




An Roinn Sláinte  
Department of Health

# Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings in Ireland

2022

Final Report and Recommendations by the Taskforce  
on Staffing and Skill Mix for Nursing



Office of the Chief Nurse





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# Contents

Foreword by the Minister for Health	4
Foreword by the Chair of the Steering Group	5
Executive Summary	6
Summary of the Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings Recommendations:	8
Assumption 1 – Patient Care Needs Differ	8
Assumption 2 – Nurse Staffing Number, Profile and Mix are Key to Ensuring Safe, High-Quality Care to Patients	9
Assumption 3 – The Organisational Environment has an Impact on Staff to Deliver Safe and Effective Patient Care	10
Assumption 4 – Positive Patient and Staff Outcomes are Important Indicators of the Safety and Quality of Nursing Care	11
<b>Chapter 1: Introduction and Background</b>	<b>12</b>
1.1 Development of a Framework for Safe Staffing and Skill Mix in Ireland	12
1.2 Extending the Framework for Safe Nurse Staffing and Skill-Mix to Adult Emergency Care Settings	12
1.3 Rationale for Policy Direction	13
1.4 Context of the Framework Development in Emergency Care Settings	14
1.4.1 Emergency care settings in Ireland	14
1.4.2 Future Demand for Emergency Services in Ireland	14
1.4.3 Covid-19 in Ireland	15
1.5 Policy Objectives	15
1.6 Purpose of the Framework	15
1.6.1 Timelines	16
<b>Chapter 2: Approach to the Development of the Framework</b>	<b>17</b>
2.1 Introduction	17
2.2 Establishing the Taskforce	17
2.3 Literature Review	18
2.3.1 Approaches Considered to Determining Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings	18
2.3.2 Recommendations from the Literature Review and Pilot Testing of Model	19
2.4 Baseline ED Workforce Survey	19
2.4.1 Key Findings from Baseline Staffing Evaluation	20
2.4.2 Summary Conclusions from the Baseline Survey	21
2.5 Policy Impact Research	21
2.5.1 Approach to Policy Impact Research – Pilot Test	21
2.6 Key Findings	22
2.6.1 Patient Outcome Measures	22

2.6.2	Staff Outcome Measures	23
2.6.3	Organisational Outcome Measures	25
2.7	Conclusion	25

### Chapter 3: The Framework 27

3.1	Scope of the Framework	27
3.2	Assumptions	27
3.3	Assumption 1 – Patient Care Needs Differ	27
3.3.1	Translating the Recommendations into Practice	29
3.4	Assumption 2 – Nurse Staffing Number, Profile and Mix are Key to Ensuring Safe, High-Quality Care to Patients	30
3.4.1	Translating the Recommendations into Practice	31
3.5	Assumption 3 – The Organisational Environment Has an Impact on Nursing Staff to Deliver Safe and Effective Patient Care	32
3.5.1	Translating the Recommendations into Practice	34
3.6	Assumption 4 - Positive Patient and Staff Outcomes are Important Indicators of the Safety and Quality of Nursing Care	35
3.6.1	Translating the Recommendations into Practice	36

### Chapter 4: Calculating the Staffing Requirement 37

4.1	Emergency Departments	37
4.2	Calculating the NHpPP	37
4.3	Examples of the NHpPP Approach	38
4.3.1	Example of Calculation for Hospital with Greater than 40,000 Annual Presentations	38
4.4	Calculating Nurse Staffing for Triage	39
4.4.1	Example of Calculation for Hospital with Greater than 40,000 Annual Presentations	39
4.4.2	Example of Calculation for Hospital with Less than 40,000 Annual Presentations	40
4.5	IU Example	41
4.6	Unscheduled / Acute Floor Areas (e.g., AMAU / ASAU)	41
4.7	Conclusion	42

### Chapter 5: Framework Implementation – Making it Happen 43

5.1	The Position – Nursing Workforce Informed by Evidence	43
5.2	Key Benefits	43
5.3	Key Requirements for Successful Implementation	44

	Reference List	45
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	Appendix 1 Taskforce Phase 2 Membership	48
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## Foreword by the Minister for Health

I am delighted to publish the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings in Ireland*. The core objective of this programme is to improve patient outcomes by developing and strengthening systematic, comprehensive approaches to the determination of safe nurse staffing and skill mix across various care settings

This Framework takes into consideration the whole of the nursing workforce in emergency care settings, while maintaining a focus on patient, staff and organisational outcomes associated with establishing a safe nurse staffing and skill combination. Determining the right nursing resource is not an easy task but a move away from past approaches to an evidence-based systematic approach is vital.

