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Safe Nurse Staffing Levels (Wales) Bill / Bil Lefelau Diogel Staff Nyrsio (Cymru)
Evidence from Chief Nursing Officer – SNSL(Org) 23 / Tystiolaeth gan Prif Swyddog Nyrsio – SNSL(Org) 23

Safe Nurse Staffing Levels (Wales) Bill

Evidence from the Chief Nursing Officer

Health and Social Care Committee, 25 February 2015

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Introduction

Professor Jean White is giving evidence to the Health and Social Care Committee in her role as Chief Nursing Officer/Nurse Director NHS Wales. As such, she is providing evidence regarding the areas where the Bill will impact on the profession of nursing and has focused on the consultation questions that relate to this area.

In this evidence paper

- "NHS in Wales" is used to refer to NHS local health boards and NHS trusts
- "acute ward" means medical and surgical adult in-patient acute wards
- "establishment" means the total number of staff allocated to work in a ward

Is there a need for legislation to make provision about safe nurse staffing levels?

Much work is already being done to ensure safe nurse staffing levels in adult acute medical and surgical wards, using existing Welsh Ministers' powers. This work started over three years ago when the current Chief Nursing Officer (CNO) came into post.

CNO's Nurse Staffing Principles

The CNO and Nurse Directors of NHS Wales have discussed the matter of safe staffing levels at many of their routine monthly meetings. The responsibility for determining a safe, appropriately skilled workforce lies with NHS organisations, however, in this instance a partnership approach across NHS Wales and Welsh Government has been established to develop tools to assist individual organisations in this area.

The Welsh Government has not set mandatory minimum ratios of registered nurses to support staff, nor minimum numbers of staff per in-patient bed. However, working in partnership, in May 2012 the CNO and Local Health Board (LHB) Chief Executive Officers (CEO) agreed a set of principles for nurse staffing levels to be used during the time it would take to develop, fully test then implement a workforce acuity and dependency tool for adult in-patient wards. It was agreed at that time to establish a programme of work to develop a suite of tools that will ensure staffing levels and skill mix are tailored to meet the specific needs of patients in each care setting.

In May 2012 the CEOs also agreed to develop individual organisational plans to comply with the nursing principles for medical and surgical wards over a three-year period. In July 2013, following publication of the Francis Enquiry into Mid Staffordshire Foundation NHS Trust, the Minister for Health and Social Services allocated an additional £10 million (recurring) funding to support these plans.

The principles are:

- Professional judgement will be used throughout the planning process
- Ward activity and demand will be considered when establishing staffing levels as well as the number of beds, environment and ward layout
- Nursing establishments on acute wards should not normally fall below 1.1 Whole Time Equivalent (WTE)/bed including a head-room of 26.9% (to cover annual leave, mandatory training, etc)
- Numbers of patients per Registered Nurse should not exceed 7 by day
- The skill mix of Registered Nurse to Health Care Support Worker in acute areas should generally be 60/40
- The Ward Sister/Charge Nurse should not be included in the numbers when calculating patients per Registered Nurse ratio

LHBs have been asked to provide progress reports to the CNO that includes details of their compliance with the principles, utilisation of the additional funding, and of the assurance frameworks or processes they have in place for continued safe nurse staffing levels.

Monitoring of the compliance of the principles has been on-going since 2012. Over that period:

- Health Boards have continued to actively address nurse establishments in adult acute medical and surgical wards.

- All Health Boards have made significant improvements to the number of wards with more that 1.1 WTE nurse/support worker per bed, with some areas now reaching 100% compliance.

- All organisations have assurance frameworks and action plans to continue to ensure appropriate safe staffing levels.

- Skill mix has improved significantly with the majority of wards with a 60:40 registered nurse to support worker skill mix.

- Some areas have not managed to recruit to the establishments identified, and have had to consider their recruitment plans. This compounds the issue of trying to reach compliance due to current demand for nurses.

- There has been an improvement in the compliance of their medical wards; in respect of no more than 7 patients per nurse, the number of compliant wards has increased by up to 75% in some Health Boards.

Acuity tool

The Committee has been provided with copies of the NHS documents:

- *Fundamentals of Care System User Guide: Adult Acute Nursing Acuity & Dependency Tool*
- *Adult Acute Nursing Acuity & Dependency Tool Governance Framework.*

The acuity tool for adult acute medical and surgical in-patient settings was rolled out in April 2014. It is a robust, evidence based tool which measures acuity and dependency of patients to help LHBs plan for future workforce requirement. It is easy to use and apply, but it cannot be used in isolation, rather it is one key tool in the determination of staffing levels in conjunction with professional judgement and nurse-sensitive indicators such as the number of patient falls.

