Nursing the system back to health

Nurse To Patient Ratios

New Zealand Nurses Organisation
New Zealand nurses have had enough of unmanageable workloads, staff shortages and unpaid overtime. Many nurses have left nursing because of stress related to work overload, saying they feel demoralised because they cannot deliver the care that they went into nursing to provide.

New Zealand is not alone in this problem. Work overload and nurse shortages are worsening trends world wide. International health agencies such as the World Health Organisation and the International Council of Nurses have described the problem of nurse shortage as critical.

Facing the same issues, nurses in the Victorian branch of the Australian Nursing Federation (ANF) campaigned for the introduction of nurse to patient ratios. As a result of their successful campaign, legally binding nurse to patient ratios were established in Victoria in 2001.

The impact on Victoria's nursing crisis was dramatic. Since the introduction of safe staffing measures, more than 4000 nurses have returned to work in Victoria's hospitals.

Impressed by the Australian results, the New Zealand Nurses Organisation (NZNO) has made a commitment to achieving safe staffing conditions for nurses here, through the introduction of nurse to patient ratios and other measures to support the work of nurses.

NZNO believes the establishment of nurse to patient ratios will encourage many nurses to return to nursing and make our hospitals safer.

This booklet outlines the NZNO safe staffing model and the four components needed to achieve safe staffing for nurses:

- Nurse to patient ratios
- The establishment of associate charge nurse positions
- Dedicated time for professional education and development
- The evaluation of patient outcomes

To achieve our goal, we intend to educate the public, employers and nurses about the NZNO model of safe staffing. At the same time, we will seek provisions in our collective employment agreements that make safe staffing a reality.

This booklet is a resource for nurses, the public, patients and employers outlining what will provide safe staffing and good working conditions. The booklet is an important part of the NZNO campaign to enable nurses to manage workloads effectively so they can give safe and effective care.

It's all about safety.

Dr Jane O'Malley,
President,
NZNO
Nursing Shortage?

It is estimated New Zealand has a nursing shortage of around 2000 nurses in the public sector. This estimate is based on a conservative figure of a 5 percent nurse vacancy rate in district health boards (DHBs). In some DHBs, the vacancy rate is as high as 12 percent.

The Nursing Council of New Zealand’s 2001 census figures show there are more than 5000 nurses holding annual practising certificates but not currently working.

With a nursing “shortage” of 2000 nurses and with 5000 nurses currently not working in nursing, it appears that New Zealand may not in fact be experiencing a shortage of nurses but a shortage of nurses willing to work in nursing.

Recent New Zealand research with new graduates shows that increasingly unmanageable workloads and lack of clinical leadership support are among the reasons nurses are making the choice to leave nursing. (Grainge and Walker, 2002).

Lack of readily available senior nursing support means that relatively inexperienced nurses are often left in charge of wards when the workload is heavy and patient acuity is high.

The chronic and widespread nature of this problem has desensitised nurses and nurse managers to the risks they carry in struggling to manage untenable workloads. Recent highly publicised incidents within New Zealand’s public hospitals underscore the effect of carrying such risks.

There is compelling international evidence showing that adequate and appropriate levels of nursing staff result in better patient outcomes, shorter lengths of stay and fewer complications. (Aiken et al 2002, Needleman, 2001)

It is often argued that DHBs cannot afford to put in place the safe staffing measures outlined in this booklet.

In 2002 the Ministry of Health estimated that the cost of nursing workforce turnover is $100 million per annum. (Ministry of Health, 2001)

It can hardly be argued that $100 million a year of unproductive expenditure should be tolerated. The argument that safe staffing is too expensive also fails to consider the cost of avoidable patient complications and deaths.
What’s Happened So Far?

In 2001 NZNO representatives visited Australia to look at the successful campaign to reintroduce manageable workloads into Victorian hospitals. Following that visit, Belinda Morieson, the former secretary of the ANF, was invited to the NZNO annual conference in 2002. There was widespread support for pursuing nurse to patient ratios following Morieson’s visit.

