

## Case Study

# A multi-modal approach to promoting hand hygiene to reduce hospital acquired infection: A change management proposal for an intensive care unit

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**Key Words:** Hospital-acquired infection; hand hygiene; healthcare-associated infection; hand washing; hand sanitising; nosocomial infection; reduce infection

## Abstract

**Aim:** Using evidence from a previous literature review, a proposed plan was developed to promote hand hygiene and reduce the prevalence of hospital-acquired infections within an intensive care unit in the North-West of England. **Methodology:** The RE-AIM framework structured the implementation of the proposed plan with Lewin's force field theory applied. The proposed plan was peer-reviewed for feedback on the change management plan. Finally, Gibbs's model was used to reflect on the lead author's independent learning journey undertaking a 3-year degree programme in adult nursing to reflect and identify opportunities for future development. **Results:** A multimodal change plan was developed with guidance from the evidence and identified themes. The peer review process highlighted areas for improvement and provided valuable feedback. **Discussion:** The proposed plan was based on three hand hygiene themes identified in a previous literature review; education and understanding, direct observation, and reminders/ prompts. The change management phase highlighted important barriers to be addressed for the proposal to be successful. The peer review process facilitated innovative ideas and reflecting on the feedback given. **Conclusion:** A proposed plan focused on hand hygiene and healthcare acquired infections offers valuable insights related to change management plans in nursing.

## Background

Hospital acquired infections (HAI's) are the second most prevalent cause of death world-wide and account for seven out of every 100 in high income countries and ten out of every 100 in emerging and low-income countries (Haque et al., 2020). Patients in intensive care units are

more at risk of contracting HAI's due to their higher exposure to invasive devices and procedures, illness severity, co-morbidity, acute illness, and prolonged length of stay (Bloch et al., 2023). One simple and cheap method of reducing HAI's is hand hygiene [HH] (WHO, 2009), which was emphasised to combat the global increase of HAI's during the Covid 19 pandemic (Wang et al., 2022). The World Health Organisation (2020) suggest regular training, reminders and updates in clinical practice could lead to improved HH. However compliance, frequency, and collegial prompting declined after only a few weeks during the Covid 19 pandemic (Moore et al., 2021), due to an increased workload. This led to 22-32% of the nursing workforce in the United States considering retiring, leaving the profession, or changing jobs (Martin, et al., 2023a).

The National Health Service (NHS) improvement proposals recommend to include local stakeholders and obtain feedback, align with policy and lastly, be evidence-based (Independent Review Panel, 2024). Therefore, a review of the literature (see Yates & Regan, 2025) was written to explore key issues of hand hygiene (HH) to reduce the prevalence of HAI's in line with WHO (2023) guidelines. This paper, despite being hypothetical, and yet to be implemented, is an example of a change management proposal using a change model, critical appraisal by a peer-reviewed analysis and finally, reflection on the first author's three-year independent learning journey. This narrative is rarely disseminated in the literature which tends to focus on evaluation of a project rather than an implementation strategy.

## The proposed plan

Firstly, we will briefly outline the proposed plan for sim-

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plicity and structure. Using evidence from a literature review, the proposed plan aimed to promote HH compliance and reduce the prevalence of HAI's within an intensive care unit in the North-West of England. WHO (2009) guidelines recommend education of both staff and patients through training, information leaflets, and adhering to “my 5 moments of hand hygiene”. These refer to moments before touching a patient, before a clean or aseptic procedure, after body/ fluid exposure risk, or after touching a patient and after touching patient surroundings). However, WHO (2009) recommendations are inconsistently delivered in practice due to a lack of evidence how to implement them (Ariyo et al., 2019). Reinforced by the vision strategy “Prevention is better than cure” (DHSC, 2018), focusing on preventative measures to aid patient outcomes, reduce risk, cost, and improve services within clinical settings, successful implementation requires team champions to promote multidisciplinary engagement as partners in the change process (Ariyo et al., 2019).

