new people into the field. Increased understanding of stacking has the potential to affect the education and care delivery of this bolus of neophytes likely to be swelling the ranks of nursing over the next few years.

A first step to reaching that goal is to increase our understanding of the phenomenon of stacking and to identify critical attributes of stacking management that lead to safe delivery of patient care. Our specific aims are to explore the following questions to develop a knowledge base about stacking.

- 1) What activities are stacked by RNs in the context of real-life care situations?
- 2) What factors, including goals and constraints, contribute to RN decisions surrounding what to stack and stacking strategies?
- 3) What strategies do RNs use to manage the stack, particularly those that reduce the potential for and consequences from erroneous actions, unexpected situations and complicating factors?

We will collect data from a larger and more diverse RN sample than in previous studies across multiple healthcare settings. Multiple methods of data collection will be used to capture rich data about RN stacking experiences to begin building a useful knowledge base. Data collection will include direct observations of 60 individual RNs stratified by three experience levels (< one year, one to five years, and > five years) during continuous and actual care delivery followed by interviews using cognitive task analysis techniques. In addition, we will conduct six focus groups with interviews designed to elicit the cognitive and behavioral work surrounding stack management. We are requesting \$96,209 for this 18-month study.

Essential to the healthcare team is the RN role of integrator and coordinator of patient care and patient care flow across multiple team members. Findings from this study will inform future curricular development in nursing education and healthcare facility RN orientation programs, both of which strive to provide basic preparation for the safe management and delivery of patient care. In addition, findings may be particularly important for informing future healthcare system and information technology designs that support RN work.

Performance Site(s)

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