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The Scottish Safe Staffing Act at Baseline: Quantitative Findings

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ABSTRACT

Introduction: Amid a global nurse staffing crisis, in 2019 Scotland legislated the Health and Care (Staffing) (Scotland) Act to address health care workforce challenges. Instead of requiring patient-to-nurse ratios as legislated elsewhere, this act requires staffing decisions according to guiding principles, duties, and a common staffing method. Measuring variation in hospitals' adherence to the act's provisions at baseline is important for policymakers to evaluate fulfillment of the act's requirements and goals. Results will inform policymakers about which provisions are achieved at baseline and which require support for employers to achieve. The purpose of the study was to establish the baseline of nurse staffing standards in Scotland at April 2024 implementation of the Act. Nurse reports of quality, safety, and their intent to leave were measured to complement assessment of the implementation status.

Design/Methods: A cross-sectional study design was used. A convenience sample of registered nurses and nursing support workers was recruited through professional organizations and trade unions. Nurses were invited to complete an online survey between May 1 and July 31, 2024. The survey content included demographic and professional characteristics, international nursing metrics, the Act's provisions, and job intentions. Descriptive statistics were calculated to describe the sample, act's provisions, and nurses' job intentions.

Results: The sample comprised 1870 nurses, of whom 93% were registered nurses, from all regions with characteristics reflecting the Scottish nursing workforce. Regarding the act's provisions, 9% reported that nursing staffing is appropriate to provide safe, high-quality care every shift. Similarly, few nurses reported that the quality of care was excellent (17%) or graded safety an A (10%). Most nurses disagreed that current staffing levels met the eight guiding principles. Most nurses reported that the common staffing method and duties regarding real-time staffing decisions were followed at best occasionally. Nearly half of nurses (45%) intend to stay in their current job over the next year. Among those intending to leave their current job, about half plan to leave the profession through retirement or another unspecified job change. The other half plan to seek another similar nursing job or promotion.

Conclusion: Few nurses report that the act's overarching goal is being met at the point of implementation. Although most nurses see nursing as a long-term career, workforce disruption is anticipated through routine turnover, promotion, or retirement, requiring workforce retention policies. Whether the act's complex provisions can be achieved and its goals fulfilled may not reverse the

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trend of exiting nurses. The complexity of the approach will be a challenge to achieving the objective of safe staffing. Therefore, this approach to achieving safe staffing may be too complex to be recommended widely. These remain urgent questions for Scottish policymakers, nurse leaders, and researchers.

1 | Introduction

Presently, countries worldwide are gripped in a hospital nurse staffing crisis, exacerbated by the pandemic (Buchan and Catton 2023; World Health Organization 2023). Hospitals have difficulty filling vacant positions, compounding the poor circumstances that deter nurses in the first place. Although there may be a sufficient supply of registered nurses in some countries, in others, including the United Kingdom, which is the focus of this paper, many vacancies are being filled by migrant nurses (Buchan et al. 2023; Royal College of Nursing 2024). These challenges to staffing risk exacerbating the crisis itself if they encourage further exits and discourage entries.

Simultaneously, multiple countries (and states/regions within countries) are considering legislation to address the workforce crisis. Two decades ago, in 2002, California, United States, enacted a law requiring minimum nurse-to-patient ratios specific to nursing unit type, for example, one nurse per five patients on a medical-surgical unit. This law's benefit has been documented (Aiken et al. 2010). The post-pandemic staffing crisis has spurred legislative activity throughout the United States and globally. Nearly half of US states have enacted staffing ratios for one or more unit types, or require a staffing committee or staffing plan, or have legislation proposed (Krishnamurthy et al. 2024). Hospital nurse ratios were adopted earlier, in 2015 or 2016, in Wales, Ireland, Queensland AU, and are under debate in England (All-Wales Nursing Staffing Group 2016; Queensland Health 2016; Van den Heede et al. 2020). In 1999, South Korea introduced financial incentives related to nurse staffing ratios, which have been modified throughout the decades with limited success (Kim et al. 2024).

In 2019 Scotland enacted the Health and Care (Staffing) (Scotland) Act 2019 (HCSA) (Scottish Government 2023). The social and political issues that led to this legislative decision are summarized below. The legislative approach to safe staffing required by the Scottish act differs dramatically from that attempted in other countries or states within countries and may offer an alternative to the common approaches amid an international nurse staffing crisis. The act requires safe staffing *principles, processes*, and the *Common Staffing Method*. That is, the act requires staffing *processes*, the intention being that these will lead to improved ratios. The Act requires institutions to develop their own staffing policies guided by evidence as well as their human resources, their patients' needs, and local context. The act applies to both health and social care, applying in health settings to all clinical staff and staff who provide clinical advice (including registered nurses, nursing support workers, allied health professions), applying to all involved in providing care to people receiving social care, and in all care settings (acute, long-term, community health and care services), and referring to "service users," which we interpret as patients, clients, or residents (Scottish Government 2024a).

The choice to enact a set of guidelines, duties, and methods, as opposed to mandating ratios which have been the most common, reflects the latest step in the government's trajectory of nursing workforce planning. The act prioritizes existing workforce planning methodologies utilized in Scotland, local context, and flexibility. It is informed by prior local and national workforce planning employed in Scotland. These efforts across the past two decades include the 2004 National Health Service Reform (Scotland) Act, a Staff Governance Standard Framework for NHS Scotland (4th edition issued in 2012), the NHS Recovery Plan 2021–2026 (2021), and the National Workforce Strategy for Health and Social Care in Scotland (2022). Statutory guidance states that the act is designed to be flexible to promote staffing decisions guided by local assessments, to enable the creation of institutional level policies, to support professional judgment (Scottish Government 2024b), and to allow for innovative models of care delivery. As such, it does not require minimum staffing numbers, minimum staffing ratios, a predetermined skill mix of professionals, or committees to determine appropriate staffing levels (Scottish Government 2024b).