Implementation planning and strategy

Implementation planning and strategy can be defined as the technique, construction, and hypothesis applied to implementation efforts (Waltz et al., 2019). Searching for implementation planning models proved to be difficult because most searches of the literature retrieved business-related models. Discovering articles such as McKenzie et al. (2022) and Moullin et al. (2015) who reviewed multiple frameworks and models allowed for a comparison of relevance. Due to being replicable and simple when compared to adopting multiple frameworks that individually address specific healthcare needs, the growing popularity of generic implementation frameworks proved useful (Moullin et al., 2015). However, the framework of Moullin et al. (2015) lacked a sense of holism, which is regarded as a fundamental issue for contemporary nursing (Nursing & Midwifery Council, 2018a; 2018b) and for this reason, the Generic Implementation Framework was identified as being inappropriate.

After consideration, the RE-AIM framework was chosen for its relevancy in healthcare (Glasgow et al., 1999). The framework is split into five principal areas: reach, effectiveness, adoption, implementation, and maintenance, which will be used to structure the proposed plan. Although RE-AIM has been criticised for excluding cost

and longevity of its implementation, it has been proven to be relevant and recyclable, as well as evolving since its original conception (Holtrop et al., 2021). Due to the age of this model the plan will draw parallels from the NHS Long Term Plan Implementation Framework (NHS England, 2019) and Nursing and Midwifery Council’s (NMC 2018a) guidelines to ensure relevance to contemporary nursing policy.

Reach

The proposed plan had been discussed with a ward manager when the lead author was on clinical placement. Discussion was held on the scope, purpose, and methods to promote HH and learn from the evidence base. A multi-method observation period would commence using World Health Organisation (2009; 2010a) guidance and their HH observation form (2010b). In line with the WHO (2009) recommendations, all staff and patients will be exposed to information (posters, leaflets, reminders, and prompts) on HH, and staff training developed to promote HH and observations of practice. Adoption of WHO (2009) recommendations will be promoted through staff education to update their knowledge base on HAI and the importance of HH. This also aligns with the NMC Code (2018a) by practising effectively and using the best available evidence. Staff would then be encouraged to share structured, relevant information with patients upon their admission, fulfilling the adoption and implementation aspect of the framework (Glasgow et al., 1999). An intensive care unit (ICU) was chosen as it was the clinical site of two research studies in the literature review (Akkoc et al., 2021; Boora et al., 2021). ICU’s have been shown to be a significant clinical area for addressing HAI’s because patients are at an increased risk due to high prevalence of invasive devices and procedures, and co-morbidity (Chen et al., 2023).

Effectiveness

Maintenance will be conducted through the introduction of an electronic hand hygiene recording system (EHRRS) and direct observation from a dedicated member of staff over three months (Akkoc et al., 2021). Although most of the research argued that direct observation is the gold standard for HH and HAI reduction, their direct observation periods were conducted over several years, proving both timely and expensive (Boora et al., 2021; Han et al.,

Table 1: SWOT analysis

| Strengths                                                                                                                                                                        | Weaknesses                                                                                                 | Opportunities                                                                                                                                                                                                                  | Threats                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>The plan and intervention expand upon and connect strong evidence-base</li><li>Most resources are already in place in healthcare</li></ul> | <ul style="list-style-type: none"><li>Expense/upfront cost</li><li>Additional resources required</li></ul> | <ul style="list-style-type: none"><li>Including patient in shared decision-making</li><li>Involvement and cohesion of the multidisciplinary team</li><li>Opportunity to expand to other clinical areas if successful</li></ul> | <ul style="list-style-type: none"><li>Resources allocation</li><li>Adoption from all staff members</li><li>Successful maintenance/sustained effect</li></ul> |

2021; Ojanperä et al., 2020). In contrast, a comparison of direct observation as a single method against a direct observation and EHHRRS combination demonstrated a multi-method approach with significantly increased HH compliance over a shorter period (Akkoc et al., 2021). This is expected to reduce financial cost, something which the studies in favour of direct observation highlight as a significant weakness of EHHRRS. However, in a study of the cost benefit of HAI interventions, Guest et al. (2019) demonstrated the cost of EHHRRS could be negated by the financial saving of HAI treatment and extended inpatient stay. This adheres to government healthcare policy, where implementation planning requires demonstration of financial balance when distributing monetary resource (NHS England, 2019).

