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of Nursing



**NURSING
WORKFORCE
ACADEMY**

Why Registered Nurse-to-Patient Ratios are Needed:

The rationale and evidence base

NURSING WORKFORCE ACADEMY



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The Royal College of Nursing's (RCN) commitment to safe staffing has been long-standing and remains a priority. Members have consistently identified safe staffing as their 'top' priority. From recent data gathered on members' experience on their last shift 48% of respondents indicated staffing levels were not sufficient to meet all the needs of patients safely and effectively (RCN, 2026).

This document sets out an evidence-based argument for using enforceable minimum registered nurse staffing levels (often described as registered nurse-to-patient ratios) to reduce patient safety risks, improve nurse wellbeing, enhance nurse recruitment and retention, and improve the cost efficiency of health and social care service delivery. Whilst there are some limitations in the research evidence, taken together, the evidence supports enforceable minimum registered nurse staffing levels. Current approaches are insufficient to protect patients and nurses from harm. For this reason, the RCN has been campaigning in this area for over two decades, as detailed later in this document.

The RCN endorses enforceable minimum registered nurse-to-patient ratios, ensuring staffing levels do not fall to dangerously low levels and helping protect patients and nursing staff from avoidable harm. Minimums are exactly that – a minimum that should always be exceeded – not a target. For the optimum level of registered nurse staffing to be achieved, baseline staffing levels (ie, the 'nursing establishment') need to be sufficient across all providers to meet predicted levels of demand without compromise to care quality. Minimum ratios are an evidence-based failsafe; they do not replace effective workforce planning (using workload assessment tools and professional judgment). They prevent dangerously low levels from being reached. Establishment setting – that is, planning the total number of permanent nursing staff that make up the 'establishment' employed to provide a particular service - should be determined using the best available guidance, for example, NICE guidelines, and meeting the RCN's *Nursing Workforce Standards*, available at: rcn.org.uk/Professional-Development/publications/rcn-nursing-workforce-standards-uk-pub-011-930

As well as setting out what guidance currently exists, and campaigning for enforceable standards, the RCN is also exploring the development of a framework that identifies registered nurse staffing associated with different standards of care quality and outcomes - from a minimum needed to avoid a significant risk of harm, to levels associated with nursing excellence.

What do we mean by registered nurse-to-patient staffing ratios?

Registered nurse-to-patient ratios refer to the average number of patients per registered nurse, for a particular ward or service, during a specific shift or work period. Within wards, the registered nurse-to-patient ratio is straightforward; it refers to the number of patients relative to the number of registered nurses. In community contexts, the more meaningful metric is the number of patients allocated to the nurse: a caseload. Caseloads refer to the number of people and activities a district nursing service supports in a defined locality and can be considered on a per shift basis, or over a period of time, referring to total number of home visits/consultations. The Queen's Nursing Institute *Workforce Standards (2022)* set out maximum caseloads; district nurses should not undertake more than nine to 10 patient visits per day. They also recommend that the first assessment visit should be undertaken by a registered nurse and be involved again at least once every four visits after that. Evidence from the Standards also indicate that caseload per wholetime equivalent over ~150 are associated with more 'work left undone' and deferred care and that teams should agree and cap caseloads/case-mix with escalation when thresholds are exceeded.

The evidence

Registered nurse levels and outcomes

A substantial body of evidence, collated over many decades, supports a critical connection between registered nurse staffing levels and both patient and nursing outcomes (Dall'Ora et al., 2022, Shin et al., 2018, Blume et al., 2021). Extensive international research, including large-scale longitudinal studies within the UK, indicate that lower registered nurse staffing levels are directly linked with heightened risks of adverse patient outcomes including preventable complications, and increased in-hospital mortality. Inadequate registered nurse staffing is also a significant contributing factor of clinician burnout, workplace injury, and diminished job satisfaction (Dall'Ora and Griffiths, 2025).