The National Taskforce brought the necessary leadership, expertise and understanding of the operational complexities of providing care in emergency care settings. The Framework recommendations have been tested in three emergency departments and one injury unit. Testing of the Framework was underpinned by a programme of research conducted by Professor Drennan in University College Cork, which confirmed the approach works within these complex care environments.

Research undertaken both before and during the Covid-19 pandemic showed the positive impact on patients and staff working within emergency care settings. As health services change towards an integrated model of care the agility provided in this Framework will undoubtedly provide significant support to teams working in this area.

Given the positive patient outcomes from this research and from the *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland* (Department of Health, 2018), national

implementation continues to be a priority. A National Lead for Safe Nurse Staffing and Skill Mix was established to ensure national implementation is coordinated efficiently further strengthen our nursing staff resources and continues to result in positive patient outcomes.

I wish to thank all those involved in developing and testing this Framework during such an unprecedented time due to the pandemic. It is testament to the Taskforce; Local Implementation Groups and the staff in the four pilot sites. I would like to thank Professor Drennan and his team in University College Cork for the quality of the research supporting this work. I would also like to thank the research teams from the University of Southampton, University of Galway, and University of Technology Sydney. I would like to pay particular tribute to Ms Rachel Kenna, CNO, Karen Greene, Deputy CNO, Ray Healy, Helen Corrigan and Gráinne Sheeran, Nursing Project Officers, and Rachel Egan, Administrative Officer without whose commitment this Framework would not have been possible.

**Stephen Donnelly, TD**  
**Minister for Health**



## Foreword by the Chair of the Steering Group

The core objective of the National Taskforce on Staffing and Skill Mix for Nursing is to develop frameworks to support the determination of safe nurse staffing and skill mix in a range of major specialities. I am pleased to now present the next step in this programme of work being undertaken by the Chief Nursing Office, the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings in Ireland*.

The large-scale pressure placed on health systems, both in Ireland and internationally, continues to challenge us and test the resilience of our services. In Ireland, as in other developed countries, there is high patient demand for emergency services. This Framework will be fundamental to ensuring that there is a sufficient nursing workforce to meet the unscheduled care requirements for patients in Ireland when they need it.

The development and implementation of this systematic, evidence-based approach to determining the nursing workforce required in emergency care settings is based on patient need, ensuring that the focus remains on the provision of the highest quality of patient care and outcomes. A nursing workforce that is based on patient need, will be in a position to ensure that patients receive high quality and safe and effective care at each step on their journey.

Implementation of Phase 1 and 2 of the Safe Staffing Framework is a deliverable of the National Service Plan (2022). A powerful part of policy making is seeing that policy become functional, realising the intended outcomes, particularly where the outcomes have the potential to positively impact patients and the staff within these care settings.

I would like to thank the members of the Taskforce, with both national and international membership from a number of key stakeholders, consisting of experts in unscheduled care settings, health policy, research and health services management. Their leadership and oversight in the development of the Framework has been critical. I would like to sincerely thank all of the stakeholders involved in

the research and development of this Framework. I want to particularly thank the staff in the four pilot sites for their willingness to participate in this research and for their expertise which was so visible throughout the pilot.

The recommendations set out in the Framework represent a significant change in the way in which current nurse staffing resources are determined in emergency care settings. This, therefore, will require hospitals and hospital groups to commit to a structured plan, and lead on the implementation of this Framework. I am proud to say that the nursing profession are in a strong position to deliver a robust implementation plan across service priority areas.

I look forward to continued engagement with the National Lead for Safe Nurse Staffing and Skill Mix within the HSE throughout national implementation of the Framework, and ongoing oversight and assessment of the impact on patient care. I also look forward to ongoing work with our colleagues in the ONMSD and Chief Directors of Nursing and Midwifery at hospital group level, to ensure timely implementation of the Framework, as we continue to strive for service excellence and safe, efficient, high quality patient care across all care settings.