During 2002 and 2003, an NZNO model was developed which included nurse to patient ratios and the establishment of associate charge nurse positions. NZNO members endorsed this model at regional conventions in early 2003.

In June this year, NZNO submitted a proposal to the Ministry of Health for a safe staffing pilot. Regrettably, the Minister of Health has rejected the NZNO pilot in favour of magnet hospital projects. The concept of “magnet” hospitals refers to hospitals that conform to a model list of attributes that have been shown to attract staff.

While NZNO supports the concept of magnet hospitals, we do not see magnet hospital concepts as an alternative to nurse to patient ratios.

With ministry support withdrawn for the safe staffing pilot, NZNO is embarking on an industrial, educational and political campaign to achieve safe staffing levels for nurses.
The NZNO Safe Staffing Model

Nurse to patient ratios are a key component of the NZNO safe staffing model.

Nurse to patient ratios describe the number of patients that may safely be cared for by one nurse in any given clinical setting.

The ratio describes the number of patients actually in the care of a nurse. It is determined from the number of nurses actually available to give direct patient care on a ward, unit or service at any given time to the patients actually present at that time.

Nurse to patient ratios allow flexibility. A 1:4 ratio means in a 20-bed unit there must be five nurses plus one nurse in charge. How many patients each nurse cares for will depend on the skill mix and patient needs.

The methodology used to apply the nurse to patient ratios is consistent with the principle of ensuring that the number of nurses available is commensurate with the number of patients requiring care.

The nurse to patient ratios should be calculated on actual patient numbers in a given ward or unit. Obviously if a hospital has a particular ward of 30 beds and only 26 beds are usually occupied, then the four “unused” beds can only be used when additional staff are available to meet ratio requirements.

What’s So Good About Ratios?

Nurse to patient ratios replace the present situation that there are often shifts when nurses are expected to care for more patients than is safe with the certainty that there will always be sufficient nurses to provide safe and effective care.

Nurse to Patient Ratios:

• Ensure there are adequate numbers of nurses on the roster.

• Provide sufficient nurses on the roster at a unit level, on every shift, to enable nurses to exercise their professional judgment as to nurse/patient allocation for best patient outcome.

• Allow effective nursing service planning, budgeting and operation at ward, service, institutional and national levels.

• Enable nursing service managers to shift from a reactive “fire-fighting”, operational approach to a proactive, strategic approach.

• Result in better patient care, greater nurse job satisfaction and the ability to recruit and retain nurses.
Who Benefits From Ratios?

The Community
- Safe, effective nursing care
- Better patient outcomes
- Increased confidence in the public hospital system

Government
- Better cost effectiveness
- Increased public approval
- Greater transparency in expenditure of funding

Employers
- Reduced nursing turnover
- Improved recruitment and retention
- Reduced sick leave
- Improved cost effectiveness
- Improved morale

Nurses
- Increased job satisfaction
- Better personal health and wellbeing

Associate Charge Nurses

What Are Associate Charge Nurses?

The associate charge nurse is a clinical nursing leadership role established in many Australian hospitals and some New Zealand hospitals at the ward or service level.

The associate charge nurse is additional to the number of nurses providing direct patient care. The role is focused on supporting nurses providing direct nursing care. It has emerged as a key role, with the change in focus of the traditional charge nurse role and the advancement of nursing. The focus of the role of the contemporary charge nurse has shifted from clinical leadership and support, to human and clinical resource management. The need for more clinical leadership positions has increased as a result of steadily increasing complexity of nursing practice.

Why Are They So Important?

Associate charge nurses provide essential, “on the floor” leadership and support to nurses caring for patients with complex nursing needs. This leadership establishes a stable and robust nursing environment where nurses are able to work together effectively to deliver excellent nursing care, to continuously improve clinical performance at individual nurse and nursing unit levels. Nurses obtain satisfaction working in units that obtain excellent patient outcomes and where their own performance is valued and enhanced. Therefore the retention of nurses is improved along with improved patient outcomes.
Overseas Evidence

The Australian Experience

Overseas models show that nurse to patient ratios get results. Nurse to patient ratios have been implemented in Victoria, Australia and California, USA. The experience overseas shows where nurse to patient ratios are implemented, nurses return to nursing.