The duty of the dedicated observing staff member will be to observe for moments of HH using the “my 5 moments of HH” developed by the World Health Organisation (WHO, 2009). When observing HH, staff are suggested to give direct feedback to the staff member as well as document all successful and failed moments of HH (WHO, 2009). Using a design consistent with the literature, a HH compliance percentage will be calculated as the number of successful HH moments against unsuccessful or missed moments.

A clinical audit will be conducted after the observation period by a staff member to determine if HH compliance had improved and been maintained. The time in which to conduct a clinical audit is dependent on resources, size of the plan and whether the intervention has been adopted and sustained (Ray-Barruel et al., 2018). Although none of the literature gave reference to any sustained effect from their interventions, Haverstick et al. (2017) suggested that attitudes of staff and patient towards HH were not fully maintained three months after the intervention. Therefore, a clinical audit will be conducted after three months and if the intervention is found to be maintained, a re-audit will commence after six months, followed by a continuous twelve-month cycle if proven to be successfully sustained (Haverstick et al., 2017). To determine the effectiveness of the plan, success measurement and threshold must be decided. Research suggests increased HH directly influences the reduction of HAI's (Gould et al., 2017; Roshan et al., 2020). However, inconsistency was revealed, as each intervention measured HH compliance against varying types of HAI's, making it difficult to draw comparisons.

## Adoption

Measuring a reduction in HAI's would also require ethical approval (Smajdor et al., 2009) to ensure informed consent is gained within nursing guidelines (Nursing & Midwifery Council, 2018a) and legislation (United Kingdom: Human Rights Act, 1998). Even with ethical approval, Wu et al. (2019) suggest many clinical research publications are not transparent in their ethical approval or

consideration. Therefore, effectiveness of the proposed plan will be determined by a set percentage of HH compliance for staff using observation and the HH calculated to determine compliance. Post-intervention compliance percentages found in research vary significantly between 91.76% and 63.65% (Boora et al., 2021). This noteworthy difference was attributed to lower compliance in developing countries, where it was shown that HH compliance is overall significantly lower compared to developed countries (Boora et al., 2021). Abildgaard et al. (2016) and Randall et al. (2009) suggest the measurement of an intervention process should be derived from similar research, relevant evidence, the attitude of those adopting an intervention and leadership were significant in determining numerical measurement for success. With this evidence in mind, successful sustainability will be measured as a HH compliance of 80%. If HH compliance is less than 80% then another direct observation period will be commenced. If HH compliance is less than 60%, EHHRRS will be implemented in conjunction with direct observation.

## Addressing barriers

A planned design and a SWOT (strengths, weaknesses, opportunities, and threats) analysis (*See Table 1 entitled: SWOT Analysis*) aid in the detection of barriers (Puyt et al., 2023). Analysis into the validity of using a SWOT analysis raised concerns from van Wijngaarden et al. (2012), suggesting SWOT analysis had become more organic by involving stakeholders (persons affected by clinical decisions) and focussing more on strategy (van Wijngaarden et al., 2012). However, an organic SWOT analysis that includes stakeholders aligns with a person-centred approach, NMC guidelines and patient involvement in their care (Nursing & Midwifery Council, 2018a).