**Ms Rachel Kenna**  
**Chief Nursing Officer**  
**Chair of the Taskforce on Staffing and Skill Mix for Nursing**



## Executive Summary

In April 2014, the then Minister for Health Dr James Reilly TD, approved the establishment of a Taskforce on Staffing and Skill Mix for Nursing. The Taskforce began its work in September 2014 and has continued to be supported by every successive Minister for Health; Leo Varadkar, Simon Harris and Stephen Donnelly. The core objective of the Taskforce is to develop a framework to support the determination of safe nurse staffing and skill mix whereby nurse staffing refers to the nursing team including both the registered nurse (RN) and healthcare assistant roles (HCA) across various clinical settings.

Arising from efforts to introduce a systematic approach to the determination of safe and appropriate nurse staffing levels in the Irish healthcare system, where historical need and legacy issues were often key determinants in staffing decisions, the Department of Health published a policy document titled: *A Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland* (Department of Health, 2018). Based on the research undertaken by a research team from University College Cork, this policy outlined a number of recommendations which focused on the objective of ensuring that the staffing of inpatient medical and surgical wards would be safe and effective.

In a continuation of this evidence-based approach, the Department of Health extended the model to develop a framework for emergency care settings; this resulted in the publication of a draft document titled: *A Pilot to Implement the Framework for Safe Nurse Staffing and Skill Mix in Emergency Care Settings* (Department of Health, 2018). This document outlined a number of recommendations towards ensuring the safe staffing of emergency care settings. Central among these recommendations was the introduction of a systematic approach to the determination

of staffing levels, the adjustment of skill mix to ensure that care was delivered by 85% RN and 15% HCA, Clinical Nurse Manager (CNM 2) role was 100% supervisory.

Four pilot sites were identified to test the Framework with an adapted model for determining safe nurse staffing and skill mix for the emergency care settings, including three Emergency Departments (ED) and one Injury Unit (IU). This final report provides an overview of the approach to the development and testing of the *Framework for Safe Nurse Staffing and Skill Mix in Emergency Care Settings* and sets out the key information to guide services on how to determine safe nurse staffing and skill mix in emergency care settings.

The objectives of the Taskforce were to:

- Develop a staffing (RN and HCA) and skill mix ranges framework related to emergency care settings in acute adult hospitals based on best available international evidence,
- Set out clearly the assumptions upon which the staffing and skill mix ranges are determined,
- Make recommendations around implementation and monitoring of the framework including the necessary education, training, and guidance required, and
- present a written report to the Minister for Health.

On this basis this final report:

- Provides an overview of the approaches taken to develop the framework, including key findings and summary recommendations from evidence and engagement,
- Provides an overview of the approach to testing the Framework components, and
- Outlines the Framework components, inclusive of a step-by-step guide to calculate the staffing establishment in emergency care settings.





## Key Findings

Following adjustment of the nursing resource in the four pilot sites, the impact was measured by the research team on three outcome measures; patient outcomes, staffing outcomes and those related to the organisation.

During the pilot, the main impact for patients following introduction of the Framework were:

- An overall decrease in time to triage for patients from an average of 0.31 to 0.20 hours (35% decrease).
- The proportion of patients leaving without being seen decreased overall by 52.3%.
- The median time waiting by patients to being seen by a decision maker decreased from 1.74 hours to 1.43 hours (a 17% decrease).
- Time from triage to being seen by a decision maker decreased from 1.41 hours to 0.80 hours (43% decrease).
- The median ED care time decreased across all three pilot sites from 5.14 hours prior to the introduction of the Framework to 4.90 hours following the introduction of the Framework, an overall percentage decrease of 4.6%.

The pilot also resulted in positive outcomes for staff working in emergency care settings.

- Nurse to patient ratio decreased per shift.
- The proportion of ED Nursing staff reporting missing a meal break on their last shift decreased.
- Overall job satisfaction increased.
- ED nurses reported an increase in overall job satisfaction.
- The proportion of ED nursing staff that described nursing care provided as good or excellent increased to 66% from 52% at baseline.

A summary of the key recommendations is provided overleaf.

Implementation of this Framework is a priority and will be overseen by the National Lead for Safe Nurse Staffing and Skill Mix in the HSE. Importantly however, implementation must be considered in the context of the staffing requirements for patients receiving emergency care and those patients whose emergency care is complete and are awaiting admission to a ward should this issue exist.