The act's overarching intention is evident in its introductory wording, which notes that "*the main purposes of staffing for health care and care services are—to provide safe and high-quality services, and to ensure the best health care or (as the case may be) care outcomes for service users* (Scottish Government 2024b)." The guiding principles embody these goals and encompass expected ethical and professional consideration of patient safety intended to be used for health care and care staffing and planning (Scottish Government 2024a, 2024b). The act's duties describe the requirements that health and care entities have related to staffing and planning. These entities in Scotland include NHS health boards, care service providers, Healthcare Improvement Scotland, the Care Inspectorate, and Scottish ministers (Scottish Government 2024b). Required duties vary by entity and may include ensuring appropriate staffing, having a real-time staffing assessment in place, training of staff, and consulting with staff (Scottish Government 2019). Annual reports to Scottish ministers are required on how duties were carried out. Ministers develop action plans (Scottish Government 2019). The act describes methods and procedures that fulfill required duties. Procedures range from patient risk identification related to staffing levels to using the common staffing method (see Figure 1).

This innovative approach makes its evaluation important. Specifically, ascertaining if it achieves its ultimate goal of ensuring a safe level of staffing. A key starting point is a baseline description of the current situation as experienced by nursing staff across the country. That will serve two purposes. First, this description would establish whether adherence to the provisions exists at planned implementation. Second, this description would be the reference point to measure after 2 or 3 years whether adherence increases as well as whether goal attainment increases. The purpose of the study was to establish the baseline of HCSA provisions in Scotland at April 2024 implementation of

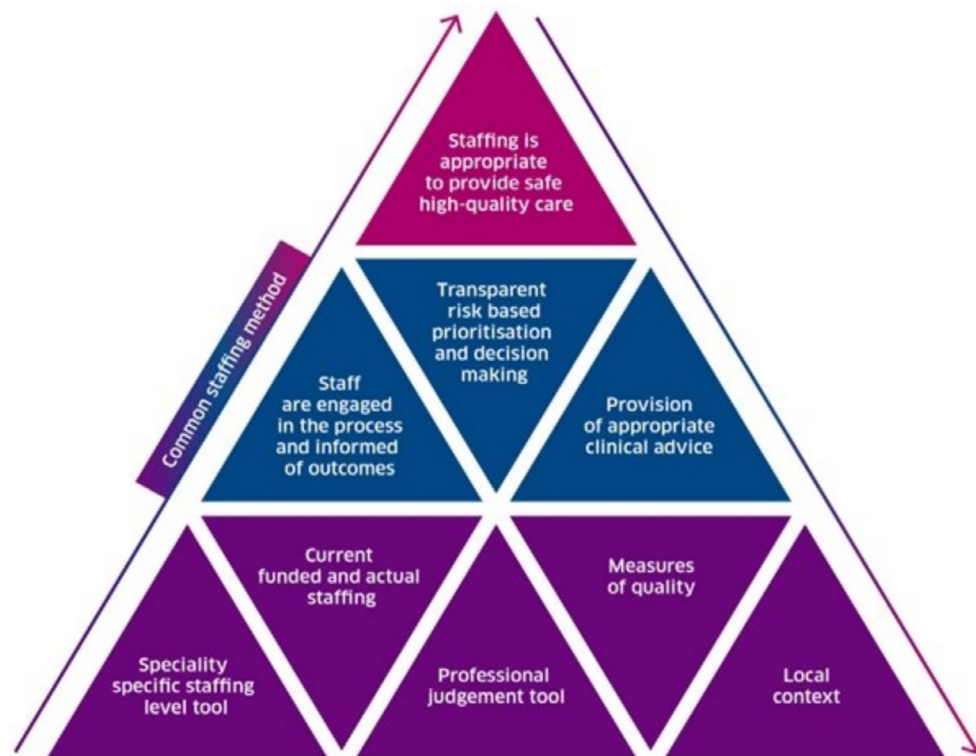


FIGURE 1 | The common staffing method. Source: Health Improvement Scotland (2022). *The Common Staffing Method: A Quick Guide*.

the Act. A second purpose was to describe nurses' assessments of quality and safety in their current workplace and their job intentions at the point of implementation.

2 | Design

2.1 | Materials and Methods

The study design is a cross-sectional, descriptive study. We utilize a methodology for researching clinical settings that relies on frontline staff, that is, nurses, as informants about key dimensions of health care structures and processes (Aiken and Hage 1968). A nurse's perspective is considered preferable to a managerial informant because of the clinical insight and proximity to patient care that the bedside nurse provides. In the current study, nurses' observations are key because they are the ones experiencing the act's provisions.

2.1.1 | Participants and Procedures

A survey was developed to gather nurses' perceptions of the act's provisions. The survey items, detailed below, were derived from the act's exact wording, which conferred inherent content validity. Given the novelty of the content, the survey was pre-tested. Invitations were sent to 11 Scottish nurses in different job roles and clinical settings in different areas of Scotland. All were registered nurses in employment. Based on their feedback, survey items were revised. After the pretest, several revisions were made for clarity. For example, one item was split into two to reflect the different content elements. The revised survey was

again distributed to the same group to evaluate the changes. This process was designed to achieve face validity. To evaluate reliability, Cronbach's alpha was calculated for the items measuring the Act's provisions. The alpha coefficients were 0.92 for the guiding principles, 0.91 for the duties, and 0.84 for the common staffing method.

We recruited a purposive sample of registered nurses (RN) and nursing support workers in Scotland by email through professional unions, specialty organizations, and the publication, *Nursing Standard*. The organizations included the Royal College of Nursing—Scotland (check notes). We did not include non-nursing roles because of our focus on the nurse staffing crisis. Nursing staff were invited to complete an online survey between May 1 and July 31, 2024. The start of our survey of nurses in the United Kingdom (i.e., England, Northern Ireland, Scotland, Wales) occurred in March 2024. The survey was hosted on an online, university-based platform called NOVI. Reminder notices were sent monthly to all nurses. The study protocol was approved by the Edinburgh Napier University ethics committee, Scotland. The protocol included an invitation letter that comprised informed consent and eligibility screening. Participants indicated willingness to participate using check boxes on initial survey pages.