With regards to training staff, it has been shown that HH education is an essential part of a healthcare environment, this is reinforced through national (National Institute for Health and Care Excellence, 2017) and international (World Health Organization, 2009) evidence bases. The allocation of resources for increased HH has improved since the Covid 19 pandemic (Alzyood et al., 2020). However, resources such as alcohol-based hand sanitisers may sometimes be unavailable due to demand and increased HH (Moore et al., 2021). This was supported by an intervention from Haverstick et al. (2017) who required financial support for increased HH sanitisation products and so should be adopted in this plan. As discussed, the use of direct observation, and more significantly, EHHRRS can be a significant cost. The cost benefit must be outlined clearly to seek approval for the allocation of financial resource (NHS England, 2019). Akkoc et al. (2021) also suggest their HH intervention was met with resistance and not adopted by certain groups of staff (Akkoc et al., 2021). To address weaknesses, threats, and resistance, change management theory (Cleary et al., 2019) will be discussed with the implemen-

tation of a model.

## Implementation: Change management and leadership

Cameron and Green (2020), and Hayes (2022) change management models were assessed for their relevance and compatibility with the plan. Hussain et al. (2018) suggest effective and open communication to staff members in Kurt Lewin's unfreezing stage, can help to overcome resistance, allow for questions and suggestions to be addressed, gain support for the change (Hussain et al., 2018). However, this intervention affects multiple groups of stakeholders who should be considered in each stage. Looking specifically at national guidelines and strategy, NHSE & NHSi (2022), provide 9 C's to include all relevant stakeholder groups and people (such as patients). The 9 C's include commissioners, customers, collaborators, contributors, channels, commentators, consumers, champions, and competitors. Using this guide, communication with the consumer, in this case the patient, would be useful. A successful example was found in the research study of Haverstick et al. (2017), where patient education and involvement resulted in greater patient outcomes and provided valuable feedback to the effectiveness of the staff members in the intervention. This was confirmed by a systematic review of patient involvement in quality care, demonstrating that patient involvement contributes to shared decision-making and mutual learning (Bombard et al., 2018). Bombard et al. (2018) suggested that patients did not want their involvement and feedback to be tokenistic, therefore it is important

to create mutual learning of HH, with staff making sure patients feedback is listened to.

## Maintenance

A systematic review of nursing leadership (Ferreira et al., 2022) found that transformational leadership, defined as building relationships with people to inspire change (Giddens, 2018), was an effective form of promoting effective communication and motivating staff to reduce burnout. An important aspect of the change process is to guide people to a realisation that change is needed, and attitudes towards practice need to be adapted. Nurses are notoriously resistant to change, and Ellis and Abbott (2018c) suggest good leadership and emotional intelligence is required alongside supportive management. Ogbonnaya and Babalola (2021) identified the perceived managerial support correlated strongly with perceived organisational support, which in turn led to increased advocacy, engagement and better patient experience. Involvement and advocacy are significant to the success of this intervention and a leader of the intervention should actively communicate and address any barriers during change (Ellis & Abbott, 2018a).

Supporting staff and promoting a positive attitude to change once implemented (Ellis & Abbott, 2018b) is key to sustainability (Silver et al. 2016). Silver et al. (2016) suggest improvements in the quality of care can be sustained by ongoing revalidation and training, visual affirmations of results, and improvement huddles to gain feedback and support. By promoting positive attitudes and interpersonal connections between staff through en-

|                                                                                                                                                                                                                                                                        |                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <p><b>When conducting the self-assessment / completing the peer review you may wish to consider these areas:</b><br/>(These notes can be referred to and included in your portfolio to enhance your work)</p>                                                          |                                                                                                     |
| 1)                                                                                                                                                                                                                                                                     | How do you feel about the clarity of your/ the project idea?                                        |
| 2)                                                                                                                                                                                                                                                                     | Is the idea for the project supported by evidence?                                                  |
| 3)                                                                                                                                                                                                                                                                     | Can you clearly articulate your idea/ is the student able to clearly articulate their project idea? |
| 4)                                                                                                                                                                                                                                                                     | Is there a sound, structured plan for implementation?                                               |
| <p>Areas of strength:</p> <p>Areas for development:</p>                                                                                                                                                                                                                |                                                                                                     |
| <p><b>You may wish to briefly reflect on your feedback following peer review and think about these questions:</b><br/>(This can help guide your critical discussion on your experiences of peer review or you may wish to use this box for your patch discussions)</p> |                                                                                                     |
| 5)                                                                                                                                                                                                                                                                     | What was your experience of peer review?                                                            |
| 6)                                                                                                                                                                                                                                                                     | What have you learned?                                                                              |
| 7)                                                                                                                                                                                                                                                                     | Explore the feedback offered- areas of strength and areas for development.                          |
| 8)                                                                                                                                                                                                                                                                     | What are some of the changes you have made/ will make from doing the review?                        |