Two validation runs are needed before the results of the acuity tool can be relied upon. A validation run is used to confirm that LHBs are correctly identifying the factors used to determine levels of acuity and dependency essential to the application of the tool. Learning shared by colleagues in England has revealed that data needs to be captured for several cycles before any significant changes to staffing establishments should be implemented. This is because the tools algorithm is for a long term forecast of staffing needs and therefore several indices must be added to make the outputs valid. The first validation run was undertaken in June 2014 and the second was undertaken in January 2015. The results will inform the triangulated approach used to determine staffing levels at local level.

Once data has been captured and validated within the national system, organisations should develop local reports which triangulate local workforce data and nursing metrics to provide intelligence which can be used to support local decision making about deployment of nursing resource within the overall workforce planning process.

The acuity tool works as a forward planner, not as a day-to-day allocator of nurses. It is essential therefore that along with use of the tool, professional judgement and nurse sensitive indicators should be used to consider the correct staff establishments. For example, a patient who is confused and disoriented may have a relatively low level of acuity and dependency but would still require a one to one observation schedule to ensure their safety. Similarly understanding the information from falls or pressure area development may change the staffing required to a particular patient group or clinical setting. The research shows that the issue of nurse staffing levels is a complex one and therefore use of a triangulated methodology is advocated. For this reason it would not be appropriate for the outcome of the tool alone to always be adhered to, hence Health Boards should be required to utilise the tool but to consider its results using the triangulated methodology.

Professional Standards

Appropriate staffing is a collective responsibility of boards and executive teams. Board members who are registrants and hold senior positions such as director of nursing or director of medicine are not individually responsible for appropriate staffing in an organisation but have a shared corporate responsibility with the whole board. However, they function in their corporate roles within the framework of professional standards set by the respective health regulator.

All professional health regulators are clear that their codes and standards apply to every registrant whatever their role and scope of practice, similarly all professional health regulators will inform the appropriate system regulator if they uncover concerns about a provider when they are investigating a fitness to practise referral or as part of their work in quality-assuring education . Such concerns could include claims of unsafe staffing or the suppression of concerns raised by staff.

Are the provisions in the Bill the best way of achieving the Bill's overall purpose (set out in Section 1 of the Bill)?

The Welsh Government does not intend to set any form of minimum ratios for the NHS in Wales as the evidence indicates that this area is too complex to take a reductionist approach. Working in partnership with the NHS in Wales, the Welsh Government has developed a triangulated approach for LHBs and Trusts to implement based on the use of: the acuity tool, professional judgement and nurse-sensitive indicators. The CNO's principles were agreed as an interim measure while the adult in-patient acuity and dependency tool was being developed.

The Bill only focuses on nurse staffing whereas Welsh Government policy is to integrate care across the professions and the sectors. The Welsh Government has defined its health policy as a move towards an integrated health and social care framework, with patients' needs at the centre of service delivery, as evidenced in the Social Services and Well-being (Wales) Act 2014. This integrated approach requires multi-disciplinary and multi-professional working with each profession utilising their

skills when the patient needs them. It seeks to eliminate unhelpful demarcations of different roles.

The CNO fully agrees that adequate staffing levels and skill mix are an important factor in delivering quality care; however mandating nurse staffing levels alone is not the answer to reducing poor care. Using the evidence-based triangulated approach, professional judgement, the acuity tool and nurse-sensitive indicators gives the NHS the flexibility necessary to assess patient needs and to change and develop services and initiatives in response to those needs. This Bill is too prescriptive and does not allow for different operational models to accommodate the flexibility required by the NHS in Wales in order to respond effectively to rapidly changing patient needs There is a significant and wide ranging number of factors other than nurse staffing levels which influence patient care and outcomes (Ball & Catton 2011; McGillis Hall & Buch 2009; Coombes & Lattimer 2007). These include the range of services a ward provides, ward layout, team mix, deployment of staff, work environment and safety, regulatory systems, communication of change and costs, medical staffing and relationship between the ward sister/charge nurse and medical consultants The education, knowledge and experience of registered nurses is an important factor as well as the management structure and roles, strong nurse leadership, teamwork and clinical governance.