The analytical sample included all RN's and nursing support staff that reported on the first demographic question upon establishing eligibility for the survey. The number of participants with non-missing data dropped throughout the survey, as reported in Results. A response rate was not calculable because the recruitment occurred through multiple nursing organizations, including unions, specialty groups, and *Nursing Standard* (journal).

2.1.2 | Measures

The survey content included demographic and professional characteristics, international nursing metrics, the act's provisions, and job intentions. The demographic and professional characteristics included professional role (RN or nursing support worker), management or clinical staff, whether one worked in a hospital or not, nursing unit type, geographic location (14 areas), and hospital name when applicable. International nursing metrics included patients per nurse, a work environment measure, and nurse-reported quality and safety grade. Several of these were not used for this baseline description.

The legislation's wording was used to create survey questions about the act's overarching goal and specific provisions. The query on the overarching goal was as follows: "How often is nursing staffing appropriate to provide safe, high-quality care?" with response categories Never, Less than once a week, Once a week, Several times a week, and Every shift. For the three sets of provisions, we deliberated the optimal response categories and decided that upholding the guiding principles would entail a "disagree to agree" spectrum, but that expectations of the common staffing method and duties related to staffing decisions were more appropriately measured on a frequency spectrum (never to always). Therefore, two types of Likert-type responses were used: agree/disagree and frequency. The act's eight guiding principles were queried with the stem: "Please indicate the extent to which each of the following statements are true about current staffing levels at your workplace." An example is "Ensures respecting the dignity and rights of service users." The response categories were Strongly Agree/Agree/Disagree/Strongly Disagree. Next, the survey queried about use of the Common Staffing Method, with the following prompt: "Please indicate how often the statements below occurred at your workplace in the past 12 months." An example is "I am engaged in the staffing decision process for my clinical area." The response categories were Never, Rarely, Occasionally, Frequently, Always, and Don't know. Additionally, a specialty specific staffing tool is required. The survey asked, "Please indicate how often a specialty specific staffing level tool was at your workplace in the past 12 months." The response categories were, Never, Less Frequently Than Once a Year, Once In The Past 12 Months, More Than Once In The Past 12, Months, Continuously, Don't Know, and Not Applicable. An additional section queried about factors to take into account when making decisions about staffing levels. The stem was "Are you aware of your employer taking into account any of the following factors when making decisions about staffing levels?" Here, the respondent answered yes, no, or don't know.

Next, the survey queried about duties expected with staffing decisions, with the following prompt: "Thinking about when staffing decisions are made in real time, please indicate how frequently each of the statements listed below occur in your workplace." An example is "Appropriate staffing levels of individuals that are suitably qualified and competent is achieved." There were eight duties in the act. We split one regarding the clinical leader into three distinct duties, yielding 10 total. The response categories were Never, Rarely, Occasionally, Frequently, Always, and Don't Know.

Nurse-assessed quality and safety were measured by single items as in the literature (Lasater et al. 2019) as follows: "In general, how would you describe the quality of nursing care delivered to patients in your work setting?" Response categories were as follows: Excellent, Good, Fair, and Poor. For safety grade: "Please give your current practice setting an overall grade on patient safety." Response categories were A (Excellent), B (Good), C (Acceptable), D (Poor), and F (Failing). For intent to leave, the question stem was as follows: "We are interested in your future career plans as it relates to staffing. In the next 12 months, do you intend to:" Response categories were as follows: Stay in the same nursing job, Leave my job for another similar nursing job, Leave my job for a more senior nursing job, Leave my job due to retirement, and Leave my job due to other reasons.

2.1.3 | Analysis

The primary aim of this study was to describe the characteristics of the sampled RNs and nursing support staff and their reports on the act's provisions and job-related outcomes in the early stages of the act's implementation. To achieve this, we computed summary statistics, such as frequencies, percentages, and means. These analyses were repeated in the subset of respondents who were registered nurses to examine whether their response patterns were the same as the whole sample.

3 | Results

3.1 | Sample Demographic and Professional Characteristics

Study participants who answered the first demographic question (what is your gender?) were considered the analytic sample ($n = 1863$). Due to respondent exit over the course of the survey, the analytic sample for the final question, on job intentions, was $n = 982$. The sample was predominantly White (95%) and female (86%) ages 50 to 59 (37%). The second largest ethnic group was reported as Black, Black British, or Caribbean or African (3%). Nearly all respondents were registered nurses, that is, with the Nursing and Midwifery Council (93%) and 7% were nursing support workers. Although management levels varied, most respondents were clinical staff (72%), and others were clinical managers (21%) or non-clinical managers (7%).

Geographically, there were respondents from all of the 14 regions in Scotland, predominantly from the urban centers of Glasgow (29%) and Lothian (Edinburgh) (14%). The sparsely populated islands of Orkney, Shetland, and the Western Isles were represented by 0.8%, 0.47%, and 1.2%, respectively. The majority of respondents were affiliated with the NHS (91%) while others worked in social care and care homes for adults (8%), or other. Four out of five respondents worked in a hospital. Among them, half (49%) worked in adult wards, 13% in mental health wards, and the remainder at lower percentages in emergency care (8%), intensive care, peri-operative/theater, outpatient services, high dependency/intermediate care, pediatrics, same day emergency care, maternity, and other.

3.2 | Act's Provisions

Figure 2 illustrates the respondents' assessment of how frequently the act's overarching goal is achieved. This demonstrates that the highest percentage of the sample (38%) reports that the overarching goal is met several times a week. Over half of the nurses (54%), however, reported that this goal was met once a week or less.

