



australian nursing federation

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Dear Dr O'Rance,

The Australian Nursing Federation would like to thank you and your colleagues Penny Hargreaves and Penny York for the providing the opportunity to discuss the draft indicators being developed by the Australian Institute of Health and Welfare for the new Australian Health Care Agreements.

As we discussed the development of indicators in relation to nursing workload, staffing and skill mix would be welcomed. The effect of nursing care, nursing workload, nurse staffing and nurse education on the safety and quality of health care is now well documented, and it is important that these factors are reflected in the provision of resources and the obligations of hospitals and health care settings, including residential aged care, to report on the provision of an appropriately staffed, and appropriately skilled nursing workforce.

The effectiveness of nursing interventions is demonstrated by the positive effect on patient outcomes, and much evidence exists to demonstrate links between nursing care and the avoidance of adverse patient outcomes, such as urinary tract infections, pressure ulcers, pneumonia, deep vein thrombosis, falls, postoperative wound infections, medication errors, upper gastrointestinal bleeds, sepsis, increased length of stay (indicative of complications), and death.

There are also significant relationships between nurse staffing, nursing workload, and nurses' work environment and the wellbeing of nurses themselves: identified over and over again as stress, burnout, occupational injuries, and ultimately, a loss to the profession, the health sector and the community, when nurses are forced to choose to end to their professional career.

The following table (Table 1) provides an overview of some of the evidence of the impact of nursing interventions on the quality and safety of health care.

The industrial and professional organisation for nurses and midwives in Australia

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Table 1

Nurse staffing	The nurse staffing levels of health care settings have a significant effect on morbidity and mortality and the occurrence of adverse events, with higher staffing levels associated with lower mortality, lower incidence of infections, decubitus ulcers, ¹ postoperative pulmonary complications, pneumonia, and septicaemia. ²
Nursing workload	Each additional patient increases the likelihood of patient death; ³ increased overtime is associated with urinary tract infections, decubitus ulcers, ⁴ and increased workload with patient falls, respiratory infections, and patient complaints. ⁵ Nurses working shifts of 12.5 hours or more are three time more likely to make an error; and working more than 40 hours a week increases the risk of error. ⁶
Nursing skill mix	An increase in registered nurse staffing is associated with decrease in pneumonia, ^{7,8} lower rates of "failure to rescue", and reduced incidence of death from shock or cardiac arrest, gastrointestinal bleeding, sepsis, deep vein thrombosis, or pneumonia. ⁹
Work environment	Each additional patient load is associated with a 23% increase in nurse burnout and a 15% increase in nurses' job dissatisfaction; ¹⁰ insufficient resources, inadequate support and inadequate equipment are all associated with an increase in injuries to nurses, ¹¹ higher nurse turnover, ¹² and an increase in errors. ¹³

Table 2 provides an overview of some of the research on the financial costs associated with inadequate nurse staffing, inadequate skill mix, and an inadequate work environment for nurses.

Table 2

Nurse staffing	Decrease in nurse staffing associated with increased health care costs of 40%; ¹⁴ inadequate nurse staffing positively associated with adverse events, which are estimated to cost \$AUD 4 billion annually. ¹⁵ Short staffed units have higher costs and patients a longer length of stay. ¹⁶ It is estimated 26.7% of all infections could be avoided if nurse-to-patient ratios were maintained. ¹⁷
Nursing workload	Reducing nursing workload by one patient per nurse (from five to four patients per nurse) is associated with one life saved per 1000 admissions, at a cost of \$US136,000 per life saved. Compared to the cost of commonly accepted medical interventions such as thrombolytic therapy (\$182,000 per life saved), implementing 4:1 ratios for nurses is cost-effective. ¹⁸

Table 2 continued

Nursing skill mix	Registered nursing care is positively associated with reducing adverse events like pneumonia, a complication which adds five days to average length of stay and is estimated to cost \$US4,000 - \$5,000 per additional day. ¹⁹ Pneumonia is responsible for increasing length of stay by 75%, a 220% increase in the probability of death, and an 84% increase in costs. ²⁰
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Nurses work environment	Poor work environments contribute substantially to nursing turnover, with turnover estimated to cost \$AUS150,000 per nurse. ²¹
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In relation to the indicators already proposed by the Australian Institute of Health and Welfare, the Australian Nursing Federation suggests the classifications of Appropriateness and Effectiveness be added, as well as the addition of the following indicators to the ones currently being considered:

EXISTING PRINCIPLES/INDICATOR CLASSIFICATIONS

Better health

1. Mental illness incidence
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Focus on prevention

1. Food security
 2. Proportion of adults with risk factors for the top four or five chronic illnesses
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Access

1. Numbers of nurses or midwives available per person; and per service.
 2. Access to community care by number of services per person; by type of health professional; by remoteness of residence; and socioeconomic status.
 3. Add the following qualifier to Indicator no. 26. re out of pocket costs to include: by remoteness of residence and socioeconomic status.
 4. Access to mental health services.
 5. Access to public oral and dental health services.
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Integration and continuity of care

1. The proportion of health records available electronically that are able to be shared with other providers.
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EXISTING PRINCIPLES/INDICATOR CLASSIFICATIONS continued

High quality - Appropriate

1. Unplanned readmission should be measured for medical as well as surgical patients.
 2. Proportion of people entering hospital who have come from residential aged care should also be measured.
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High quality - Safe

1. The proportion of hospital patients with discharge plans should be assessed for all discharges.
 2. The proportion of health records available electronically.
 3. With regard to adverse events it is suggested that these include: failure to rescue; decubitus ulcers; use of restraints; surgical wound infections; hospital acquired septicaemia; hospital acquired pneumonia; patient falls; and postoperative PE or DVT.
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Sustainable

1. The development of indicators here to reflect the available evidence on the effect of staffing and workload on nurse turnover is important e.g. indicators on numbers of nursing staff per service provider; nursing skill mix (proportion of assistants in nursing, enrolled nurses and registered nurses); nursing workload, including patient "churn"; and staff satisfaction would all be important indicators to evaluate the sustainable of services.
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NEW PRINCIPLES

Appropriateness

1. Consideration should be given to assess whether care is being provided by the most appropriate health professional e.g. the development of indicators to determine an appropriate skill mix.
 2. Consideration given to the development of indicators to determine the cultural appropriateness of care for Indigenous people.
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Effectiveness

1. Indicators to determine the extent to which care is evidence based e.g. compliance with clinical guidelines.
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It is also suggested that all types of indicators should include the collection of information with regard to Indigenous status.

We also discussed the evidence base for magnet hospitals at our meeting and would like to provide the following overview for you information.

The evidence base for magnet hospitals began in the 1980s when Margaret McClure et al discovered that in the midst of a global nursing shortage, some US hospitals demonstrated a substantially greater ability to recruit and retain professional nurses.

Using McClure's research instrument, the Nursing Work Index, Aiken et al analysed the effect of these particular work environments on the quality of care and stability of the nursing workforce.²²

Known as "magnet" for their ability to attract, these hospitals have particular organisational structures (and are able to be accredited accordingly) that recognise the importance of nurses throughout all levels of the hospitals administration and management from the top down. The first 'magnet hospitals' were found to be places where nurses had autonomy and control over their practice settings; good relationships with their colleagues; adequate support services; enough staff to provide high quality care; time to discuss patient problems with their colleagues; the opportunity to participate in policy decisions; a powerful nursing leader; and an environment that recognised the value of their work.²³

According to Dr Aiken, one of the most significant features of magnet hospitals is that they provide greater autonomy for nurses and give nurses greater control over their work. This not only improves nursing morale, but it leads to safer care.²⁴

The most substantial benefit of the magnet organisational approach is that the improvement in the nurses' work environment reduces medical errors and preventable adverse patient outcomes, and addresses the underlying cause of the difficulty in recruiting and retaining sufficient numbers of qualified nurses.

Improved patient outcomes not only benefit the patient, they also reduce hospital expenditure. Magnet hospitals are cost effective because they reduce the cost of staff turnover and reduce average patient costs by preventing expensive complications. They have lower mortality rates, fewer ICU days of care, lower average length of stay, use fewer pharmaceuticals, and undertake fewer tests - all of which contribute to more cost effective care.

I have also attached for your information a Submission made by the Australian Nursing Federation to the Australian Government and the National Health Hospitals Reform Commission on the Australian Health Care Agreements.

Once again, thank you for the opportunity to contribute. We look forward to seeing the subsequent indicators as developed by the Australian Institute of Health and Welfare.

Please don't hesitate to contact me if you require any further information.

Kind regards,

Fiona Armstrong
Federal Professional Officer

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