The RCN's guidance published in 2010, *Guidance on safe nurse staffing levels*, notes that:

> "In virtually every case, minimum staffing ratio recommendations made by specialist bodies are accompanied by guidance that staffing levels should be locally determined to take into account the level of clinical need and local factors that influence staffing requirement (such as range of services, unit/ward layout, team mix). Some bodies recommend specific tools be used to enable staffing levels to be planned in relation to workload and clinical needs." [RCN 2010, p 42]

What, if any, are the potential barriers to implementing the provisions of the Bill? Does the Bill take sufficient account of them?

Some issues which could be interpreted as a barrier to implementation are discussed in the section about unintended consequences and vice versa.

There are many factors to be taken into account when managing the staffing of a ward. They include the complexity of the care individual patients require - including their physical, emotional and mental health needs - the numbers of patients, the layout of the ward and the services provided by other professionals. These factors will all impact on the numbers of nurses and healthcare support workers that are required. Other factors include the experience of the staff, the handover time, and the continuing professional development requirements of the staff such as mandatory training.

Experience in the new hospitals such as Ysbyty Ystrad Fawr in Caerphilly has shown that single room style wards require more staff as patients can not be easily seen from one central location thus requiring slightly higher numbers of staff to accommodate this. The hospital has 269 beds, all in single en-suite bedrooms.

The ability to use a single set ratio will be affected by the number of beds on the ward. For example, setting a ratio of one nurse to seven patients is not practical if the ward has 23 beds as the ratio can never be achieved close to 1 to 7; either there are three nurses making the ratio too high at 1 to 8 or there are four nurses making the ratio too low at 1 to 6. These ratios may not be appropriate at all for the clinical setting. This is also the case for all ward environments where the number of beds is not divisible by the nurse to patient ratio. This may also mean that staff are moved around from ward to ward just to comply with a ratio rather than because of the need of the clinical area. There is some evidence of this argument in the literature although it is mainly anecdotal.

Some ward areas will have ward clerks who can undertake some administration duties for clinical staff but others will not. Other roles such as housekeepers and ward domestics vary across Wales again affecting the responsibilities staff need to undertake and thus the numbers required. These practical issues make it impracticable to apply a set ratio to all acute wards.

The issue of when the ratio is set for is also problematic. The guidance would need to say when the ratio applies during a 24 hour cycle. Similarly, the issue of meeting the ratio shift by shift is problematic. There is no standard shift system in the NHS in Wales. The complexity of a patient's needs within a ward can change mid-shift as can the movement of patients within the hospital. Defining shift by shift compliance would therefore be difficult. Various factors would need to be considered e.g. shifts vary in length from seven to twelve hours and staff also work half-shifts and twilight shifts. It would be difficult to establish a standard definition of the meaning of a "shift", as well as agreement on when the ratio would apply and how it would be calculated e.g. whether an average would be taken of the staff on a single shift or of the staff on all the shifts during one day or one week or a month.

To fix a number across the board could potentially put patents at risk. For example, an acute surgical ward with some high dependency beds is likely to have a high number of complex diagnostic procedures and treatments being undertaken. This type of clinical environment is likely to require significantly more staff than a ward where planned routine surgery is being undertaken.

The Welsh Government's prudent healthcare initiative aims to: minimise avoidable harm; carry out the minimum appropriate intervention and promote equity between the people who provide and use services. Of necessity, this will require reconfiguration of some existing services. A mandatory nurse staffing ratio could hinder such developments. Also, an emphasis on having enough nursing staff to meet the mandatory ratio could lead to fewer cleaning or clerical staff, for example, and increase the risk of adding non-clinical tasks to nurses' workloads.

Similarly the role and responsibilities of staff who support wards is not necessarily considered in the ratios. For example, many adult acute medical and surgical wards have an Advanced Nurse Practitioner service, where nurses with advanced level of practice undertake complex assessment and treatments of patients. The availability of such services can effect the requirement for staff, depending on how much interaction these roles have with the patients on a ward. In order to continue with the development of new, innovative roles and service models, in line with the aims of prudent healthcare, consideration on how these affect the minimum ratios needs to

be considered. It is possible that such innovation will be stifled to ensure compliance with a ratio.

The proposed minimum nurse staffing levels would need to be addressed as part of the Integrated Medium Term Plans, where the planning and prioritisation would be undertaken.

Are there any unintended consequences arising from the Bill?

There are numerous such potential consequences. Some are discussed in the section regarding barriers to implementation.