## Summary of the Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings Recommendations:

Developed from the evidence and the policy impact research, the four key assumptions from the *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings*, describe the assumptions underpinning the core elements used to determine safe nurse staffing and skill mix in adult emergency care settings. These are outlined in Figure 1.



Figure 1 - Assumptions of the Safe Nurse Staffing and Skill Mix Framework

### Assumption 1 – Patient Care Needs Differ

Number	Recommendation
1	It is recommended that a systematic, triangulated evidence-based approach to determine safe nurse staffing and skill mix based on patient need be implemented nationally in emergency care settings.
2	It is recommended that application of the evidence-based model to determine the required nurse staffing complement be supported by data that is routinely collected in emergency care settings. This data includes the number of patient presentations by triage category as well as patient outcome indicators.
3	It is recommended that the number of RNs allocated to triage in ED should be determined by the number of patient presentations.  EDs with annual presentations greater than 40,000 should have a minimum of two RNs allocated to triage per shift, 24/7.  EDs with annual presentations less than 40,000 patients should have a minimum of one RN allocated to triage per shift, 24/7. The assessment of staffing for triage must always take the professional judgement of the senior nursing management team into consideration.
4	The recommended minimum frequency to re-assess nurse staffing requirements in EDs is at six monthly intervals per annum using routinely collected patient data to identify seasonal variation. More frequent measurements may be required if, for example, there is a change / redesign of the service.

## Assumption 2 – Nurse Staffing Number, Profile and Mix are Key to Ensuring Safe, High-Quality Care to Patients

Number	Recommendation
5	It is recommended, that the RN: HCA skill mix ratio for EDs is 85:15 once a safe nurse staffing level exists.
6	It is recommended that the assessment of staffing requirements must always take the professional judgement of the senior nursing management team into consideration. Professional judgment should also take into account the physical environment of the department and associated services.
7	It is recommended that organisations support leadership and professional development of all grades of CNMs in unscheduled emergency care settings (CNM 1, CNM 2 and CNM 3).
8	It is recommended that staff should have access to the expertise of a Clinical Skills Facilitator in unscheduled emergency care settings as it is recognised that these roles are essential for the maintenance of competencies of nurses caring for emergency care patients and will significantly enhance the department's ability to oversee induction, training and ongoing professional development requirements of staff.
9	It is recommended that RNs in unscheduled emergency care settings should be supported to achieve the capabilities and competencies as outlined in the enhanced nurse contract.
10	It is recommended that staff commencing in emergency care settings, including graduates, should be provided with a structured induction programme and the opportunity to undertake a relevant Level 8 foundation programme in order to develop the future emergency nursing workforce.
11	It is recommended that RNs in unscheduled emergency care settings should have access to relevant continuing professional development, higher/postgraduate diploma and master's level education to facilitate the development of the workforce and succession planning for future clinical, leadership, management, specialist and advanced practice roles.
12	As recommended in the <i>Review of the Role and Function of the Healthcare Assistant</i> (HSE, 2018) <sup>1</sup> , all HCAs working in emergency care settings will have QQI Level 5 as a minimum qualification or be provided with a supportive pathway to acquire this qualification.
13	It is recommended that all emergency care settings have a minimum of one HCA 24/7, and that this must be considered when applying the recommended skill mix.

<sup>1</sup> See <https://www.hse.ie/eng/staff/resources/hrstrategiesreports/health-care-assistant-review-final-report-2018.pdf>