In 2000, the Australian Industrial Relations Commission handed down a decision that was overwhelmingly in favour of the claim of the Victorian branch of the ANF for nurse to patient ratios with associate charge nurses.

There are two main parts to the Victorian model: nurse to patient ratios and the establishment of associate charge nurse positions on every shift.

The Victorian model saw the reintroduction of over 3300 nurses by February 2002 (this represents an increase of 16 percent) to the workforce by guaranteeing manageable workloads and support on each shift from an associate charge nurse. The ANF (Victoria) reports that the retention rate of these nurses one year later is 95 percent.

In Victoria, not only has there been a retention rate of 95 percent of the nurses that came back into nursing, but for the first time in many years there has been an increase in the number of students enrolling to train as nurses and a reduction in the usual attrition rate of student nurses.

The Californian Experience

In 1999, after a decade of market driven care in the 1990s, the Californian legislature passed the first comprehensive legislation in the US to establish minimum nursing levels in hospitals, through nurse to patient ratios.

The ratios were a direct response to the erosion of patient care standards in hospitals and the exodus of nurses who would no longer work in unsafe hospitals.

Minimum ratios were established for approximately 20 different units.

The Californian Nursing Association, while recognising that the ratios fell short of their proposals, stated that they would produce improvements in all Californian hospitals and achieve significant relief for the nursing shortage.

The Californian ratios are minimum numbers that are increased as considered desirable, depending on patient and nursing needs, including severity of illness and complexity of clinical judgement.
The NZNO nurse to patient ratios have been determined by what is known to be acceptable and workable for New Zealand nurses.

Ratios for specialist units have been confirmed with specialist NZNO colleges and sections. The Victorian nurse to patient ratios have also influenced the NZNO ratios.

There has been a strong message from nurses that computer-determined dependency systems cannot support effective nurse allocation adequately for consistently safe practice. Nurses report that such systems regularly fail to deliver the right number of nurses on a prospective and regular basis.

Nurses are sick of workload management systems that retrospectively tell them that more nurses were needed than were rostered on a given shift, but do little to assist them manage at the time of the actual shortage.

As well as being ineffective, computer-determined management tools are themselves time-consuming, taking nurses from the bedside to enter patient and nurse data.

In many wards, units and hospitals, nurses already manage their workloads on the basis of established nurse to patient ratios. For many nurses this will only formalise existing arrangements and practices.
The NZNO model is primarily, but not exclusively, focused on public sector hospitals.

Nurses in the private sector often struggle with similar unmanageable workloads. NZNO believes the establishment of staffing ratios in the public sector will influence the private sector by providing a positive model, and setting the standard necessary for a safe environment.

Aged care presents a different situation than in the public sector. The enactment of the Health and Disability Services (Safety) Act in 2004 will repeal the current regulations stipulating the minimum numbers of registered nurses on duty at a given time.

To maintain regulated nursing levels in aged care, a new regulation must be developed. NZNO has participated on an expert advisory group, which has recommended an increase in minimum nursing staffing levels in aged care facilities.

Though there are issues of safe staffing levels in midwifery, NZNO has not proposed ratios for delivery suites. Funding arrangements for midwives are determined by Section 88 specifications. The model of care delivery, i.e. the numbers of independent midwives and lead maternity carers, determines staffing. Nevertheless, the establishment of reasonable workload boundaries are fundamental to safe midwifery practice.
Nurse To Patient Ratios

General Medical/Surgical Wards

Tertiary Hospitals
Mainly leading teaching, research and referral hospitals, general and special services for trauma, transplant, oncology, neurosciences, cardiac, paediatrics, and acute surgical and medical services.

- **am shift**: 1:4 + in charge
- **pm shift**: 1:4 + in charge
- **night duty**: 1:8

Secondary Services Hospitals
(Metropolitan and provincial centre hospitals)

- **am shift**: 1:4 + in charge
- **pm shift**: 1:5 + in charge
- **night duty**: 1:8

Negotiations may be required to establish the best category for a particular hospital.