With regard to the act's eight guiding principles (Figure 3), here we consolidated strongly agree and agree; as well as disagree and strongly disagree. We focused on agreement that current staffing levels in the nurse's workplace meet these principles. For all but two principles, most nurses disagree that these principles are being met. For these two principles, "respecting the dignity and rights of service users" and "a multi-disciplinary approach to care," about 70% of nurses agreed. By contrast, the principles that the most nurses disagreed were being met were "ensuring

the wellbeing of staff" (78%) and local context considered (83%). Further, 70% or more of respondents disagreed with three other items: "allocating staff efficiently and effectively," "being open with staff and service users about decisions on staffing," and "my employer identifies and takes all reasonable steps to mitigate any risks associated with staffing."

Regarding use of seven aspects of the common staffing method (Figure 4), for which desirable response categories are always or frequently (always/frequently), along with combining occasionally, rarely, and never (i.e., occasionally or less), a consistent pattern is observed for six of the seven factors: 75%–85% of respondents answered occasionally or less. Among these, the least frequently occurring methods were "Measures of quality are used in considering staffing" and "The local context is taken into account when considering staffing." For items on *Being engaged in the staffing decision process for my clinical area*, *Informed of outcomes of staffing*

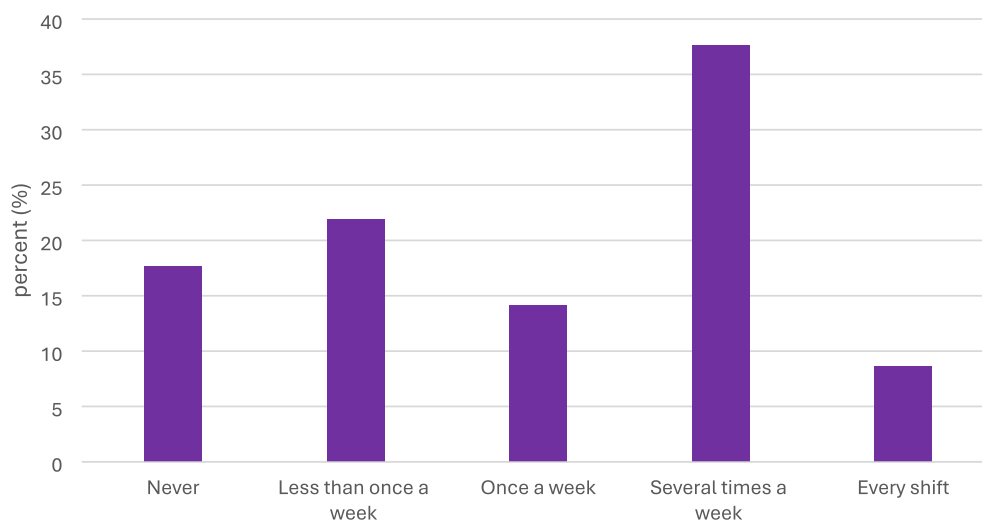


FIGURE 2 | Overarching goal: frequency of appropriate staffing to provide safe, high-quality care.

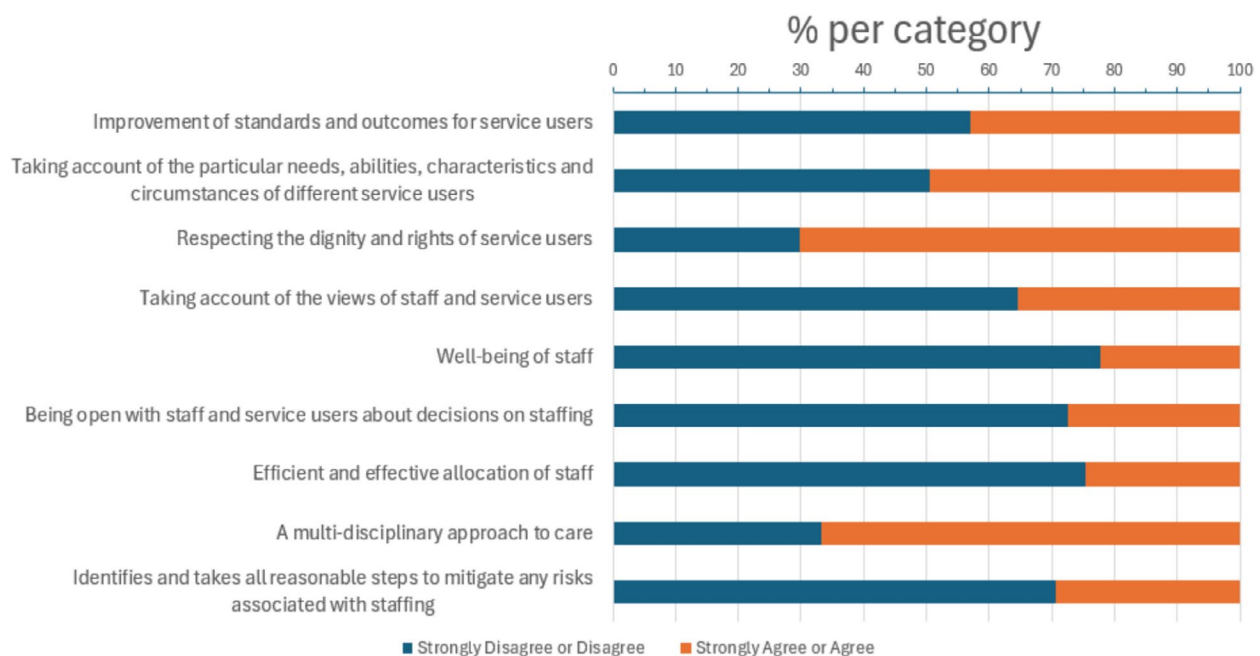


FIGURE 3 | Agreement that guiding principles are being upheld.