## Assumption 3 – The Organisational Environment has an Impact on Staff to Deliver Safe and Effective Patient Care

Number	Recommendations
14	<p>It is recommended that, as outlined in the Workplace Relations Commission (WRC) agreement of 2016<sup>2</sup>, where the issue exists, patients whose emergency care is complete and remain in the ED while awaiting admission to a ward are staffed separately from patients receiving emergency care.</p> <p>The staffing model for this cohort of patients should be based on the WRC Agreement and the <i>Framework for Safe Nurse Staffing and Skill-Mix in General and Specialist Medical and Surgical Care Settings in Adult Hospitals in Ireland</i> (Department of Health 2018).</p>
15	<p>It is recommended that nurse staffing rosters in the ED should clearly identify RN and HCA staff allocated to provide emergency care, and those staff allocated to provide care to patients whose emergency care is complete and are awaiting admission to a ward should this issue exist.</p>
16	<p>It is recommended that recruitment processes be streamlined to deliver timely recruitment to avoid gaps in staff replacement in emergency care settings.</p>
17	<p>It is recommended that 100% of the CNM 2 role is in a supervisory capacity when they are in place as a shift leader in an ED. This acknowledges the need to ensure that senior leadership is in place 24/7.</p>
18	<p>It is recommended that each hospital where the <i>Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings</i> is implemented, will put in place a Local Implementation Group (LIG) that comprises collaborative representation from nursing, finance, human resources, IT, quality and safety and representation from the office of the National Lead for Safe Nurse Staffing and Skill Mix in the HSE.</p>
19	<p>It is recommended that the LIG be chaired by the Director of Nursing and will consult with the Executive Management Team at hospital level and Chief Director of Nursing at Hospital Group level.</p>
20	<p>It is recommended that, where Safe Nurse Staffing Coordinators are established, they include emergency care settings to support existing governance and oversight systems in line with safe nurse staffing policy.</p>
21	<p>It is recommended that the Director of Nursing, as Chair of the LIG, based on the recommended evidence-based approach, endorses the safe nurse staffing and skill mix requirements to the Hospital's Executive Management Team. These recommendations should be verified by the LIG in coordination with the National Lead for Safe Nurse Staffing and Skill Mix.</p>

<sup>2</sup> <https://www.hse.ie/eng/staff/resources/hr-circulars/hrcircular0072016.html>

## Assumption 4 - Positive Patient and Staff Outcomes are Important Indicators of the Safety and Quality of Nursing Care

Number	Recommendations
22	It is recommended that on-going research in the emergency care settings is continued. This will facilitate the future support of a longitudinal evidence-based approach to policy on safe nurse staffing and skill-mix in response to changes in population health.
23	It is recommended that emergency care setting and organisation wide mechanisms are put in place to measure and monitor, at a minimum, routinely collected outcomes related to nurse staffing in EDs including, but not limited to, patients leaving without being seen, time to triage, time to be seen, ED care time and patient and staff experiences. Consideration should be given to incorporating these outcomes in IT systems at ED level, should these systems become available.
24	It is recommended that LIGs collate relevant patient, staff and organisational outcome data to provide longitudinal evidence to support Directors of Nursing and Chief Directors of Nursing to support the governance and monitor the impact of the <i>Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings</i> .



# Chapter 1:

## Introduction and Background

**This chapter presents the background, context and objectives of the Taskforce on Staffing and Skill Mix for Nursing. This includes the processes that resulted in the development of the Framework as well as the purpose of the Framework.**

### 1.1 Development of a Framework for Safe Staffing and Skill Mix in Ireland

In April 2014, the then Minister for Health Dr James Reilly TD, approved the establishment of a Taskforce on Staffing and Skill Mix for Nursing. The Taskforce began its work in September 2014 and has continued to be supported by every successive Health Minister; Leo Varadkar TD, Simon Harris TD and Stephen Donnelly TD. The core objective of the Taskforce is to develop frameworks to support the determination of safe nurse staffing and skill mix, whereby nurse staffing refers to the nursing team including both RN and HCA roles in a range of major specialities.

The determination of safe and appropriate nurse staffing levels and skill mix in the Irish healthcare system prior to the work of the Taskforce has traditionally been based on historical need and professional judgement rather than being informed by a systematic structured approach. To address this, the Department of Health published a policy document titled: *A Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland (Phase 1)* (Department of Health 2018). This report outlined a number of recommendations pertaining to staffing levels in medical, surgical and specialist settings in acute hospitals to ensure safe and effective delivery of care. Following this publication, implementation of the Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings (Phase 1) by the HSE commenced in a number of Model 4 hospitals and has continued on a phased basis across the health system.

The formation and work of the Taskforce was based on a number of international reports, research studies and public enquiries that clearly demonstrated the relationship

between safe nurse staffing levels and patient outcomes (Ball and Catton 2011; The Mid Staffordshire NHS Foundation Trust Inquiry chaired by Robert Francis QC 2010; Keogh Review 2013; Cavendish Review 2013; Berwick Report; Aiken *et al* 2014, Kane *et al* 2007, Griffiths *et al* 2014). The advancement of frameworks for safe nurse staffing in Ireland, are highlighted in a number of policy and industrial relations agreements. For example, the *National Standards for Safer Better Healthcare* (HIQA 2012a) includes Standard 6 – Workforce, which outlines the necessity to determine workforce requirements to provide sustainable high quality safe care and support. Furthermore, a Labour Court Agreement from 2019 (LCR 21900) relating to nurse recruitment and retention noted the commitment to progress implementation of the Framework for Safe Nurse Staffing as a requirement to achieve nursing workforce stability and enhance patient outcomes.

