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SUBMISSION TO

HEALTH & AMBULANCE SERVICES COMMITTEE

in response to

**HOSPITAL AND HEALTH BOARDS (NURSE-TO-PATIENT AND MIDWIFE-TO-PATIENT
RATIOS) AMENDMENT BILL 2015 (Bill)**

February 2016

**Contact: Lucy Fisher
Executive Director
Private Hospitals Association of Queensland Inc
PO Box 370
Kenmore QLD 4069**

EXECUTIVE SUMMARY

- The private hospital sector is strongly committed to the provision of safe patient care and the allocation of nursing/midwifery resources that directly target the needs of each individual patient but is opposed to legislation which prescribes minimum nurse/midwife to patient ratios together with associated regulations which may further articulate minimum staffing requirements as international research falls short of recommending any optimal minimum ratios or prescribed skill mix.
- With the exception of Victoria and California, other countries and jurisdictions which have implemented or are seeking to legislate safe staffing measures have moved away from mandated minimum ratios in favour of mandatory staffing plans. Such plans are generally accompanied by a requirement for some form of disclosure or public reporting.
- There has been a heightened focus on quality and safety since Victoria introduced ratios in 2001. Australia now has National Safety & Quality Health Service Standards (NSQHS) which underpin the National Accreditation System. All public and private hospitals must be accredited to the national standards which include a substantial auditing component and evidence requirement that the standards are being met. The standards do not prescribe staffing ratios or minimum requirements but hospitals must demonstrate that staff are appropriately skilled and trained. Hospitals must also provide evidence of outcomes across a wide ranging set of indicators under the broad headings of clinical governance, partnering with consumers, patient identification and procedure matching, clinical handover, recognising and responding to clinical deterioration, falls, medication, pressure injuries, infection control and blood management.
- In addition to the NSQHS Standards, Queensland has *The Clinical Services Capability Framework (CSCF) for Public and Licensed Private Health Facilities v3.2, 2014*, a comprehensive multiple module document which provides a set of capability criteria identifying minimum service, workforce, support service requirements & risk considerations by each service level. The document was completely rewritten in 2009-10 and reviewed in 2014. Whilst each module outlines the medical, nursing, allied health and other workforce specifications relevant to the service levels within each module, the CSCF does not prescribe staffing ratios, absolute skill mix or clerical and/or administrative workforce requirements for a team providing a service, as it was agreed by clinicians that these were best determined locally.
- To maintain a good working environment for nurses/midwives and a safer environment for patients, hospitals need to ensure that they have the right nurses/midwives with the right skills in the right place at the right time but what the actual number and skill mix will be will vary from hospital to hospital, units within the same hospital and between shifts within the same unit and be subject to the changing condition and needs of its patients. If the nursing and midwifery regulation prescribes the same skill mix for all medical and surgical units within the specified facilities, it may not reflect contemporary team based care models for a particular ward or unit and in consequence could result in a waste of scarce resources.
- Reporting compliance with prescribed ratios will not in itself provide evidence that a hospital is staffing safely because it is a process and not an outcome measure. As the stated intent of this legislation is to improve patient safety, it is recommended that the focus of reporting should be on recognised nursing and patient safety sensitive indicators as outlined in this submission.
- The nursing and midwifery regulation will be the instrument with the power to articulate skill mix and other prescriptive staffing requirements for various clinical units, which depending on what is specified, may not only prove challenging for some units to meet but could be highly costly without delivering any identified improvements to patient safety. PHAQ would hope that it would be mandatory that any proposed change to the regulation from that which is currently before Parliament, would require public consultation and be subject to the RIS system prior to it taking effect.
- PHAQ would recommend therefore, that the legislative provisions include a requirement for a comprehensive independent analysis to be undertaken 12 months after implementation to ascertain whether the legislation has met its pre-determined patient safety objectives or if any unintended consequences were identified. The outcomes of this analysis should be tabled in Parliament and made publicly available.

INTRODUCTION & GENERAL COMMENTS

The Private Hospitals Association of Queensland is the peak body representing the interests of private hospitals operating in this State, and as such we appreciate the opportunity to provide comment on the proposed legislation to implement nurse to patient ratios in specified public health service facilities.

Before focussing on specific aspects of the proposed suite of legislation, PHAQ would like to place on record that the private hospital sector is strongly committed to the provision of safe patient care and the allocation of nursing resources that directly target the needs of each individual patient but is opposed to any legislation which prescribes minimum nurse to patient ratios, together with associated regulations which may further articulate minimum staffing requirements or specified skill mix, for the various reasons we will outline in this submission.

Literature Review

PHAQ has undertaken an extensive international literature search and whilst there is certainly a significant body of evidence to suggest that professional nurse staffing is a critical component of quality patient care and decreased patient mortality and morbidity, the research falls short of recommending any optimal minimum ratios or prescribed skill mix – in fact quite the contrary as the following extracts from the literature highlight.

A comprehensive literature review conducted in part by the University of California Davis Center for Nursing Research (2002) noted that, “*We found no evidence to justify specific nurse-to-patient ratios in acute care hospitals, especially ratios that are not adjusted for case mix and skill mix.*”

Similarly, Blakeman Hodge et al ⁽²⁰⁰⁴⁾ in their study found that: “*Primarily no empirical evidence supports the specific numbers assigned through mandatory ratios with better patient outcomes*” and Donaldson, Bolton et al (2005) concluded that “*there has been little evidence that specific nurse-to-patient staffing ratios improve safety or quality. For example, a study of California hospitals before and after the imposition of mandatory ratios demonstrated an increase in costs but no improvement in quality of care.*”

Nurse staffing ratios have a relationship with reductions in hospital-related mortality in most published studies. However, lack of a published evaluation of intentional change in RN staffing from some initial value (e.g. 6 patients to 1 RN on general medical wards) to some lower patient-RN staffing value (such as 5:1 or 4:1) limits conclusions on increasing nurse staffing ratios as a patient safety strategy. All longitudinal published studies to date have assessed natural variations in RN staffing. The concern remains that mortality is not reduced by increased nurse staffing but by something the nurses do. (Shekelle, P.G. [2013])

In support of advocacy to introduce mandated minimum ratios of one nurse to four patients for medical and surgical units, proponents have frequently made reference to a study by Aiken et al [2002] entitled *Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Satisfaction*, which investigated the relationship between staffing levels at 168 Pennsylvania hospitals in 1999 and mortality rates of selected surgical patients. However the manner in which the results of this study have often been quoted may inadvertently mislead the reader regarding the actual study findings.

