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✧ EDITORIAL ✧

Australian direct care nurses can make cost savings and improve health-care quality if they have access to meaningful data

Health Workforce Australia (HWA) reports¹ show growing demand for registered nurses (RN)² in Australia associated with an ageing population. Adequate supplies of nursing professionals will be needed in the future. Streamlining or optimizing the work processes of registered nurses to work efficiently and productively has become a prominent theme for the better management of nursing workforce supply to meet this demand. This necessitates reconfiguration of the nursing 'skill mix' or the proportion of registered nurses in relation to enrolled nurses and other nursing support workers.

The Grattan Institute in a recent report,² for example, has proposed major changes to the configuration of nursing roles in Australia. But while there may be a place for support services to nurses, international research shows that such a proposal may bring serious risks if steps are not taken first to monitor nursing workforce data on a national scale. It is these data—currently lacking in Australia—which are needed to inform and underpin such a large-scale change to nursing roles.

Minimum nursing data related to nursing quality and performance are readily accessible in many countries, including the United States. These data can take the form of around 10 basic measures known as 'nursing-sensitive' structural and outcome indicators. Structural indicators are nursing staff measures, including nursing hours, skill mix and nurse patient ratios. Outcome measures are adverse event indicators, such as pressure injuries, medication errors, falls and infections, which are established as valid and reliable evidence of the impact of direct care activity of nurses in hospital units.

In the United States, Belgium and elsewhere, a minimum information structure of key nursing care quality performance measurements is used by nurses to evaluate their contributions to health outcomes, by providers to monitor and improve care delivery and by employers to reward high performance. If registered

nurse levels are compromised on some hospital wards, then quality outcome measures on pressure injury prevalence, medication errors, infection and other adverse events may rise. Evidence from a decade of nursing research has shown dependencies between registered nurse levels and adverse events—confirmed most recently by Linda Aiken and colleagues, showing that reduced nurse staffing in European hospitals led to higher mortality rates after common surgeries.³

Through HWA⁴ and other best practice initiatives, registered nurses have provided examples of how their roles have expanded their scope of practice in emergency departments and other settings. ENs' roles have been optimized in many health-care settings so they can undertake additional functions, including medication administration that were previously the domain of RNs.

Nurses are supportive of allowing health-care support workers to help with basic patient care under their direction; however, solid evidence either way on the significance of RN levels in maintaining quality is lacking, making it difficult for the nursing profession to elaborate the processes or mechanisms that link nurse staffing levels with patient risk. Given this lack of information, nurse workforce solutions, including those offered by the Grattan Institute, should be monitored to ensure they are as safe and effective as planned.

RNs may be easy targets for cost savings in Australia as they represent both the largest health-care workforce and a significant element of health-care costs. RN roles in hospital settings are not only concerned with direct care, but have pivotal roles in managing quality and patient risk. It is estimated that adverse events in Australian hospitals cost \$2 billion, of which half may even be preventable.⁵ Pressure injuries are among these and their prevalence rates in the Australian acute care sector can range between 4.5% and 36.7%.⁶ In the State of Western Australia, the costs of hospital-acquired pressure injuries in bed days

alone for 2011 were \$12.2 million.⁷ Data from the fourth State-wide Wound Prevalence Survey conducted in Western Australia identified, also, an increase of 7.6% in the prevalence of potentially preventable pressure injuries and skin tears. In that year, the survey identified also an increase of 7.6% in the prevalence of potentially preventable pressure injuries and skin tears, with a 30% increase in the number of patients receiving a pressure injury risk assessment on admission. Importantly, it was noted that compared with 2009, there was a decrease of 11% in the use of pressure-relieving devices.

It has been shown that if nurses have timely access to basic nurse-sensitive outcomes data, they have acted on the information. For example, data from a US nursing minimum dataset shows a significant reduction in hospital-acquired pressure injuries in adults from 78 acute care hospitals over 8 years (2003–2010).⁸ Hospital-acquired pressure ulcer surveillance based on US nurse minimum data teamed with RN prevention initiatives has provided a net saving of \$127.51 per patient.⁹

What is needed as a priority is investment in basic minimum nursing data structures to reduce the cost of care through quality and safety improvements. Policy initiatives must be directed to nurture the development of national nursing minimum data structures for quality and performance measurement. Some of these data may be currently available in hospital information repositories as activity or case-mix data, but their use has been underutilized and better use of its application requires exploration.¹⁰ The development of nursing quality measurements will not only provide empirical evidence to policy officials who seek meaningful information on the effectiveness of workforce change initiatives, but would also provide vital information for nurses to reduce patient cost and risk.

Liza Heslop

Associate Professor, College of Health and Biomedicine, Victoria University, Melbourne, Victoria, Australia
Western Center for Health Research and Education (CHRE),
Sunshine Hospital, Level 3, 176 Furlong Road, St. Albans,
Victoria, Australia, 3021

NOTE

^aIn the main, there are two different levels of qualified nurses in Australia. Registered nurses (RNs) are the highest level, followed by second-level nurses, enrolled nurses (ENs). Nursing support workers tend to be designated as Assistants

in Nursing (AINs) or other forms of personal care attendants and nursing assistants.

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