Figure 1: Peer assessment template

hanced communication, a leader of this intervention will seek to successfully create a resilient workforce that is adaptive to change (Wei et al., 2019). Linking evidence to the implementation planning and change management theory resulted in the creation of a plan (prior to implementation) to target the proposed intervention for HH. In the next section we discuss the proposed plan after the lead author was peer-reviewed and critical feedback received on the strengths, weaknesses, and opportunities for development.

## Peer review experience

Peer reviews (not in a publication sense) are an important aspect of nursing and relevant to the NMC's (2018c) education framework, stating in sections 3.16-3.18, that a nursing student should collaborate with professionals and peers, receive constructive feedback, and have opportunities to give feedback. The use of peer reviews helps to articulate negative feelings associated with criticism (Duers, 2017); however, the lead author welcomed any criticism as an opportunity to learn from (*see figure 1 entitled: Peer assessment template*).

To complete this peer review, a student from the lead author's group was chosen. One concern with using a friend for a peer review, is the possibility of bias (Tornwall, 2018). However, anonymous peer reviews may not result in honest feedback or positive outcomes, and verbal peer feedback is more likely to attain positive results (Tornwall, 2018). A review of peer-assisted learning (Williams & Reddy, 2016) suggested that overall, healthcare students benefitted from peer review approaches to learning, both as teachers and learners. The peer review process was an opportunity to critically reflect and amend the planned proposal.

## Lessons learned

Peer review feedback increased motivation to learn and improves self-esteem (Yoo & Chae, 2011). A recent study identified that group peer review was effective at providing positive feedback to aid learning and giving feedback was more satisfying than receiving it (Burgess et al., 2021). This was something the lead author had noticed in group settings, where group learning and feedback led to increased discussion and productivity (Wenger et al., 2002). However, students may struggle to provide constructive criticism of clinical development and professional behaviour (Burgess et al., 2021). A solution to this issue is the need to build rapport and create a safe environment before trust can be established, both psychologically and emotionally to increase receptiveness (Sherman, 2019). Sherman (2019) also highlighted giving feedback should be timely, specific, and not overwhelming to develop clarity.

## Exploring the feedback

An area of strength of the proposal was the robust evi-

dence base used to guide the intervention rationale and design (see Yates & Regan, 2025). A nurse wishing to implement a proposal plan needs to be familiar with the evidence relevant to clinical practice (Bianchi et al., 2018). Furthermore, evidence-based practice is sustained by strong leadership, an unobstructed vision, and ability to communicate effectively (Bianchi et al., 2018). An area for development would be to enhance leadership skills to reinforce the rationale for change and sustain implementation. The next strength identified was the time of the intervention and post-implementation measurements. The discussion of cost was a positive aspect of the proposal. Although the cost of resources such as EHHRRS was discussed in the literature review (Yates & Regan, 2025), referring to research on the cost of HAI's to healthcare and allocation of financial resources (Guest et al., 2019; 2020). The cost-effectiveness of the proposed plan was difficult to quantify; however, a review of EHHRRS reports of estimates of £150 per bed for simplified systems to a 15-bed ward system costing between £30,000 and £40,000 (Conway, 2016).