For example, in his speech to Parliament introducing this Bill, the Minister for Health in referring to this study stated:

One paper in particular, published in 2002 in the Journal of the American Medical Association, found that for each additional patient beyond four assigned to a registered nurse the risk of death increases by seven percent for all patients.

It is reasonable to assume that some people might interpret this to mean that the study findings concluded that 7 more patients per 100 would die if the ratio were 5 patients per nurse rather than 4 patients per nurse – i.e. that the risk to the individual patient would increase by 7% - this is not the case as illustrated in the table below which utilises figures from this study.

Sample Size (Number of Patients)		232,342		
Actual Deaths		4,535		
Calculated Deaths as per Study Methodology				
No. of Patients / Nurse	No. of Deaths	Odds of Mortality	Increase in Odds of Mortality	Change in No. of Patients / Nurse
4	4000	1.72%		
5	4280	1.84%	0.12%	4 to 5
6	4534	1.95%	0.23%	4 to 6
8	5000	2.15%	0.43%	4 to 8

Aiken et al study – Hospital Nurse Staffing and Patient Mortality, Nurse Burnout and Job Dissatisfaction (JAMA October 23/30 2002 - Vol 288 No.16)

Alternate Methods of Calculation						
No. of Deaths based on 4000 at 4:1	OR (Odds Ratio)	Odds of Mortality	Increase in Odds of Mortality	No. of Deaths based on 4534 at 6:1	Odds of Mortality	Increase in odds of mortality
4000	1.00	1.72%				
4280	1.07	1.84%	0.12%			
4580	1.14	1.97%	0.25%	4534	1.95%	0.23%
4900	1.23	2.11%	0.39%	4852	2.09%	0.37%
5243	1.31	2.26%	0.54%	5191	2.23%	0.51%

As demonstrated above, what this study concluded is that based on its assumptions, decreasing the nurse to patient ratio from 4 patients per nurse to 5 would result in the odds of mortality ratio increasing by 7%. This odds of mortality increase from 1.72% to 1.84% of all patients results in an increased risk of death to the individual patient of 0.12% - and not 7% as might be interpreted from the manner in which the results of this study have often been quoted.

This study, and another similar one have attracted criticism from a number of other renowned international researchers and which is perhaps best summarised in a quote from Welton, J.M. [2008] below:

Proponents of mandatory, nurse-to-patient staffing ratios point to research indicating an association between nurse workload and patient mortality and morbidity. Two studies in particular have been used to support development of state and federal laws. The first, a study of 799 hospitals in 11 states, found a higher prevalence of infections, such as pneumonia and

urinary tract infections, failure to rescue, and shock or cardiac arrest when the nurses' workload was high ([Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002](#)).

A second widely acknowledged study investigated the relationship between staffing levels at 168 Pennsylvania hospitals in 1999 and mortality rates of selected surgical patients. The investigators reported that for each additional patient a nurse was assigned, there was a seven percent increase in the likelihood of dying for a patient under that nurse's care ([Aiken, Clarke, Sloane, Sochalski, & Silber, 2002](#)). These findings have been the primary arguments for setting specific, nurse-to-patient staffing ratios.

There are several weaknesses in these studies, as well as other studies, evaluating the relationship between nursing workload and patient care quality. The nurse-to-patient staffing ratios used by both Needleman's team and Aiken's team are hospital averages, not individual, nursing unit-level measures. There is no basis in these two studies for generalizing to any particular nursing unit or individual patient. Furthermore, the measure of patient death in the select surgical patients may not be a direct measure of general, inpatient, nursing quality. It is equally likely that the surgeon or surgical environment influenced the patient's outcome. We must also be cautious in generalizing the findings of these two studies from data collected in the late 1990's to current hospital conditions. Although a recent review of nearly a hundred nurse staffing studies by the Agency for Healthcare Quality and Research found an association between staffing levels and patient mortality and hospital outcome, the authors concluded that these relationships are not causal (Kane, Shamliyan, Mueller, Duval, & Wilt, 2007). The available evidence does not support the establishment of specific nurse-to-patient staffing ratios at this time; and the extant literature contradicts the legislative efforts endorsed by those seeking mandatory, nurse-to-patient staffing ratios.

Welton, JM [2008]

Clarke, SP & Donaldson NE [2008] stated that:

There are no evidence based minimum staffing ratios, although clinicians and managers set operating ratios every day, largely on the basis of their experience and to a lesser extent, from extrapolations of researchers' findings. As in all aspects of health care management, empirical evidence needs to be interpreted in the context of local data and experience.

Mandated minimum ratios were first introduced in California in 1999 largely in response to recruitment and retention issues being experienced at that time, although ratios did not take full effect until January 2004. 12 years later it remains the only American State with a 'one size fits all' mandated minimum ratio requirement across multiple service areas and clinical units. For medical and surgical units the ratio is 1:5 but up to 50% of this ratio may be staffed by Licenced Vocational Nurses (ENs).