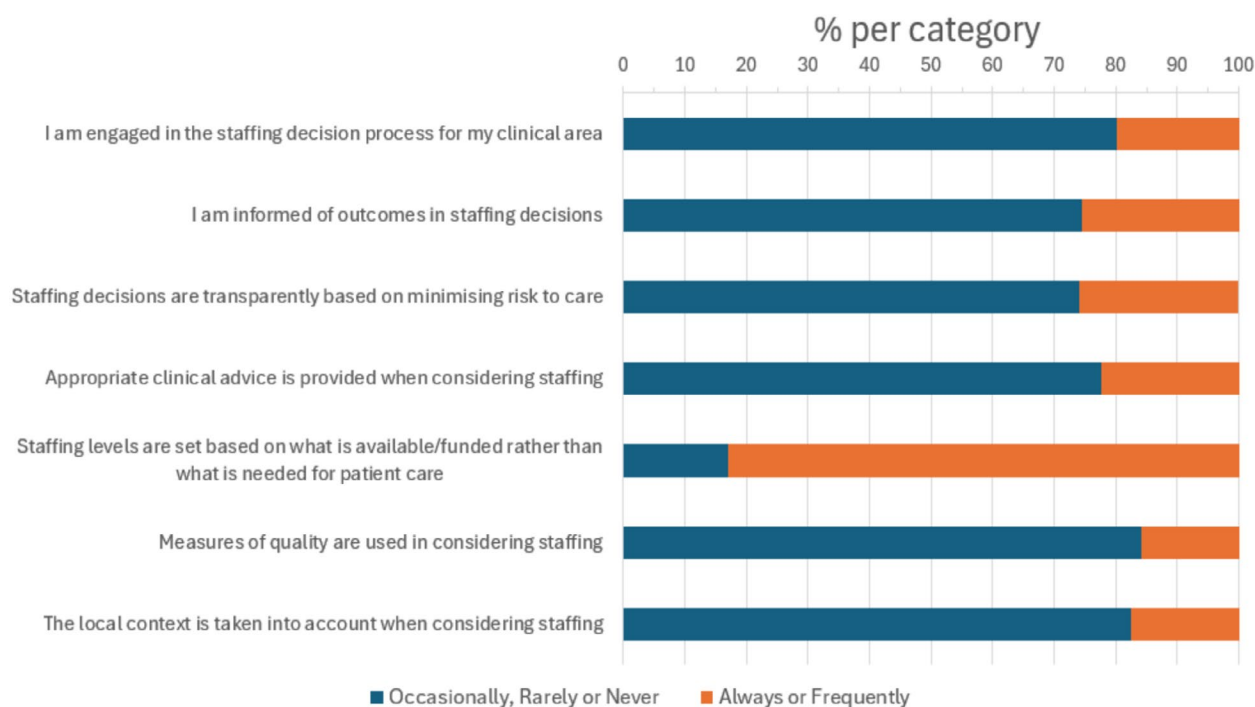


FIGURE 4 | How often aspects of the common staffing method occur.

decisions, *Decisions being transparently based on minimizing risk to care*, and *Provision of appropriate clinical advice regarding staffing*, 75%–80% of nurses reported these occurred occasionally or less. The exception was “*Staffing levels are set based on what is available/funded rather than what is needed for patient care*.” For this item, 85% of respondents answered always/frequently. These questions included a “don’t know” response. On average, 6.5% of respondents reported “don’t know,” ranging from 0.7% to 19.7%. The notably higher value of 19.7% was for the local context.

Of the 11 factors to be considered in decisions about staffing levels, on average one quarter (26%) responded “don’t know.” Here, the highest percentage (46%) of nurses did not know about the factor: “*Health Improvement Scotland assessments of health care quality*.” Additionally factors that nurses did not know reported by more than a third of respondents were “*The distribution of resources between different health care settings*” and “*The local context*.” Among nurses who replied yes or no, more nurses replied no (57% on average) than yes (43%).

For the 10 duties expected when making staffing decisions displayed in Figure 5, here again desirable responses are Always or Frequently. The duties that the fewest nurses (~15%) reported occurring Always/Frequently were “*Appropriate time and resources for staff training*,” and “*Adequate time for clinical leaders to supervise clinical care or support staff development*.” By contrast, the greatest percentage of nurses reporting Always/Frequently for “*A risk escalation process is in place*” (45%) and “*Appropriate staffing levels are achieved by employment of bank or agency workers*”(40%). Next, 30% of respondents indicated that “*Appropriate staffing levels of individuals that are suitably qualified and competent is achieved*” was considered Always/Frequently. These questions included a Don’t Know response. On average, 13% Did Not Know (range 2%–31%). The highest were *Risk escalation process* (26%) and *Severe/recurrent risks* (31%).

Regarding whether training in preparation for the Act has taken place in their workplace, over half of respondents (54.4%) said No; 35.4% Did Not Know, and the remainder (10.2%) said Yes.

3.3 | Nurse Ratings of Quality and Safety and Nurses’ Job Intentions

The modal response category (47%) was “Good” quality of care (Figure 6). The next most frequently reported response was “Fair” (27%). For safety grade (Figure 7), which exhibited a normal distribution, the predominant response was Acceptable (34% of respondents), followed by Good (30%). Only 10% graded safety as Excellent.

Regarding nurses’ job intentions (Figure 8), almost half (45%) planned To Stay in The Same Job. Most of the remainder reported Leave My Job Due to Other Reasons (19% of the whole sample) or Leaving for a Similar Nursing Position (19%). Seventeen percent planned to seek a more senior nursing position or to retire. Results on the subset of RNs only were essentially the same, that is, within 2% points of the value for the whole sample including nursing support workers.