The case for ratios

Implementing a mandatory minimum has been associated with improved registered nurse staffing levels, resulting in increased job satisfaction, and lower levels of sickness absence, workplace injury, and nurse burnout (Barrientos-Trigo et al., 2018, Serratt et al., 2013, Van den Heede et al., 2020, Wynendaale et al., 2019, Twigg et al., 2021).

Systematic reviews and meta-analyses consistently demonstrate that lower registered nurse-to-patient ratios are associated with detrimental patient outcomes. In the past, much (but not all) of the research in this area was observational in design, challenging assumptions of causality. More recently, longitudinal studies have made the more explicit causal link between registered nurse staffing and outcomes: negative outcomes arise as a direct consequence of lower registered staffing. The overarching synthesis is robust; better registered nurse staffing is associated with better outcomes.

The evidence supports a shift in policy and legislation to safeguard adequate and appropriate registered nurse levels. Whilst the effect size for the worst possible outcome - patient death – is modest when aggregated across the health care system, we see that raising low nurse staffing can play a significant role in reducing number of avoidable patient deaths each year. In the NHS in England, it was estimated that raising nurse staffing to meet NICE recommended minimum levels, would save 1,760 lives a year (Ball, 2020). The consistency of the relationship between registered nurse staffing and outcomes across varied clinical settings reinforces the argument that adequate registered nurse staffing is a foundational requirement for patient safety and high-quality care (Dall’ora and Griffiths, 2025).

Evidence from the United States of America (USA) demonstrates that implementation of mandated minimum nurse-to-patient ratios reduced the number of patients per nurse (Olley et al., 2019). In California (where legislation for mandatory minimum registered nurse staffing was passed in 1999), hospitals increased their number of registered nurses more than in other states, especially in places that had the lowest staffing levels to begin with (Mark et al., 2013).

Staffing mix, substitution, and patient safety

Health care providers can meet these minimum levels either by increasing their regular staff (the baseline) or by using temporary staff, however high reliance on temporary staffing, particularly when unfamiliar with the setting, has been associated with poorer outcomes (Griffiths et al., 2024). Concurrently, evidence from acute hospital settings shows that reducing the proportion of registered nurses within the skill mix is associated with poorer patient outcomes (Lasater et al., 2024). There is no direct evidence that substitution of registered nurses with less qualified staff is safe or cost effective ([rcn.org.uk/Professional-Development/publications/rcn-no-substitutions-uk-pub-012-536](https://www.rcn.org.uk/Professional-Development/publications/rcn-no-substitutions-uk-pub-012-536))

The nursing support workforce is an integral part of the nursing team, and it is important that there are funded establishments which include these roles in addition. Again, this should be determined by effective workforce planning, evidence-based workload assessment tools, and professional judgment. Inadequate registered nurse-to-patient ratios also negatively impacts nursing support workers, who can be left with inadequate support and supervision. The overall skill mix of registered nurses and nursing support workers needs to be appropriate to meet the needs and dependency of patients effectively and safely (Twigg et al., 2019).

Cost effectiveness

Research shows that increases in the numbers of registered nurses could be cost effective because having fewer registered nurses (relying more heavily on support staff) can lead to worse patient outcomes and may cost more overall. Economic evaluations from NHS hospitals in the UK show that improving registered nurse ratios could be financially beneficial due to reduced patient stays and hospital readmissions (Dall’ora and Griffiths, 2025). Investment in nursing is thus both cost-effective and economically justified; whilst also improving patient safety, with a low cost per quality adjusted life year (QALY). Economic modelling by Saville et al., (2025) estimates that eliminating registered nurse understaffing would cost £2,701 for each QALY gained for patients (Griffiths et al., 2024) – considerably under the NICE threshold for investment of £25,000-35,000 per QALY (NICE, 2025). Additionally, the value of reduced hospital stays, staff sickness and re-admissions exceeded the costs of additional staff, meaning that there was a net cost saving (Griffiths et al., 2024).