A number of American States have since introduced staffing legislation but the models are different and are based on a requirement for hospitals to develop their own staffing plans which include unit specific minimum ratios tailored to the characteristics of its service profile and inpatient population. Most States with staffing plans in place have implemented mandatory reporting and compliance regimes. In April 2015, the *Registered Nurse Safe Staffing Act* was introduced in America, which is a bipartisan piece of legislation, which if passed, would require *Medicare* participating hospitals to establish a committee composed of at least 55 percent direct care nurses to create nurse staffing plans that are specific to each unit.

Victoria introduced mandated minimum ratios in the public sector in 2001, but they were not premised on any strong evidence base and arose out of an Australian Industrial Relations Commission arbitrated decision largely in response to recruitment and retention challenges being experienced at the time. As noted in the explanatory notes, in October 2015, the Victorian Government passed the *Safe Patient Care (Nurse to Patient and Midwife to Patient Ratios) Act 2015* which enshrines in legislation the ratios currently set out in the *Nurses and Midwives (Victorian Public Sector) (Single Interest Employers) Enterprise Agreement 2012-2016*. The Act will apply to those departments and wards currently required to have ratios under the Enterprise Agreement.

There has been a significant heightened focus nationally on quality and safety since Victoria introduced ratios in 2001. Australia now has National Safety & Quality Health Service Standards (NSQHSS) which have been endorsed by all Health Ministers and which underpin the National Accreditation System. All public and private hospitals must be accredited to the national standards which include a substantial auditing component and evidence requirement that the standards are being met.

The standards do not prescribe staffing ratios or minimum requirements but hospitals must demonstrate that staff are appropriately skilled and trained. Hospitals must also provide evidence of outcomes across a wide ranging set of indicators under the broad headings of clinical governance, partnering with consumers, patient identification and procedure matching, clinical handover, recognising and responding to clinical deterioration, falls, medication, pressure injuries, infection control and blood management.

In addition to the National SQHS Standards, Queensland has *The Clinical Services Capability Framework (CSCF) for Public and Licensed Private Health Facilities v3.2, 2014*, a comprehensive multiple module document which provides a set of capability criteria identifying minimum service, workforce, support service requirements & risk considerations by each service level with Level 1 managing the least complex patients through to Level 6 which manage the highest level of patient complexity. Senior medical and nursing clinicians across multiple specialties from metropolitan, regional, rural and remote and from both the public and private sectors were involved in its development. The document was completely rewritten in 2009-10 and reviewed in 2014. A Governance Committee, chaired by the Chief Health Officer, has been established to oversee its ongoing maintenance and future development. Whilst a service planning guide for public hospitals, compliance with the CSCF is a mandatory condition of licence for private hospitals.

Whilst each module outlines the medical, nursing, allied health and other workforce specifications relevant to the service levels within each module, the CSCF does not prescribe staffing ratios, absolute skill mix or clerical and/or administrative workforce requirements for a team providing a service, as it was agreed by clinicians that these were best determined locally. As noted in the foreword to the CSCF and jointly signed by the Chief Health Officer and former Director General – “*When applied across the state, a consistent set of minimum standards and requirements for clinical services will safeguard patient safety and facilitate clinical risk management in public and licensed private health services.*”

PHAQ considers that because of the unpredictability of the patient care environment, mandated ratios are ineffective in addressing the demands and constant fluctuations of patient care and nursing care needs. To maintain a good working environment for nurses and a safer environment for patients, hospitals need to ensure that they have the right nurses with the right skills in the right place at the right time but what the actual number and skill mix will be will vary from hospital to hospital, units within the same hospital and between shifts within the same unit.

Nurse Managers need to understand unit ward throughput peaks and troughs by the month, day of the week, and times of day in order to staff accurately and having done that, then to adjust staffing to accommodate constantly fluctuating patient acuity.

Other staffing variables which must be considered include the physical layout of the unit, availability of hospital resources and technology, experience levels of the staff and the number of temporary staff and staff in orientation or training on the unit at any particular time.

As noted by MacMillan, K. [2014]. *Staffing in-patient hospital units with the right kind of nurses over a 24 hour period is actually a very complex process that nurse managers work with every day. The number of RNs and LVNs (ENs) required varies with the individual nurse's background and experience and with the complexity and acuity of the patient's condition. While a unit may be an acute surgical unit, the patients in the bed can represent a range of nursing care needs because of age, other existing health conditions and complexity of medical and surgical care. For example of 26 inpatient beds, 8 beds might be occupied by frail elderly patients who are not able to be discharged home and are waiting for nursing home beds. They require a lot of direct observation and care, but not necessarily direct care by an RN. A simple nurse to patient ratio ignores these real factors and ties the hands of nursing administration and managers to make staffing decisions based on real and emerging patient needs and real availability of a range of nursing personnel. A better approach to this kind of problem is a dynamic staffing approach that recognizes that hours of patient care provided by the right level of provider is what really matters and that this can change over the course of a day, over a shift and even hourly in many hospital settings.*

The proposed minimum ratios are the same for all surgical and medical wards and yet as noted in the example above, patient care type is critical in terms of being able to assess patient acuity accurately and the skill mix necessary to deliver appropriate care. Nurse Managers need to accurately assess the type of work on the ward and how much of it must be done by an RN or EN and how much an Assistant in Nursing (AIN) /Patient Care Assistant (PCA) may be able to do.

To our knowledge, at this stage there is nothing in the suite of ratio legislation which articulates the proposed skill mix for the mandated minimum ratios to apply to medical, surgical, maternity and mental health wards at the specified public sector facilities. However PHAQ is aware that the QNU in its document "*Ratios Saves Lives*" is advocating for a ratio in adult medical & surgical wards of 80:20 RN/EN.