4 | Discussion

The legislation in Scotland was unprecedented in its focus on safe staffing principles, methods, and duties as opposed to setting minimum numbers. This study provides the first glimpse at the state of the act’s provision at its implementation. We find that the act’s overarching goal, to assure safe quality care, is not being met as reported by over half of the respondents, who represent all regions of the country. Notably, over half of the respondents plan to leave their present jobs. Respondents’

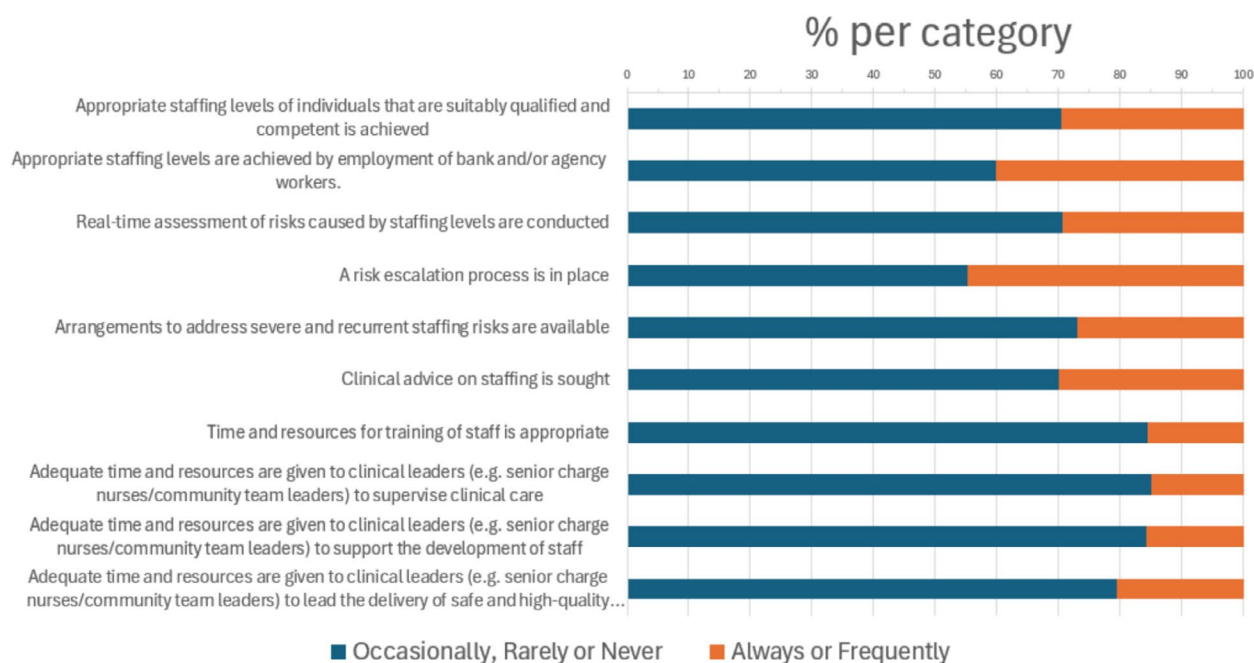


FIGURE 5 | How often staffing decisions fulfill duties.

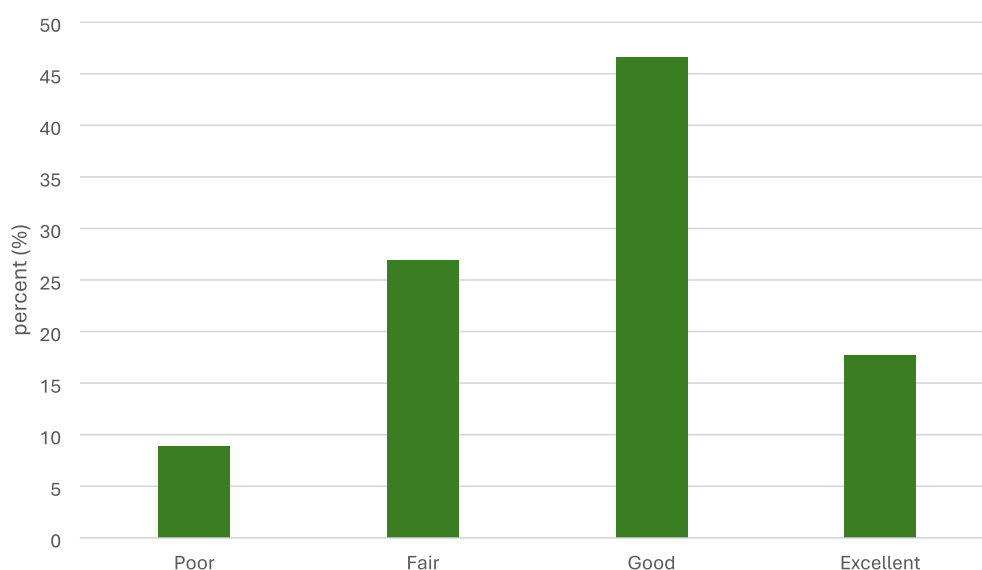


FIGURE 6 | Quality of care rating.

views on workforce challenges coupled with the act's goal not being met indicate both the need for legislation and the lack of achievement of the act's provisions at this early stage. Nurses' ratings of quality as "good" (47% of respondents) and safety as "acceptable" (34%) suggest that excellent quality and safety are infrequent, also suggesting a legislative solution is warranted.

For all but two of the eight guiding principles, few nurses agree they are being met. Notably, only about one in five respondents agreed that current staffing levels ensure staff well-being. This poor assessment aligns with the majority of nurses intending to leave for similar or more advanced positions or entirely through retirement or exit and signals an urgent issue requiring managerial and even policy attention. The two principles

that most nurses agreed are being met are respecting service users (i.e., patients/clients/residents) and having a multi-disciplinary approach to care. It is, to some extent, reassuring to observe at baseline that these important guidelines are considered as being achieved, given current staffing levels by 70% of respondents. This indicates, however, that almost a third of staff believes this is not being met. Improvements are needed, however, to allocate staff efficiently and effectively, to mitigate risks associated with staffing, and to be open with staff and service users about staffing decisions and take account of their views. About half of respondents agreed, and the other half disagreed that staffing levels supported improving service user standards and outcomes and taking account of service users' particular needs, abilities, characteristics, and circumstances. This has worrisome implications for patient care.