Failure to comply with the duty in the Bill

The Bill does not state that there will be any consequences if the NHS in Wales does not comply with its duty to maintain safe nurse staffing levels nor is there any express power of redress set out in its provisions. However, LHBs may well choose to err on the side of caution, because of the direct and indirect impacts of the Act. Awareness of the Act could encourage health boards to focus on meeting the ratios to the exclusion of other important factors such as using professional judgement and the acuity tool. It could be easier for health boards to comply by reducing the number of beds to match the number of staff available. Faced with a legal requirement to maintain such a ratio, hospitals will face difficult choices.

Placing undue emphasis on minimum nurse staffing ratios

There are several recent reports and publications that have commented on the issue of nurse staffing levels and/or measurement of technical standards. Many of these make reference to the limitations of placing an emphasis on a number or a technical specific standard.

The Berwick Review of patient safety, carried out in 2013, concluded

> "Neither quality assurance nor continual improvement can be achieved through regulation based purely on technically specific standards, particularly where a blunt assertion is made that any breach in them is unacceptable." [Berwick 2013, p 11]

> "The system needs to be agile, responsive and proportionate. This cannot be achieved through a series of prescriptive, technical standards that attempt to delineate between "acceptable" and "unacceptable" according to a tick-box or list." [*Ibid.* p 30]

It also advised

> "Use quantitative targets with caution. Goals in the form of such targets can have an important role en route to progress, but should never displace the primary goal of better care. When the pursuit of targets becomes, for whatever reason, the overriding priority, the people who work in that system may focus too narrowly." [*Ibid.* p 4]

The recent NICE review of the literature in this area concluded that:

> "There is a lack of high-quality studies exploring and quantifying the relationship between registered nurse and healthcare assistant staffing levels and skill mix and any outcomes related to patient safety, nursing care, quality and satisfaction. All of the identified studies were observational and the majority were not for UK populations. Where evidence was available it tended to be associational with limitations due to confounding factors that affected the outcome.
>
> There is a lack of appropriately designed interventional studies relating to the outcomes of interest with appropriate control for confounding variables, such as studies designed to identify the outcomes associated with increasing numbers of available nursing staff. The outcomes identified generally report on failures of care rather than the more positive aspects of quality of care. There is also a lack of research on measures of missed care that could be routinely monitored and therefore easily collected and investigated." [NICE 2014 p.32]

Thus it would appear that it would be easy to place undue emphasise on the ratio rather than the outcome. These reports and published evidence support the CNO and Nurse Directors adopted approach in Wales of a triangulated methodology to analysis, understand and set safe nurse staffing levels.

Recruitment issues

Expectations of nursing establishments have changed in recent years due to a number of factors such as more acutely ill patients, response to reports into failings in care in various parts of the UK and any new national/professional guidance. The introduction of legislation in this area is likely to further affect the expectations of nursing establishments thus increasing the demand. The workforce planning system responds well to fluctuations in the system; however an increased demand can not always be foreseen. The commissioning and education cycle means it takes four years from the point of commission to the production of a registered nurse (the education programme is 3 years) and therefore there is a degree of lag in the system.

This is highlighted by the experience in NHS England, where an increased demand for registered nurses followed the publication of the Francis Report in 2013 demonstrating that where an issue is highlighted as a concern a demand is likely to be created. To a degree the demand for registered nurses has increased following the adoption of the CNO and Nurse Director Principles and the associated funding announce to support the work of nurse staffing in adult acute wards. This demand is multifaceted and includes the global market for nurses as well as the changing pattern of, and demand for, services provided both by the NHS and other sectors.

NHS Wales is likely to identify a necessity to train more nurses in order to have enough staff to meet any compulsory ratio. These extra nurses would be commissioned by the Welsh Government, however the commissioning cycle works one year in advance and it takes three years to train one nurse, at a cost of £38,000. The consequences of this planning cycle will not materialise for a number of years. In the meantime, competition for existing nurses will continue, possibly at the expense of other professions.

NHS Wales is already taking action to recruit and retrain nurses, including encouraging those who have left the profession to return to the workplace. In order to comply with a compulsory staffing ratio, LHBs will need to ensure that vacancies are filled more quickly, and hire more agency or bank staff until the vacancies are filled to ensure patient safety. This could lead to increasing competition between hospitals for nursing staff. To keep costs down, hospitals may be tempted to recruit more nurses on lower grades, thus reducing the skills of the workforce. Another option to reduce costs would be to reconfigure existing services, so that more staff nurses are needed than higher grades, which would also reduce the skills of the workforce. A further cost-effective option that Health Boards may consider would be to close beds until the vacancy is filled. This could also be the case if an unexpected shortfall in staff occurred that could not be covered such as a member of the substantive staff being sent home sick. There is a global market for nurses and there are recruitment pressures across the UK, not just Wales.