PHAQ has been unable to find any evidence from the literature of an optimal skill mix for acute care units – in California the mandated minimum skill mix for medical & surgical wards with a 1:5 ratio is 50% RN. In 2006, the Royal College of Nursing recommended a skill mix ratio of 65% RN to 35% healthcare support workers as a benchmark for acute ward areas and in 2012 the Chief Nursing Officer for Wales established guidance that the skill mix of RNs to support workers in acute areas should generally be 60:40.

We have been unable to find any evidence in the literature in support of a minimum skill mix of 80:20 for all acute medical and surgical wards as advocated by the QNU.

Skill mix on general medical and surgical units will vary depending on the clinical unit, however if the nursing and midwifery regulation prescribes the same skill mix for all medical and surgical units within the specified public health service facilities, it may not reflect contemporary team based care models for a particular ward or unit and in consequence could result in a waste of scarce resources.

PHAQ concurs with the views expressed by Buerhaus, P.I. (2010) when he stated:

The goal is to employ the number and mix of nurses that can most efficiently produce the required treatments and services consistent with the organisations' objectives, budget and quality standards and to find ways that other health care personnel, capital and technology can be most productively combined. If hospitals are required to staff according to mandated minimum nurse staffing levels or ratios, then in effect, they will be forced to produce patient care services inefficiently. By constraining hospitals' ability to select and experiment with different numbers and skill mixes of nurses, they would be significantly hampered in exploring ways to maximally combine nurse care with the services of other providers or technologic innovations. Hospitals, like any other employer of nurses, need the freedom to take full advantage of the resources needed to satisfy the demand of patients and also meet its objectives.

As noted in the Explanatory Notes – the objective of the Bill is to:

“establish a legislative framework to ensure safe nursing and midwifery staff numbers and improve patient outcomes, through mandating nurse-to-patient ratios (ratios) and workload provisions in public sector health service facilities.....”

“Through minimum ratios, persons receiving care and treatment will benefit from improved patient safety and quality of care. In turn, this provides greater patient satisfaction and improved patient outcomes, including reduced readmission rates and reduced post-operative mortality rates.”

PHAQ considers that a requirement to monitor adherence to mandated minimum ratios will not in itself provide evidence that a hospital is providing safe patient care. Of far greater relevance is outcome data on a range of recognised and relevant nursing and patient safety sensitive outcome measures – for example: patient satisfaction & complaints, falls, pressure injuries, medication administration errors, infection rates; response to deterioration, staff turnover, absenteeism and agency usage to name a few. Analysis of these measures provides a far more reliable indicator that a hospital is staffing safely in order to meet the changing needs of its patients rather than reports of compliance with mandated minimum ratios or prescribed skill mix.

SPECIFIC COMMENTS

HOSPITAL AND HEALTH BOARDS (Nurse-to-Patient and Midwife-to-Patient Ratios) AMENDMENT BILL 2015

138B Prescription of Minimum Nurse to Patient & Midwife-to-Patient Ratios

It is acknowledged actual ratios will be prescribed in a regulation and not the Act however it should be noted that the draft amendment regulation and explanatory note tabled by the Minister on 1 December 2015 has not been posted to the website of the Health and Ambulance Services Committee.

In addition to prescribing minimum ratios, the Bill enables a regulation to prescribe requirements about the skills or qualifications of the nurses or midwives included in the ratios. Given that the Bill defines a nurse as a person registered under the Health Practitioner Regulation National Law in either the registered nurses division or the enrolled nurses division, when considering this legislation it is clearly of immense relevance to know whether the amendment regulation contains any skill mix specification and the evidence base on which any such specification was determined. PHAQ would question why the draft amendment regulation was not made available for public comment along with the Bill?

138C Temporary Exemptions

The Bill makes provision for temporary exemptions to enable the Government to respond to extenuating circumstances that may temporarily prevent a Service from complying with ratios with examples noted in the explanatory notes including challenges in recruiting and training staff, providing appropriate levels of supervision and support or providing accommodation and other infrastructure for additional staff.

Each of these examples are indicative of longer term issues in meeting prescribed minimum staffing levels, but there are other more immediate scenarios which might prevent a hospital from meeting a regulated minimum ratio or prescribed skill mix requirement through no fault of its own - for example, natural disasters or mass outbreaks of flu generating high rates of short term absenteeism. It is suggested that perhaps provision needs to be made for *emergency situations*, whereby hospitals have an automatic temporary exemption from compliance for the period in which they are affected by an emergency situation acknowledged by the Chief Executive of the Health Department.

138 D Minister to consider particular matters before a nursing and midwifery regulation is made or temporary exemption granted.

138d (2) The Minister **must** consider the Service's capability to comply with the regulation and the likely effects of compliance.

(3) The matters that the Minister **may** consider include:

- (a) the likely financial costs of compliance and
- (b) any matter (including the nature, size and location of the Service) that may affect the Service's ability to recruit and retain staff and
- (c) the infrastructure that the Service has, or can acquire, to support staff and
- (d) the potential effects, on health services delivered by the Service, of actions the Service may reasonably need to take to comply with the regulation

The clause combines both the making of a regulation and the granting of a temporary exemption which we consider to be problematic. For example, in the case of making a regulation PHAQ considers it imperative that the Minister **must** (rather than 'may') consider each of items (a) to (d) for every service to which the regulation would apply, whereas in the case of granting a temporary exemption, it may not be necessary or relevant to consider every item.

138 D (1) This section applies if the Minister proposes to –

- (a) recommend to the Governor in Council the making of a nursing and midwifery regulation applying to a Service

Given its importance and potential impact on public sector health services which may be significant in some cases, PHAQ considers that the making of a nursing and midwifery regulation applying to a Service should not be excluded from the Regulatory Impact Statement system (RIS) nor from public consultation, under either general exclusion (e) (*regulation for the internal management of the public sector or statutory authority*) or a relevant specific exclusion (*e.g. Certain specific subordinate legislation is excluded from the RIS system - This subordinate legislation is excluded from the RIS system on the basis that it has been previously assessed as meeting one of the exclusion grounds, for example comparable consultation requirements.*)

Depending on the proposed specific skill mix requirements for particular wards and units and any other mandatory minimum staffing specifications which may be prescribed in the nursing and midwifery regulation, it may have both direct and indirect impacts, some of which could be significant.