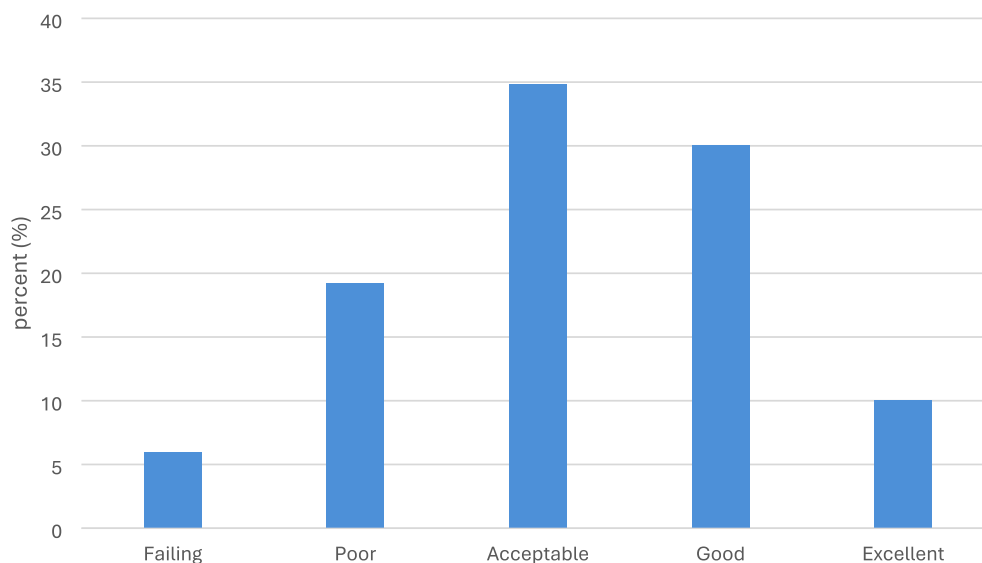


FIGURE 7 | Patient safety grade.

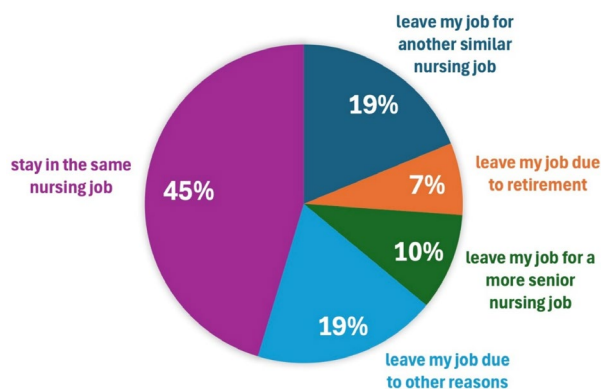


FIGURE 8 | Job intentions.

Nurses' responses indicated that only one of the seven aspects of the common staffing method is occurring frequently or always, as reported by 85% of respondents: staffing based on available/funded personnel instead of what is needed for patient care. Finance/staff availability should not determine staffing under the common staffing method. This indicates that financial decisions and limited availability of staff are influencing staffing decisions, rather than being based on patient need. The incidence of respondents reporting that steps in the common staffing method are only occasionally, rarely, or never in place reveals the present circumstances of insufficient staffing. This also illustrates that respondents did not merely give uniform answers to a series of questions in the same survey section, which supports the veracity of answers and discernment of respondents. For the remaining methods, three quarters of respondents reported they occurred occasionally or less frequently. This infrequency of these methods suggests that these provisions are considered a lower priority and not well understood without clearer guidelines, or they may not be feasible in the current staffing situation which presents risks for staffing decisions.

Most nurses reported that the duties expected when making staffing decisions were fulfilled occasionally or less frequently. The duties most frequently fulfilled were having a risk escalation

process in place and achieving appropriate staffing through bank or agency nurses. Only about 15%–20% of nurses reported that time and resources for clinical leaders to supervise clinical care, support staff development, and lead delivery of safe, high-quality care were frequently or always adequate. Similarly, few nurses reported that there is appropriate time and resources for staff training. We consider nurses' observations about the time and resources given to their leaders and to their own training as valid. We infer that universally poor availability of human resources in the Scottish health service limit leaders' capabilities across these key managerial functions.

Over half of respondents reported that training in preparation for the act had not taken place in their workplace. Another third (35%) did not know if training had occurred. Only one in 10 said training had taken place and attended it. These results indicate that expected preparation ahead of the act's implementation was quite limited, which is consistent with the disagreement or infrequency that nurses report the act's provisions being achieved. However, the large majority of nurses (about 90% or more) knew about most of the guiding principles and duties, indicating familiarity with these components of the act.

The responses regarding job intentions were discouraging. Among the 55% of nurses who planned to leave their current job, most (38%) either did not specify the reason for leaving or planned to seek a similar job in nursing. The quarter (26%) of respondents who plan to exit clinical practice through retirement or advancement presents multiple workforce and clinical challenges. These include less mentorship for new-to-practice nurses, fewer nurses available, a less experienced nursing staff which implies reduced quality of care delivered and poorer interprofessional team function. Seeking a more senior nursing position may be interpreted as desirable career advancement. The remainder seem to desire to leave their current employer, this group most clearly appears disaffected with the current workplace. Several worrying trends have been reported by the Royal College of Nursing Scotland (Royal College of Nursing 2023) showing that the highest number in the past decade of nurses leaving in 1 year was noted in 2022: 4238. Simultaneously, entrants to Scottish

nursing undergraduate degree programs have fallen short of desired numbers (Royal College of Nursing 2023). These trends paired with the 2024 survey data herein indicate a dwindling Scottish nurse workforce. According to the RCN-Scotland, in the context of nurses wanting to leave the professions, “the Act has the potential to drive and transform the experience of nursing staff, which is key to the current challenge of retaining nurses in Scotland” (Royal College of Nursing 2024).