A mandatory ratio may lead to a higher demand for agency and bank nurses, while hospitals are covering unfilled vacancies or simply because of the usual variation in the numbers of nurses required on a ward. However, agencies are not immune to the problems of recruiting staff so there is a real risk that any suppliers will be unable to recruit new agency staff in sufficient numbers to meet local demand.

Market dynamics

If hospitals need to recruit greater numbers of nurses, care homes will need to compete to recruit and retain their nursing staff too. They will all be 'fishing from the same pool'. The Bill may therefore affect care homes and other private sector providers indirectly, which may means care home/bed closure and the transfer of patients to the NHS.

Multi-disciplinary issues

The Bill does not take a multidisciplinary approach to staffing teams that provide patient care. In particular, the Chartered Society of Physiotherapy has repeatedly expressed concerns. At the evidence session for the Health and Social Care committee on 29 January 2015, representatives of the Society stated that any mandatory ratio would be "unacceptable." The NHS in Wales may pour all resources into nursing, and that may distract from the other disciplines that trying to provide a joined-up approach on a ward.

The duty on health service bodies to have regard to the importance of ensuring an appropriate level of nurse staffing wherever NHS nursing care is provided

The CNO fully agrees with the aim of ensuring an appropriate level of nurse staffing wherever NHS nursing care is provided

Safe nursing care is dependent on a number of factors, not just the number of nurses deployed, and is already a consideration on every ward. However, the Bill would put too much emphasis on maintaining a rigid nurse to patient and nurse to healthcare support worker ratio, whilst neglecting the other factors namely

- using professional judgment to make decisions appropriate to the particular circumstances on a day-to-day basis
- the staff skill mix – the range of qualification and experience; individual clinical competencies; different areas of expertise
- the use of multi-disciplinary approach – doctors, specialist nurses and other healthcare professionals
- the varying nursing needs of individual patients and patient turnover in general
- the time of day - more staff may be needed to help feed patients at mealtimes
- the ward environment – physical layout and size
- using the acuity tool– a practical resource to facilitate the process of calculating the nursing staff requirements for wards or organisations

The duty on health service bodies to take all reasonable steps to maintain minimum registered nurse to patient ratios and minimum registered nurse to healthcare support workers ratios, which will apply initially in adult in-patient wards in acute hospitals

It is widely accepted that there are gaps in the evidence base in the area of nurse staffing levels. The evidence that is available along with published reports that consider nurse staffing have informed the work in Wales to adopt the triangulated methodology approach. These publications challenge the use of a 'minimum' ratio and are set out below.

Requiring minimum ratios of nurses to patients and nurses to healthcare support workers is a very inflexible and impracticable approach which fails to take into account the way in which the NHS operates on a day to day basis. This view is supported in the latest NICE guidance, *Safe staffing for nursing in adult inpatient wards in acute hospitals*. In the accompanying *Frequently Asked Questions* document, NICE states

> "The Safe Staffing Advisory Committee reviewed the best available evidence and concluded there is no single nursing staff to patient ratio that can be safely applied across the wide range of acute adult in-patient wards in the NHS. This is because there is considerable variation in the nursing needs of different patients across different wards and at different times as demonstrated by the real-life data that were examined in the economic analysis and field testing reports.
>
> Having a single recommended nurse to patient ratio would not allow for all the nursing care needs of patients to be adequately accounted for. This guideline recommends the factors that need to be systematically assessed at ward level when determining nursing staff requirements, with the nursing care needs of individual patients being the main driver." [NICE 2014b, p 4]

The paper *How to ensure the right people, with the right skills, are in the right place at the right time* published by the National Quality Board also takes this view, with the CNO for England stating:

> "There has been much debate as to whether there should be defined staffing ratios in the NHS. My view is that this misses the point – we want the right

staff, with the right skills, in the right place and the right time. There is no single ratio or formula that can calculate the answer to such complex questions. The right answer will differ across and within organisations, and reaching it required the use of evidence, evidence based tools, the exercise of professional judgment and a truly multi-professional approach. [National Quality Board undated, p 3]"

"The guide does not recommend a minimum staff-to-patient ratio. It is the role of provider organisations to make decisions about nursing, midwifery and care staffing requirements, working in partnership with their commissioners, based on the needs of their patients, their expertise, the evidence and their knowledge of the local context. [*Ibid*. p 8]"

This is also the view of the CNO for Wales and the Welsh NHS Executive Nurse Directors.