By way of illustration:

“To accommodate mandatory staffing ratios, California hospital administrators have made difficult decisions and changes. These include reducing hiring and dismissal of ancillary staff, holding patients longer in the emergency room, hiring more agency and per diem nurses and cross training nurses to cover breaks (Douglas 2010). This increased economic costs for employers and has led to increased workload for nurses (having to perform more non-nursing tasks).” (Tevington, P [2011]. Significantly, the introduction of fixed nurse-patient ratios “created a number of unintended consequences that impacted patient care in unplanned and negative ways such as Emergency Departments on by-pass, surgical cancellations, unit closures and in-hospital patient transfers to other units that compounded the staffing problem.” (MacMillan, K [2014])

138E Standards about nursing and midwifery workload management

We note the policy intent of 138E is to enable the Queensland Health *Business Planning Framework* methodology to determine appropriate nursing and midwifery staffing levels to be legislated in addition to minimum ratios. However the intent to use this methodology as well as mandated minimum ratios, and potentially prescribed skill mix via the nursing and midwifery regulation, would seem to be directly opposite principles.

As noted in the Introduction of the *Business Planning Framework (BPF)* (page 2) - the BPF is a:

“tool for nursing workload management, provides nurses with a business planning process to assist in determining appropriate nursing staff levels to meet service requirements and evaluate the performance of the nursing service. It is a move away from using historical staffing establishment ratios to a method based on a demand and supply approach that is responsive to the changing health care delivery environment and the subsequent nursing resource requirements.

Service demand relates to meeting patient care needs and is established by considering factors such as:

- *Activity*
- *Acuity/complexity*
- *Performance targets*
- *Technology*
- *Physical layout and environment of work area*
- *Supply issues of health professionals and support staff*
- *Service quality*
- *Models of service delivery*
- *Financial outcomes*
- *Government initiatives and policy direction*
- *Public/private interface*

Clearly the above factors are critical in determining nursing resources and they set the scene for the BPF document to be used as a guide for nurse managers to work through the business planning process in support of the best allocation of nursing resources.

Page 5 of the BPF outlines the principles as noted from the extract below

Principle 1 - The patient/client

The BPF supports the provision of patient/client focused health care through:

- Applying models of clinical care and clinical practice that are evidence based and support integration
- Meeting agreed outcomes and health improvement targets
- Promotion of the premises underpinning delivery of safe, quality health care by QH namely
 - **Accessible**, responsive, safe, **efficient**, **sustainable**, effective, **appropriate**

Within principle one, the items that we have highlighted in bold, would seem to be potentially at risk from mandated minimum ratios or prescribed skill mix.

Principle 2 - The staff

Nursing staff plan and manage resources, ensuring:

- **The supply of nursing staff is balanced with service demand to effectively manage nursing workloads**
- Integration of
 - **Workforce planning**
 - **Workplace flexibility**
 - **Evidence based practice**
 - Clearly identified required competencies
 - Appropriate training
- **Systems are in place for managing safe and equitable workloads**

Again the items in bold would seem to be breached by a mandated minimum nurse patient ratio/prescribed skill mix system

Principle 3 - The organisation

The BPF incorporates the principles associated with Queensland Health's current strategic direction through:

- Strong committed leadership that will support the achievement of organisational goals
- Optimal use of resources to achieve quality outcomes
- Integration of systems to assist decision making
- Health service managers providing access to timely, accurate and reliable data to enable planning and monitoring of services and costs

From an organisational viewpoint mandated nurse patient ratios / prescribed skill mix breach all principles because it is not an optimal use of resources for quality outcomes, allows for no flexibility in management and does not provide the opportunity to effectively and efficiently use the very tool devised to manage outcomes, services and costs, namely the Business Planning Framework.

The proposed minimum mandated patient ratio model is in direct contradiction to the BPF. It is unlikely to be sustainable, would not seem to be warranted by current outcomes and is not validated by robust evidence.

138F Publication of information about nursing & midwifery workload management

It is intended that under this section, public sector health services will provide the Chief Executive of the Health Department with information regarding their compliance with ratios and the standard in respect of prescribed facilities and wards and their compliance with the BPF in respect of non-prescribed facilities and wards. The Chief Executive may then publish that information.

As alluded to earlier, prescribing a requirement to monitor adherence to mandated minimum ratios and the standard will not in itself provide evidence that a particular hospital is providing safe patient care. Analysis of outcome data on a range of recognised and relevant nursing and patient safety sensitive measures would provide measurable clinical indicators to more reliably identify whether a hospital is staffing safely, rather than reports of compliance with mandated minimum ratios and prescribed skill mix.

HOSPITAL AND HEALTH BOARDS AMENDMENT REGULATION (NO..) 2016

The website of the Health & Ambulance Services Committee only provides access to the following 3 documents:

- Hospital and Health Boards (Nurse-to-Patient and Midwife-to-Patient Ratios) Amendment Bill 2015
- Explanatory Notes
- Explanatory Speech

In his speech to Parliament (Hansard 1/12/15 – p 2975), the Minister stated:

..aspects of the legislative framework will be prescribed in a nursing and midwifery regulation. A draft version of the regulation has been prepared by the Office of the Queensland Parliamentary Counsel. The regulation will amend the Hospital and Health Boards Regulation 2012. I table the draft amendment regulation and explanatory notes to assist the Health and Ambulance Services Committee and the House in its consideration of the bill. (Emphasis added)

As the Bill is essentially a 'head of power' document articulating a legislative framework, with much of the specific detail to be contained within a regulation, it is clearly of significant importance that the amendment regulation and explanatory notes should also be made available for public comment.