## Opportunity for development

An area of development identified in the peer review was the lack of a tools to measure HH performance. The proposed plan adhered to the WHO's (2009) "my 5 moments of HH" to measure and collect data, however a tool was not specified. This resulted in a further search and a WHO (2010b) observation form downloaded for use. This will be used to observe HH in clinical practice and collect data to inform the evaluative process. The peer review process highlighted the opportunities for professional development as well as outlining the importance of both giving and receiving feedback and its relation to growth in leadership. Finally, following the peer review, Gibb's (1988) reflective cycle was used to guide reflection on the three-year nursing degree course from 2021 to 2024 (Wain, 2017). Gibbs (1998) model includes a description of experience, feelings, evaluation, and analysis. This led to identifying key issues related to the proposed change (*see table 1 entitled: SWOT analysis*).

## Description

Reflection focused on the independent learning journey of the lead author from the beginning of the nursing degree to developing leadership skills. Starting on the nursing degree programme with no healthcare experience ensured the lead author could not have imagined being able to lead a team of nurses for a span of duty. The issue of leadership was of concern to the change management proposal and a key recommendation of the Mid Staffordshire Inquiry (2013), commonly referred to as the Francis report. Promoting and leading person-centred care should involve knowing patients' diagnosis, treatment, care plans and developing a therapeutic relationship to ensure each patient is treated as an individual and cared for with dignity and genuine concern. Care also means

being an advocate for patients' and their families and being-there for them (NMC, 2018a). More about this issue in the analysis section.

The arrival of the Covid 19 pandemic changed the experiences of nursing students significantly. The learning and teaching provision changed from a campus-based learning to distance learning with the aid of digital resources (Langegård et al., 2021). The result of being removed from a campus-based experience affected students group learning, reduced motivation, education, and sense of wellbeing (Langegård et al., 2021). The importance of social situated learning is the influence of the group on the individual and vice versa, by learning from each other, observing how to act, think, talk, test, challenge, share ideas and role modelling professional behaviours, called a community of practice (Wenger et al., 2002). Hence, when removed from campus and forging links and relationships within the group, the introduction of online learning led to increased stress, student dissatisfaction, a sense of alienation and disembodiment (Odurado & Estoque, 2021). High stress is associated with lower resilience, and equally lower stress correlates with higher resilience and nursing students had to adapt and manage their studies to promote resilience to a situation out of their control (Nie et al., 2021).

## Feelings

At first, the lead author remembered feeling stressed, inadequate, and had doubts about finishing the course. A study of nursing students outlined the importance of self-esteem and mental health, concluding that low self-esteem correlates highly with student dropout in the first year of education (Dancot et al., 2021). Negative feelings were exacerbated by the arrival of the Covid 19 pandemic and the impact it would have on clinical and academic experience. A cross-sectional study of the effects of the Covid 19 pandemic (De Los Santos et al., 2022) found that all students felt quite anxious and doubtful of their abilities, and first-year students were most at risk of discontinuing their course. This is not surprising due to the raised statistical significance of nurse and nursing assistant deaths (79.1 per 100,000, 47 deaths, ONS, 2021).

Several factors influenced a positive change in behaviour. Good academic performance gave the lead author the confidence to develop the knowledge and ability to safely provide care as required by the NMC (2018a). What also contributed to improved confidence was a sense of developing resilience (the ability to return to a good place after experiencing difficulties) to cope, and emotional intelligence (Dancot et al., 2018). Emotional intelligence is the ability to critically reflect, understand, manage emotions in others and yourself (Christianson, 2020), and is linked with nursing students academic and clinical progress (Sharon & Grinberg, 2018). Developing resilience in nursing students has equally been shown to

improve academic success, and preparation for a nursing career, dependent on the support available to student nurses (Keener et al., 2021).