Small Metropolitan Hospitals and Small Centre Hospitals

- **am shift**: 1:5 + in charge
- **pm shift**: 1:6 + in charge
- **night duty**: 1:10

Country/Rural Hospitals

- **am shift**: 1:6 + in charge
- **pm shift**: 1:6 + in charge or 1:7 + in charge if no theatre services
- **night duty**: 1:10

In smaller rural hospitals, where aged care patients occupy beds designated as acute, ratios may need to be increased.

NICU (Neonatal Intensive Care Unit)

- **All shifts**: 1:2 + in charge

Discrete Level 2 Special Care Units

- (a) where 10 or more cots: 1:3 on all shifts
- (b) where less than 10 cots: 1:4 on all shifts

The general rounding principles, as determined, shall apply, provided that two nurses shall be required in respect of six cots.

To illustrate in respect of the 1:3 ratio:

- 10 cots = 3
- 11 cots = 4
- 12 cots = 4
- 13 cots = 4
- 14 cots = 5
- 15 cots = 5
- 16 cots = 5

1. Acutely ill neonates in NICU will always be a 1:1 ratio and in discrete Level 2 units that stabilise these babies it may well be 2:1.
2. CPAP babies require the same ratio of care as ventilated babies.
Emergency Departments

Emergency department patients can be broadly defined into four categories: critical, high risk or has time-critical needs, stable and minor.

The current profile of most patients in New Zealand emergency departments fits either high risk or time-critical needs and stable categories.

- High risk, time-critical needs patients 1:2
  (with ability to flex to 1:3 for short periods)

- Stable Patients 1:3
  (with ability to flex to 1:4 for short periods)

Note: The average patient dependency requires a base ratio of 1:3 nurses available on the floor for the purpose of direct patient needs.

In addition, extra nurses need to be available for clinical co-ordination, triage and resuscitation roles 24 hours a day, seven days a week.

All emergency departments require a workable plan to cover for facility overload.

More detail on nurse to patient ratios for emergency departments is available from the NZNO website or from the College of Emergency Nurses (NZNO).

Intensive Care Units

Ratio of 1:1 + in charge for ventilated and critically ill patients.

Designated Coronary Care Unit

- am shift 1:2 + in charge
- pm shift 1:2 + in charge
- night duty 1:3

High Dependency Unit

(stand alone units) in hospitals

- am shift 1:2 + in charge
- pm shift 1:2 + in charge
- night duty 1:2

Where HDU is part of an Intensive Care Unit, the “in charge” position is to cover both HDU and ICU.

Rehabilitation Units

Rehabilitation units for spinal injury patients and brain injury patients often have acute patients as well as short and long term rehabilitation patients. Because of the variation in dependency, these units need to establish, on a unit by unit basis, the appropriate nurse to patient ratios.
Assessment Treatment and Rehabilitation Units (AT&R)

- am shift 1:5 + in charge
- pm shift 1:6 + in charge
- night duty 1:10

Where Rehabilitation and ATR beds are less than 25 percent of a ward or unit, the ratios, according to the dominant clinical description, shall apply.

Operating Theatre

3 per theatre
Operating theatres will normally have three nurses, one scrub nurse, one circulatory nurse and one anaesthetic nurse. This may be varied up or down, depending on the following circumstances:

1. Complexity of the surgery or procedure;
2. Pre-existing condition of the patient;
3. Number of operations on the list;
4. Experience and skill mix of staff;
5. Type of equipment used;
6. Number of students requiring supervision;
7. Temporary fluctuations in demand across the whole theatre suite during a session; and
8. Layout and number of operating suites.

Post-Anaesthetic Care Unit/Recovery Room (PACU)

All shifts 1:1 for unconscious patients.
References


Gower, S. Finlayson, M. (2002) *We are able and artful, but we’re tired: results from the survey of New Zealand hospital nurses*. Paper to the College of Nurses Aotearoa annual conference, Nelson, September.