PHAQ was one of the organisations provided with a consultation draft of the amendment regulation and the comments which follow are in relation to that consultation draft.

Note: As a copy of the amendment regulation as tabled in Parliament on 1/12/2015 has not been posted to the website, PHAQ acknowledges that the draft document may have been amended subsequently with the effect that some of the comments which follow may no longer be relevant.

The legislation summary document states that the technical nature of the operational provisions supports their inclusion in regulation rather than the Bill to ensure that the legislative framework has sufficient operational flexibility for the Government to prescribe and apply ratios under a phased implementation model. Whilst it is acknowledged that this approach may indeed provide more flexibility, PHAQ would hope that it would be mandatory that any proposed change to the regulation from that which is currently before Parliament, would require public consultation and be subject to the RIS system before it could be enacted.

Part 6A Nurse-to-patient and midwife-to-patient ratios

30A Definitions for pt 6A

This section provides precise definitions of ward types - for example

Surgical ward - means a hospital ward in which public sector services are provided to treat patients during recovery from surgery

Maternity ward – means a hospital ward in which public sector health services relating to maternity health are provided.

In reality, wards are often mixed with medical and surgical patients. With such precise definitions being in place – would this prevent a medical patient being outlied to a surgical ward if insufficient beds were available in the medical ward or a gynaecological patient being outlied to maternity?

Patients are complex with many co-morbidities and often under varying specialties and within the ward the acuity may be such that some patients may require 1:1 care.

There is some flexibility within the Victorian ratio model in terms of its application as this extract below articulates.

Part 2 – Nurse to patient and midwife to patients

Division 1 – General;

9 – Application of Ratios

(1) (d) a ratio may be applied in a flexible way in order to evenly distribute the workload, having regard to the level of care required by patients in a ward.

Examples:

2 For subsection (1) (d), in a ward with 8 patients and a 1:4 ratio, if 3 patients require a higher level of care and 5 patients require a lower level of care, then one nurse may be assigned to care for the 3 patients requiring the higher level of care and the other nurse to the other 5 patients.

Rather than imposing a rigid patient headcount per nurse, the Victorian minimum ratio model at least provides the nurse manager with a modicum of flexibility to manage ward workload reflective of patient acuity. PHAQ is unaware whether a similar arrangement is proposed for Queensland, but if not, would strongly recommend that it should be.

30C Nurse-to-patient and midwife-to-patient ratios applying to particular wards – Act, s 138B.

Clearly, the intent is for this regulation to be the one which will prescribe specific skill mix for certain areas within a hospital and other mandatory staffing requirements and as such it will be the most critical element of the legislative suite and the one with the greatest potential to impact on day to day staffing, hospital budgets and service delivery.

Depending on the skill mix, that is the percentage of RN vs EN and any other specific requirements which this regulation might stipulate, it may prove challenging for some of the smaller facilities to meet – particularly the night shift requirement of 1 nurse to 7 patients.

Given the lack of national and international evidence regarding optimal minimum ratios, and considering Victoria's experience over 16 years with a night shift ratio of 1:8 which it has not sought to amend, PHAQ would question on what evidence base the decision was made to amend the original policy intent of 1:8 and to introduce a night shift ratio of 1:7?

We are aware that the Queensland Nursing Union (QNU) in its document "*Ratios Save Lives*" has advocated for a ratio of 1:7 for night shift together with a range of highly prescriptive skill mix and other staffing requirements, but these have not been accompanied by a robust underlying evidence base. For example for all adult medical and surgical wards the QNU is advocating for a skill mix of 80% RN 20% EN; no more than one (headcount) Assistant in Nursing and 'Like for Like' replacement.

Quite apart from being unable to ascertain any evidence base for an 80:20 skill mix across all medical and surgical areas, such a proposal is not only out of touch with contemporary team based models of care but may lead to a downgrading of the EN role – many of whom are highly skilled. Advanced Practice EN courses are now available in a range of specialty areas for example: perioperative, rehabilitation, oncology, renal, palliative, orthopaedic, mental health, critical care and emergency department.

In Queensland ENs have been diploma trained since 1997 with medication endorsement from 2007. This is in stark contrast to Victoria where a diploma was not mandated as the minimum requirement for ENs until 2012 and therefore the skill level of the Queensland EN historically has been significantly higher. ENs without medication endorsement had a significantly reduced scope of practice which might explain why Victoria introduced an 80:20 skill mix. With the exception of care planning and directing care, providing an EN has demonstrated competency and training and works in a supervised model of care, there is little that they cannot do that an RN can.

AINs/PCAs are often student nurses and the hours they spend as part of the nursing team are vital to supplement the limited clinical training they are exposed to whilst at University. AINs/PCAs multitask and so are able to also cover infection control, equipment cleaning roles or may be utilised to provide some additional basic care – for example a confused patient who may need someone to sit with them.

In its document “*Ratios Save Lives*” the QNU has stated that there can be no more than 1 AIN per shift and in some clinical areas there can be no AINs. If AINs who are RN or EN students are to be effectively excluded from the skill mix how will they get the additional practical experience they need? Hospitals would not be able to afford to employ them on a permanent supernumerary basis.

Contemporary staffing is moving to the use of assistants, AINs/PCAs, Allied Health Assistants, Anaesthetic Technicians etc. Care models are constantly changing and staffing needs to be responsive to such change.

The private hospital sector considers that mandated minimum ratios and prescribed skill mix is a retrograde step more akin to a patient allocation model whereas hospitals have been working within a team based environment for an extended period. A team based model ensures that senior and junior RNs work together supported by well-trained ENs and AINs/PCAs who assist with feeding, toileting, mobilising and other activities of daily living, together with other ward based activities.