In its *Guidance on safe nurse staffing levels* published in 2010, the RCN in England succinctly summarised the advantages and disadvantages of a fixed ratio:

Pros	**Cons**
Can halt or reverse reductions in nurse staffing	Defining minimum – does is become average or maximum?
Can encourage workforce stability and reduce use of temps	Measuring minimum – is it calibrated adequately in relation to workload?
Simple to implement and understand	How can compliance be assured? What are the penalties for non-compliance?
Provides standard approach (reduces need for complex systems)	What is cost of compliance – will other staffing be reduced?
If mandatory, can ensure compliance from all employers	Inflexible – can one size really fit all?

[RCN 2010, p 37]

This guidance recommends that

"To make judgements about numbers of staff needed requires insight into the roles and competences of different staff groups (which may vary considerably locally). Need to know who does what, before you can judge how many of each is needed… Triangulation is essential. In other words, use several different approaches to determine staffing from different angles. [*Ibid.,* p 38]"

And it concludes

"The RCN does not advocate a universal nurse-to-patient ratio. This would be meaningless given the range of factors that clearly influence the number and mix of nursing staff needed, and which need to be considered locally to determine staffing. [*Ibid.,* p 40]"

The conclusions also list the ratio of the patients per registered nurse as only one of several indicators that should be monitored regularly namely

Actual nursing staff in post as a proportion of total establishment	To identify current staffing relative to the planned number of nurses required - per

	ward/unit/catchment area.
Proportion of registered nurses (RN) as percentage of total nursing staff	The benchmark average on general hospital wards is 65% RNs
Nursing staffing relative to population served	• In hospitals this is nurses per occupied bed (NPOB) or per bed • In community this is nurse per head of population (and may include measure of socio-economic need of population)
Nurse staffing relative to patients	• Ratio of the patients per RN (on a day or night shift) provides indicator of actual staffing levels on hospital wards • Nursing hours per patient day (provides global measure) • In the community this is typically captured through caseloads
Staff turnover	For example using data on annual joiners and leavers to provide a stability index (defined as the percentage of staff in the organisation for at least a year). Length of service can be used as a proxy.
Sickness absence	Sickness absence rate is calculated by dividing the sum total sickness absence days by the sum total days available per month for each member of staff.

[*Ibid.,* p 41]

In 1999, the US State of California introduced legislation to set a mandatory nurse-to-patient ratio in a variety of settings. The law came into effect in 2004 and hospitals were allowed five years to phase in compliance. Much research has been carried out into the effect of mandatory staffing ratios in California and it is often cited. Research carried out by Aiken in 2002 about mandatory ratios in California concluded that

> "Our results do not directly indicate how many nurses are needed to care for patients or whether there is some maximum ratio of patients per nurse above which hospitals should not venture. Our major point is that there are detectable differences in risk-adjusted mortality and failure-to-rescue rates across hospitals with different registered nurse staffing ratios. [Aiken 2002, p 192]"

Research carried out in the UK by Rafferty in 2006 found that

> "Hospitals in which nurses cared for the fewest patients each had significantly lower surgical mortality and FTR [failure to rescue] rates compared to those in which nurses cared for greatest number of patients each… In addition to better outcomes for patients, hospitals with higher nurse staffing levels had significantly lower rates of nurse burnout and dissatisfaction.[Rafferty 2006, pp 179-180]"

However, both authors stopped short of recommending a staffing ratio.

In 2012, review by Cook et al of the research regarding the statutory ratio applied in California found that there was no persuasive evidence that the regulation change improved patient safety in the affected hospitals in California. Empirical results suggested that a mandate reducing patient/nurse ratios, on its own, need not lead to improved patient safety and that improved nurse staffing might be crucial in improving patient safety, but only in combination with other elements.