## Evaluation

Doubts over an ability to complete the course were consistent with other student nurses experiences (Ulenaers et al., 2021), with self-doubt affecting first and final-year students alike (Bakker et al., 2019). What helped was the support received in the first few months from academic advisors and family members to reduce stress and promote a commitment to learn (Li & Hasson, 2020; Riley et al., 2019). Furthermore, nursing students who engage with academic support are less likely to discontinue and have improved academic results (Glew et al., 2019). Similarly, Hoek et al. (2019) suggested a correlation between resilience, academic success and emotional intelligence developed within the first year of study, led to increased and consistent academic progress. This blend of academic success, emotional intelligence and resilience is consistent with the NMC's (2018b) guidelines to be professionally accountable. However, supporting organisations (such as the NHS and universities) need to be aware of the notion of epistemic injustice, when a person's knowledge or credibility may be doubted due to negative stereotyping and prejudice from others in authoritative positions (Fisher, 2023). The adult learning experience is full of such moments, and student nurses need to develop a sense of balance; being open to new knowledge and skill development, whilst maintaining a sense of their own competence. Patients are also vulnerable to epistemic injustice, such as treatment/medication options, informed consent/ risk of coercion or being objectified as a number or an illness. Therefore, organisations need to learn to value and understand the lived experience of its staff and patients' by listening to them (Fisher, 2023). This issue relates to the next section.

## Analysis

Developing leadership skills informed by evidence refers to recommendation 195, supernumerary nurse leaders on duty should operate in a supervisory capacity, know the contents of patient's care plans, work alongside staff, develop staff clinical competences, monitor performance and give timely feedback. Recommendation 197 suggested leadership training at every level from student to director. However, implementing the 290 recommendations has been criticised due to their voluntary nature and organisations appraising the relevance of each recommendation (Martin et al, 2023b). This led to continued repetition of negative working cultures, behaviours creating toxic environments, lack of interventions based on valid and measurable surveillance methods, early warning, and risk-based assessments (Martin et al, 2023b). Therefore, many lessons have not been learnt from the Francis report (Regan & Shillitoe-Kehoe, 2019).

In relation to the proposed plan in this paper, sustainable improvement in the NHS should start from the spirit of the Francis report, to learn lessons and avoid repeating them (Martin et al., 2023b). The spirit of the inquiry was suggested to require listening to people and for them to feel empowered to speak up. Next, learning, collating, and acting on data to improve health care provision, and lastly, strong leadership (from students to directors) is suggested to be significant to ensure patients are always at the centre of healthcare and staff having a commitment to evidence based care (Martin et al., 2023b).

An interesting dynamic was being a mature male nursing student. Studies report an unfavourable societal view of male nurses and additional barriers faced by men wishing to pursue a career in nursing (Whitford et al., 2020). Reasons may be related to societal views, salaries, type of work (people and care orientated), changing perceptions of masculinity and a sense of not being trusted (epistemic injustice, Fisher, 2023). This experience was unlike female nurses who may help male patients with intimate care (Christensen & Knight, 2014). With just over 10% of the nursing workforce being men (NMC, 2017), there is much to be done to ensure equality, diversity, and inclusion. When reading the NHSE (2023) improvement plan there was no mention of the word “men” but an emphasis on the powerful use of language to change attitudes and behaviours, despite 23% of the 1.3 million workers being men. However, the spirit of the NHSE (2023) is aimed at addressing the perceived power dynamics of language, gender, and NHS employment, so with that in mind, promoting equality and inclusion in the workplace to empower nurses, is a contributing factor to sustainable service improvement.

## Conclusion

This paper presents a proposed plan to improve HH and reduce the prevalence of HAI's in United Kingdom ICU's. HAI's impact on the effectiveness of clinical treatments, and may lead to more harm, with the risk of complications (NICE, 2016). The importance of HH is a simple and cost-effective action that nurses can do to reduce HAI's yet there remains inconsistency in ICU's due to staff and patient's higher risk of invasive procedures and devices (Boora et al., 2021). Developing a well-structured proposal plan is necessary for successful implementation of an intervention. These challenges indicate there is a need to review the evidence to overcome resistance to change (Cheraghi et al., 2023). A review of the proposal was followed by a peer review allowing for reflection and rationalising the practicality of the proposal. Lessons learned from feedback and reflection using Gibbs model provided clarity on the lead author's development of emotional intelligence and resilience.

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