As noted by Fairbrother, Chiarella and Braithwaite [2015]

It is now increasingly understood that newly graduated nurses require reliable structural and collegial support in their early years of practice. This is something that individual patient allocation, with its focus on the nurse as autonomous professional in the nurse-patient relationship, has intrinsic difficulties in delivering.”

On the analysis presented here, team approaches allow acute nursing to account for skill and experience stratification and the multiple social, technological and institutional factors influencing the nursing workforce, as well as the wider hospital-based healthcare environment.

Skill mix on general medical and surgical wards will necessarily vary depending on the clinical unit and a prescribed ‘one size fits all’ approach would fail to recognise the range of critical inputs which the experienced nurse manager always takes into consideration in allocating staff to a particular unit on a particular shift – variables which may change multiple times an hour. Whilst 80:20 might be an appropriate and indeed necessary skill mix for some high acuity medical and surgical units; a skill mix of 70:30 or even 60:40 may be entirely appropriate for others.

ESTIMATED COSTS OF GOVERNMENT IMPLEMENTATION

In a media statement of 1/12/2015 it was stated that around 250 additional nurses would need to be recruited to meet the ratios at a cost of \$25.9 million in the first year but no detail has been provided as to how this estimate was calculated.

Should prescribed skill mix and other specific staffing requirements be mandated in a regulation, which differ from current practice at some or all public hospitals, it could substantially alter both the initial and ongoing cost of this legislative initiative. PHAQ would question whether the cost implications of any potential alterations to current skill mix have been calculated.

PENALTIES FOR NON-COMPLIANCE

Neither the Bill nor the Regulation articulates any enforcement provisions or penalty for non-compliance. Whilst the consultation draft - *Nursing and Midwifery Workload Management Standard* lists various compliance requirements, it too is silent in relation to any penalty for non-compliance or an enforcement regime.

In the absence of an enforcement regime or penalty for non-compliance it raises the question as to how effective in practice this legislation will be.

EVALUATION

Neither the Bill nor the *consultation draft* Amendment Regulation make any reference to a requirement to evaluate the suite of ratio legislation after a defined period, although in a media release on 1/12/2015 the Minister for Health said that after the Act had been in operation for one year, the Government would review its effect and consider whether the ratios should be extended to other wards and facilities or different ratios should be developed.

When reviewing the impact of this legislation and to ascertain whether it has met the policy objectives stated in the Explanatory Notes, it should be measured against a range of nursing and patient safety sensitive outcome measures which may include but not necessarily be limited to patient satisfaction & complaints; falls, pressure injuries, medication administration errors, hospital acquired infections, response to deterioration; nursing staff turnover, absenteeism and agency usage.

The reporting requirements for public hospitals under this legislation should require that they report baseline measures for these nursing and patient safety sensitive indicators as at 1/7/2016 – the date of proposed implementation, based on the prior 12 months data with the same indicators to be measured 12 months later.

Public hospitals should also be required to report on the increased wage costs for the 12 month period in staffing to meet the new requirements. This will be the only way to demonstrate whether the increased staffing cost is reflected in measurable improvements in staff and patient safety outcomes, or conversely whether the requirement to comply with mandated ratios and/or prescribed skill mix has in fact given rise to some unintended consequences which might have had an adverse impact on patient care delivery – e.g. EDs on by-pass more frequently; surgical cancellations, unit closures or increases in patient transfers both internal and external as was the experience in California when ratios were introduced.

The evaluation should also review the frequency and circumstances surrounding any temporary exemptions which might have been granted during the period.

Therefore enshrined in this suite of legislation there needs to be a statutory requirement for a comprehensive independent review to be undertaken 12 months after implementation and that the outcome measures used for evaluation, are not limited to simply reporting on whether or not the mandatory ratios were met, but include a comprehensive set of nursing and patient safety sensitive outcome measures and service delivery indicators.

A prescribed set of indicators should be endorsed by Parliament as the evaluation criteria to be used in measuring the effectiveness or otherwise of this legislation, together with a requirement that the outcomes of the review be reported to Parliament and made publicly available, prior to any further amendments being made to the regulatory regime governing minimum ratios established under this legislation.

Following an initial independent evaluation, whilst the ratio legislation may be in force, annual reporting of these indicators should be obligatory for the specified facilities.

Some practical scenarios which need to be considered

Queensland has some geographical challenges in providing its health care services which are not experienced by some other States – hence a significant issue with legislated minimum ratios is – *what happens when you cannot staff to the minimum ratio or meet a prescribed skill mix or ‘like for like’ replacement requirement?*

Whilst the Bill makes provision for a temporary exemption from compliance it does not appear to cover the day to day situations and dilemmas which confront a nurse manager in endeavouring to staff a ward appropriately, particularly if there is a need to factor in a legislatively prescribed skill mix.

Some potential scenarios include:

- What if the only means of meeting the ratio is to include a young inexperienced RN when the majority of patients on the unit are frail elderly with multiple comorbidities? The ratio would have been satisfied, but as a nurse manager you are concerned that it is not best practice. An experienced EN is available, whom you consider to be far more suitable, but if you roster that EN it would result in you exceeding the prescribed EN limit and hence be in breach of the ratio – as a Nurse Manager what should you do?
- What happens if overnight you have a full medical ward but due to staff sickness, the following morning you are unable to staff in accordance with the mandated minimum number of RNs. Do you have to transfer some patients to another ward within the hospital if possible, or failing that, transfer them to another hospital – but what if the transfer is not in the best interests of the patient? (i.e. significant distance from their home?) – What should the nurse manager do?
- Equally, if a hospital retained all patients and operated below the mandated minimum – would this give rise to a potential legal or financial liability in the event of an adverse incident as the hospital was not staffing in accordance with a legislated minimum – even if it were subsequently proven that the staffing change did not contribute to the incident?
- The QNU’s “*Ratios Saves Lives*” document promotes ‘*like for like*’ replacement. Should a ‘*like for like*’ requirement be incorporated into the nursing and midwifery regulation what would be the impact on a surgical list in the event this could not be satisfied? Would routine surgeries have to be cancelled if a theatre nurse called in sick and no ‘*like for like*’ replacement could be found? An experienced EN may be available but the nurse who called in sick was an RN and therefore would not satisfy the ‘*like for like*’ requirement. Again what should the nurse manager do?