Research carried out by Aiken in 2014 compared the impact of nurses' qualifications and staffing levels in nine European countries. While she concluded that the degree nurses had better patient outcomes her analysis does not appear to isolate the effects of two separate factors namely the level of qualification the nurses attained, and the number of nurses on duty. Once again demonstrating that patient outcomes and ratios can not necessarily be shown to have a direct causation, indeed the author makes the point regarding education levels and experience. She concluded:

> "Hospitals in which nurses cared for fewer patients each **and** [my emphasis] a higher proportion had bachelor's degrees had significantly lower mortality than hospitals in which nurses cared for more patients and fewer had bachelor's degrees… our data are cross-sectional and provide restricted information about causality. [Aiken 2014, *Discussion*]"

A common theme of much research into staffing levels is that it is cross-sectional i.e. it provides a snapshot of staffing levels at one given time and that it fails to prove causality i.e. a clear link between staffing levels and patient outcomes. Aiken concludes by calling for research into staffing levels to be carried out over longer periods of time:

> "Longitudinal studies of panels of hospitals would be especially valuable to help to establish causal associations between changes in nursing resources and outcomes for patients. [*Ibid*., *Discussion]"*

Since 2004, all registered nurses in Wales have qualified by completing a bachelor degree course. The existing nurse workforce in Wales is a mixture of graduates and nurses who qualified/registered before degrees were introduced. They are supported by health care support workers/nursing assistants.

Research by the National Nursing Research Unit at King's College, London suggested that setting a mandated minimum ratio had major consequences not just in terms of investment required to set up, establish and periodically recalibrate a mandatory ratio, but also in terms of mechanisms needed to monitor compliance and deal with non-compliance. Ratios do not remove the need for robust mechanisms for workforce planning locally, to ensure that the right staff with the right skills are in place to meet patient needs. [National Nursing Research Unit 2012, p 2]

In the first instance, the duty applies to adult in-patient wards in acute hospitals only.

At the evidence session of the Health and Social Care Committee held on 29 January 2014, all the witnesses – RCN, BMA, NHS Confederation and the Chartered Society of Physiotherapy – agreed that whilst there is evidence about safe staffing levels in medical and surgical adult in-patient acute wards, there is as yet little evidence for staffing levels in other settings. The CNO concurs.

If the Bill is enacted, it would seem reasonable to implement this duty in a single setting first and evaluate its impact carefully before considering applying a similar duty to other settings.

Note that it is necessary to make the distinction between an acute ward and an acute hospital. Were the Bill to be enacted, it should be enacted for acute adult medical and surgical wards rather than acute hospitals since an acute hospital may also provide other, non-acute services. There is an opportunity to clarify this in the guidance to be issued, by defining the terms used, as is required by the Bill, or an amendment could be made to set out the definitions on the face of the Bill.

The requirement for the Welsh Government to issue guidance in respect of the duty set out in section 10A(1)(b) inserted by section 2(1) of the Bill which

- **sets out methods which NHS organisations should use to ensure there is an appropriate level of nurse staffing (including methods set out in section 10A(6) inserted by section 2(1) of the Bill)?**

The Welsh Government already provides guidance to health service bodies, such as the CNO's Nurse Staffing Principles discussed above. Guidance has also been issued for the use and governance of the adult acuity tool for use in adult acute medical and surgical wards. Reports and other documents published by professional organisations are considered for application in Wales and often inform guidance that is produced.

- **includes provision to ensure that the minimum ratios are not applied as an upper limit?**

It is difficult to envisage any kind of mechanism that the Welsh Government could use that would prevent a mandatory minimum ratio from becoming a de facto maximum. As discussed above, the pressures and costs of complying with a mandatory ratio may divert resources so much that there is little opportunity to exceed the minimum level of staffing.

- **sets out a process for the publication to patients of information on the numbers and roles of nursing staff on duty?**

It may be useful for patients to know the number and roles of staff on a ward, but listing each member of staff's responsibilities would be difficult to understand, unnecessary and time-consuming burden. Information on some of the matters covered by the Bill is already in the public domain through the 'My Local Health Service' website, such as levels of staff sickness and absence, and healthcare-acquired infections (at a Local Health Board level).

- **includes protections for certain activities and particular roles when staffing levels are being determined?**

The CNO's Nurse Staffing Principles already require a degree of uplift when working out the required levels of staff, in order to account for sickness absence, training and supernumerary staff such as the ward sister.

Teaching is a requirement of practice and enshrined in the nurses' registration with the Nursing and Midwifery Council, their regulator. Nurses mentor students and

others throughout the shift, sometimes for a short period while undertaking a task and sometimes for longer periods working though students' competency requirements.

Induction for temporary staff is vital and important, however to make a protection against the ratio is practically difficult. Often agency staff arrive on the shift and receives their induction during the handover period. This induction is already planned and delivered and does not require a protection.