Workload planning tools

Patient dependency classification tools (eg, Safer Nursing Care Tool) are used to enable nurse staffing to be planned relative to patient acuity and local context. Whilst they remain a recommended approach, there is limited evidence demonstrating direct impact on outcomes independent of staffing levels (Griffiths et al., 2020). An adequate baseline staffing level has been shown to reduce risk to patients at a low cost compared to policies relying on temporary staffing (Saville et al., 2025). Overall, having an adequate baseline staffing level has been found to reduce risk to patients at a low cost compared to approaches which lean towards temporary deployment to solve low staffing.

Evidenced-based tools should be applied (along with professional judgement) to determine the nurse staffing levels needed and set establishment levels. However, they should always exceed the level set as the minimum, which is there as a failsafe (not a plan). Health and social care employers need to triangulate robust frameworks and evidence to plan optimum registered nurse staffing for each setting and implement effective workforce planning to meet specific needs locally. To date, legislation in parts of the UK has provided a foundation for planning nurse staffing; however, the RCN believes enforceable ratios with clear minimum nurse staffing levels nationally are essential.

The RCN campaign/approach timeline to safe staffing

The RCN has engaged in a long-term campaign for safe staffing across the UK, beginning with a resolution passed at RCN Congress in 2006 for UK wide legislation for appropriate staffing levels. In Wales from 2007-2010, the campaign *Get it Right* focused on workforce planning and in 2011 Congress supported the campaign for legally enforceable, rather than voluntary, nurse staffing levels.

The profound and far-reaching consequences following the Mid Staffordshire NHS Foundation Trust Public Inquiry (Francis Inquiry, 2013), which linked low staffing to poor patient outcomes, meant the RCN intensified its focus on mandated levels. RCN Wales launched the *Time to Care* campaign, leading the presentation of The Safe Nurse Staffing Levels (Wales) Bill in 2014 and Nurse Staffing Levels (Wales) Act 2016 became the first law of its kind in Europe, mandating that health boards and NHS trusts maintain safe staffing, with all sections coming into force in 2018.

In 2017, the RCN published *Safe and Effective Staffing: Nursing Against the Odds*, highlighted that staffing in emergency departments often falls below safe standards, while RCN Scotland prepared for its own safe staffing legislation passing as The Health and Care (Staffing) (Scotland) Act 2019, a landmark UK-first legislation covering both health and care services.

In 2019-20, RCN Northern Ireland held strike action to achieve pay equality and safe staffing. They continue to hold the Department on Health and Northern Ireland Executive to account for the delivery of the Health Minister's safe staffing framework – particularly, the implementation of safe staffing legislation.

In 2021, the RCN published the first version of *Nursing Workforce Standards*, detailing requirements for safe staffing across all UK settings and in Wales Section 25B of the Wales Act was extended to children's wards. The *Last Shift* survey results in 2022 demonstrated that despite legislation in some areas of the UK, many staff continued to work under unsustainable pressure. An explicit commitment to nurse-to-patient ratios was made at Congress in April 2023, supported by all four UK countries, and in late 2023 and

early 2024 the RCN brought chief nurses, policy leads and members together reaching a consensus on the need for action.

In 2024, The Health and Care (Staffing) (Scotland) Act came into force on 1 April while the RCN continued to campaign for similar legislation in England and in Northern Ireland. In 2025, an updated version of the *Nursing Workforce Standards* was published, with an increase in member workforce champions across the UK.

Summary

Unsafe staffing levels are a major concern for our members whose overriding aim is to provide safe and effective care. Given the weight and breadth of the evidence available, the RCN believes enforceable nurse-to-patient ratios are essential, alongside the use of high-quality workforce planning tools, to protect both patients and nursing staff from harm. The investment needed to increase registered nurse staffing to reach and exceed these minimums, would pay for itself in savings made due to more efficient, higher quality care being delivered. Minimum nurse-to-patient ratios will help ensure consistent, high-quality care while safeguarding the wellbeing and retention of the nursing workforce.

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