Each of these scenarios would require an immediate solution and therefore would be outside the scope of the temporary exemption provisions, given the time it would probably take to obtain approval from the Minister.

By prescribing minimum ratios and skill mix in legislation it will inevitably give rise to frequent dilemmas for nurse managers given the complexity of variables that contribute to staffing decisions, some of which may change by the minute. Adding more staff is often not the solution and can make a challenging situation worse.

Patient outcomes are not about staffing as a solution – that is one aspect, however evidence based practices, treatment plans and processes, training and leadership must also be considered.

For example, one patient safety initiative which has demonstrated a positive impact on clinical outcomes and patient safety is hourly nurse rounding. Hourly rounding is a process intervention which has been linked to lower rates of patient falls, pressure ulcers and medication errors and higher patient experience scores (Halm, 2009).

Hourly rounding ensures that the following questions are asked of every patient every hour: How is your pain? Are you comfortable or need repositioning? Is everything within reach? and do you need to use the bathroom?

A recent Press Ganey Nursing Special Report (Press Ganey Associates 2015) stated that *new cross domain analyses suggest that the work environment of nurses can have as much or greater impact than staffing on many safety, quality, experience and value measures.*

Executives and managers make a host of decisions beyond those involving staffing that affect the clinical effectiveness of nursing. Thought leaders in the arena of patient safety practices have identified a number of organisational strategies that may constitute better practice in managing the impact of nurse staffing on patient care and quality.

For example, efforts to optimise clinical, throughput flow and reduce practice variability may reduce threats to staff and patients due to system and personnel overload. Managing supply and demand in healthcare settings by smoothing peaks and valleys of patient flow as well as staffing levels may be effective in modulating workflow extremes that cause staff distress and might pose risk to patients. Implementing systems that enable staff to standardise high-volume common practices such as patient education, discharge planning and risk assessments may be expected to increase efficiency, while enabling staff to customise these highly effective interventions to the unique characteristics of the patient/family... Considered key to safe staffing, professional judgement as the gold standard establishes the threshold for safe patient care in a given clinical setting.

Clarke, SP and Donaldson, NE [2008]

We note that clause 2.3.2 of the *Nursing and Midwifery Workload Management Standard* states that “*professional judgement is recognised as the valid criterion for deeming a definitive staffing level of nurses and midwives as being safe*” a statement we strongly agree with.

However, it would appear that the power to be vested in the nursing and midwifery regulation might override this in so far as this regulation may specify a particular skill mix across all surgical units within a hospital which must be complied with, notwithstanding that depending on Casemix, acuity and other relevant variables, the resource intensity will differ between units, such that for a particular shift, the professional judgement of an experienced nurse manager may determine that a lesser skill mix is both safe and appropriate.

PHAQ would sincerely hope that before the regulation is finalised the sentiments expressed below will be taken into consideration and a statement similar to that contained in the Standard be included in the Regulation:

If there is agreement that the expert professional nurse has an essential role in staffing, then whatever solution we stand behind, must give the nurse the power to make staffing decisions to override models, including ratios when they don't make sense and to have the authority to use their expertise in the best interest of patients, the care team and the hospital (Douglas, K. [2010])

In conclusion, PHAQ would reiterate that the private hospital sector is strongly committed to the provision of safe patient care and the allocation of nursing resources that directly target the needs of each individual patient, but is opposed to any legislative provisions which prescribe minimum nurse to patient ratios or specify skill mix or other prescriptive staffing requirements for reasons previously stated.

An extensive literature search failed to identify any robust evidence in support of the minimum ratios proposed (1:4; 1:4; 1:7) nor any evidence in support of an 80:20 skill mix across all adult medical and surgical wards as advocated by the QNU.

With the exception of Australia, other countries & jurisdictions which already have, or are seeking to legislate safe staffing measures, have moved away from mandated minimum ratios in favour of mandatory staffing plans which are generally accompanied by a requirement for some form of disclosure or public reporting.

Reporting compliance with prescribed ratios will not in itself provide evidence that a hospital is staffing safely because it is a process and not an outcome measure. As the stated intent of this legislation is to improve patient safety, it is recommended that the focus of reporting should be on recognised nursing and patient safety sensitive indicators as outlined in this submission.

The nursing and midwifery regulation will be the instrument with the power to articulate skill mix and other prescriptive staffing requirements for various clinical units, which depending on what may be specified, may not only prove challenging for some units to meet but could be highly costly without delivering any identified improvements to patient safety. PHAQ would recommend therefore, that the legislative provisions include a requirement for a comprehensive independent analysis to be undertaken 12 months after implementation (as outlined on pages 15-16) to ascertain whether the legislation has met its objectives or if any unintended consequences were identified. The outcomes of this analysis should be tabled in Parliament and made publicly available.

One assumption that underlies the staffing discussion is that there is an objective optimal staffing level or ratio that will provide the best of all possible patient outcomes. Unfortunately, research hasn't yet discovered the ratio and the relationship between the cost of hiring more nurses and the outcomes for patients remains poorly understood.

Manjlovich, M [2009]

*This submission has been endorsed by the Management Committee of the
Private Hospitals Association of Queensland.*

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