Continuing professional development and mandatory training are undertaken using a variety of methods. Some will be away from the clinical area and some will be work-based learning. Some training is delivered by practice facilitators and university clinical lecturers.

To make a protection for these function would be potentially difficult to understand and implement and may not reflect the learning at work ethos we expect from the NHS in Wales.

The requirement for Welsh Ministers to review the operation and effectiveness of the Act as set out in section 3

The Bill lists a minimum of nine indicators, which the Welsh Ministers must consider when reviewing the operation and effectiveness of the Act. This is not an exhaustive list, so other indicators could be added at a later date.

However, there is little evidence that any of these indicators are indicative of safe nursing. For example, if a patient is discharged, slips on ice while walking down his garden path and is re-admitted, this incident has no connection with the nursing care he had previously received.

The NICE guidance on safe staffing published in 2014 is based on an extensive review of existing peer-reviewed research about the relationship between nursing levels and patient outcomes. The *Evidence Review 1* paper concludes that "no direct causal inference can be made from the observed associations." [University of Southampton 2014, p 6]

> "The evidence does not give strong support for the validity of any single outcome as an indicator of adequate nursing staff specifically. However, infections, falls, pressure ulcers, drug administration errors and missed care all remain plausible outcomes although they are potentially difficult to interpret and implement. [*ibid.* p 11]"
>
> "In relation to costs, evidence suggests that increases in nurse staffing and / or a richer skill mix have a potential to be cost-effective but the existing evidence is derived from observational studies in countries with very different contexts and cost bases to the UK and so cannot be used to directly estimate the consequences of change… The diverse evidence base in terms of contexts, outcomes, measures of staffing and methods of analysis renders any attempt to directly derive safe staffing levels that could apply to the NHS context from this research, premature. [*ibid.* p12]"
>
> "Determination of safe staffing levels needs to take into account ward case mix, acuity, dependency and patient turnover. Other factors may also

> influence staffing requirements including ward layout and size but the evidence is not strong. [*ibid.* p13]"

This NICE guidance based on this evidence recommends using the red flag system, coupled with professional judgement, to determine nursing staff requirements. NICE defines a "red flag event "as

> "…events that prompt an immediate response by the registered nurse in charge of the ward. The response may include allocating additional nursing staff to the ward or other appropriate responses. [NICE 2014, p39]"

These events include unplanned omission in providing patient medications; a delay of more than 30 minutes in providing pain relief; failure to assess or record patient vital signs as outlined in the care plan, and a delay or omission of regular checks. The Royal College of Physicians supports this approach.

Do you have a view on the effectiveness and impact of the existing guidance?

The CNO and Nurse Directors principles agreed in May 2012 have had a significant impact on nurse staffing levels. They have embraced best evidence in this area and allowed a narrative to be formulated at local level to inform the allocation of nurse staffing establishments. While progress to achieve such principles has been monitored it has always been considered as requiring a time frame in which movement towards compliance would be incremental. The additional monies announced by the Minister for Health and Social Services to support work in the area of hospital nurse staffing levels has aided that journey. The NHS in Wales can demonstrate where progress has been made, even in the difficult current market for registered nurses.

- Health Boards have continued to actively address nurse establishments in adult acute medical and surgical wards.
- All Health Boards have made significant improvements to the number of wards with more that 1.1 WTE nurse/support worker per bed, with some areas now reaching 100% compliance.
- All organisations have assurance frameworks and action plans to continue to ensure appropriate safe staffing levels.
- Skill mix has improved significantly with the majority of wards with a 60:40 registered nurse to support worker skill mix.
- Some areas have not managed to recruit to the establishments identified, and have had to consider their recruitment plans. This compounds the issue of trying to reach compliance due to current
- There has been an improvement in the number of their medical wards in respect of no more than 7 patients per nurse by up to 75% in some Health Boards.

All NICE guidance is issued specifically for health and care in England. However, the latest NICE guidance *Safe staffing for nursing in adult inpatient wards in acute hospitals* informs the Chief Nursing Officer's work. As discussed elsewhere, this

guidance does not prescribe a fixed staffing ratio. Existing guidance such as that for the acuity tool already incorporates much of the advice from NICE and the All Wales Professional Nurse Staffing Group (AWPNSG) is considering revising other guidance if it is thought necessary in light of the latest NICE guidance.

It is too early to tell what the impact has been of the NICE guidance in NHS England.

Annex 1 **References**

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