It is important to acknowledge that intent to leave does not equal eventual turnover. Prior research has shown that in a sample reporting 40% intent to leave, only 10% resigned within the next year (Lake 1998). We conceptualize intent to leave as a signal of job disaffection. That is, whether a nurse leaves or does not may be as important as whether disaffected nurses remain with their current employer, both of which have negative consequences for the nursing team and the employer.

While the Scottish act is unlike earlier staffing legislative approaches, several other legislative initiatives have been evaluated in a pre- and post-implementation design. Studies in South Korea and Queensland, locations that enacted nurse-to-patient ratio legislation, compared baseline staffing data to data 1–2 years post implementation to evaluate the impact of staffing legislation (Kim et al. 2024; McHugh et al. 2021). These studies showed that staffing ratio improvements were greater in hospitals subject to the legislation compared to hospitals that were not subject to the legislation (McHugh et al. 2021; Kim et al. 2024). An evaluation of the California nurse-to-patient ratio minimum legislation found that the number of patients per RN significantly decreased when comparing ratios 2 years pre-regulation to 2 years post regulation (Burnes Bolton et al. 2007). The Nurse Staffing Levels (Wales) Act stipulates that each NHS health board in Wales publishes a progress report every 3 years (Royal College of Nursing Wales 2019). To date, progress reports indicate that health boards are at different stages of implementation, with some health reports reporting large deficits in staffing levels. Since the act was implemented, health boards have increased budgetary spending for more nursing staff and have committed to implementing IT systems that would allow them to more accurately calculate staffing levels and report compliance with the act (Royal College of Nursing Wales 2019).

Our findings have implications for policy, management, practice, and research. Because other states and countries want to improve patient care through staffing policy, the reported results are relevant. Therefore, it becomes important to know whether this legislative approach can achieve its goals. Findings from the current study necessarily reflect the status at implementation, that is, too early to expect goal achievement. Nevertheless, we can expect nurses to know the Act's requirements and because it builds on earlier work plans, ongoing principles and staffing methodologies which originated in earlier government initiatives should be in place. The widespread lack of achievement, per nurses' perceptions, of provisions in the Act 5 years post-legislation, the pandemic notwithstanding which delayed implementation of the Act, suggests that this approach to achieving safe, high-quality care might be impractical and overly complicated.

Using nurses' perceptions is an established approach to assessing legislative achievement (Aiken et al. 2010; McHugh et al. 2020). More broadly, nursing systems research relies on

the observations of frontline nursing staff to reveal present clinical realities, as the nurse is considered the key informant. By contrast, reports by stakeholders such as nurse managers and directors cannot capture these clinical realities fully. The substantial majority of participants were registered nurses. Coupled with the sensitivity analysis, findings can be confidently applied to registered nurses.

The Scottish Government has statutory guidance to accompany the Act. Annually, employers must report challenges or risks and steps taken to comply with requirements across about 13 sets of provisions. These reports support health policy planning. That being said, there is no clear way of knowing that certain provisions of the Act have been implemented or how to monitor their implementation. The statutory guidance does not indicate how a hospital/facility can demonstrate that it has achieved whatever is mandated. For example, attainment of use of staffing tools or meeting duties. As valuable as the nurses and support workers' perceptions are, there should be values or targets that an institution can move towards and processes to do so to successfully meet the act's requirements. The act sets forth principles, duties, and methods without pragmatic guidance or signposts. For many provisions, it is hard to imagine how their achievement could be ascertained. For example, taking service users' particular circumstances into account in staffing decisions. Whether checklists or other measures could capture the fulfillment of the provisions is unknown. While it may be too soon to tell, presently this approach does not seem promising. Perhaps in regulatory guidance or reporting templates, benchmarks, targets, and measures could be provided.

Our study implications for employers are to work with government officials to properly measure and monitor the Act's provisions. Practice implications are for clinical nurses to communicate with their managers whether the implementation of the act is yielding fruitful change and the value of clear communication about the value of the act's provisions and their implementation to prevent demoralized staff from exiting.

This research team undertook a baseline evaluation of the Act's implementation from the perspective of registered nurses and nursing support workers. While this evaluation was not mandated by the government, it represents the first step in a rigorous evaluation in a prospective design. The next obvious step is to replicate the current study in 2–3 years to assess improvement in goal achievement, including improvement in outcomes, as has been done in other countries with nurse staffing legislation.

5 | Limitations and Strengths

The principal study limitation is the convenience sample, although a strength is that the sample does reflect the age and gender distribution of the Scottish nursing workforce (National Health Service Scotland 2022). Another limitation is the diminishing sample size across the later survey sections. The authors created the survey content to embody the act's provisions. The three sets of questions on the act's guiding principles, duties, and the common staffing method exhibited high reliability. The survey wording, including response categories, however, may not fully reflect the act's intention or meaning.

6 | Conclusion

Few nurses report that the act's overarching goal is being met at the point of implementation. Although most nurses see nursing as a long-term career, workforce disruption is anticipated through routine turnover, promotion, or retirement, requiring workforce retention policies. Whether the act's complex provisions can be achieved, and its goals fulfilled, may not reverse the trend of exiting nurses. This approach to achieving safe staffing may be too complex to be recommended widely. Although this is very early days, we remain skeptical that this approach will succeed. But time will tell. The lack of achievement at the point of implementation of principles, goals, and methods evidenced in the responses is concerning. These remain urgent questions for Scottish policymakers, nurse leaders, and researchers. Clearly, we need to invest in further research given the importance of this policy both for international understanding and for nurses and patients' wellbeing in Scotland.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Clinical Resources

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