### 1.2 Extending the Framework for Safe Nurse Staffing and Skill Mix to Adult Emergency Care Settings

Following the development and publication of *The Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland (Phase 1)* (Department of Health 2018), the Department of Health extended the work of the Taskforce and developed a document titled: *A Pilot to Implement the Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings (Phase 2)* (Department of Health, 2018), henceforth referred to as the Framework. This Framework was developed by members of the Taskforce on Staffing and Skill Mix for Nursing in Emergency Care Settings (see Appendix I for membership) and was implemented and tested in three EDs

and one IU. The Framework outlined the core assumptions that informed the testing and the development of the Framework in this document. These included:

- 1) The identification and testing of a systematic approach to determine staffing levels in emergency care settings,
- 2) The delivery of care by 85% RN and 15% HCA grades, and
- 3) That the CNM2 role be 100% supervisory per shift.

In addition, the Framework also recommended the identification and utilisation of data collected in emergency care settings for decision making on staffing and skill-mix.

Following the establishment of a Taskforce on Safe Nurse Staffing and Skill Mix for Adult Emergency Care Settings, the scope and remit for the development of the Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings (Phase 2) was determined. The decision of the Taskforce was that Phase 2 would include adult EDs and IUs only for the following reasons:

- It is a clearly defined physical care area with a deliberate policy brief.
- The availability of international evidence on outcomes on staff, patients, and the organisation affecting the provision of care.
- Despite the development of national models of care for acute floor settings by the national clinical care programmes, many units were not operating in line with the model of care for a variety of reasons at the time this report was being developed.

The Framework presented in this document is built on research and the work of the Taskforce that informed its development. Although not within the scope of the research underpinning the Framework, guidance relating to other unscheduled care / acute floor settings, such as, Acute Medical Assessment Units (AMAU) and Acute Surgical Assessment Units (ASAU) are outlined in sections 4.6. This guidance is based on the research outlined in this document underpinning the development of the Framework for emergency care settings as well as *The Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland (Phase*

1) (Department of Health 2018) and *Setting the Direction: A Development Framework Supporting Nursing Practice Skills and Competencies in Acute Medical Assessment Units (AMAU) and Medical Assessment Units (MAUs)* (HSE 2016).

## 1.3 Rationale for Policy Direction

The nursing and midwifery workforce is critical to the delivery of safe and effective patient care. A safe nurse staffing approach stipulates that there must be sufficient nurses available to meet patient needs, that nurses have the required skills, and are organised to enable them to deliver the highest level of care possible.

Research over the last 20 years has demonstrated the impact that nurse staffing can have on patient outcomes, with several studies reporting that lower levels of nurse staffing are associated with adverse patient, staff and organisational outcomes (Aiken *et al.* 2002; Kane *et al.*, 2007; Needleman 2011; Griffiths *et al.* 2014). Systematic reviews have also examined the relationship between skill mix<sup>3</sup> and patient outcomes identifying that in clinical settings with a higher proportion of care delivered by RNs there are better patient outcomes (Kane *et al.* 2007; Griffiths *et al.* 2015, Simon *et al.* 2015). Evidence reviews undertaken for the National Institute of Health and Care Excellence in the UK (NICE) (Griffiths *et al.* 2015; Simon *et al.* 2015) identified that higher rates of staffing are associated with lower rates of mortality, failure to rescue, falls, length of stay and readmission rates. In the reviews for NICE, it was also identified that lower levels of staffing are associated with higher rates of drug administration errors and episodes of care left undone or missed nursing care.

<sup>3</sup> Skill-mix is defined as the proportion of care provided by registered nurses compared to other grades providing nursing care.

## 1.4 Context of the Framework Development in Emergency Care Settings

### 1.4.1 Emergency Care Settings in Ireland

Nationally, there are 29 EDs and 11 IUs across 6 Hospital Groups delivering unscheduled adult emergency care. EDs provide care 24/7 and are located within an acute hospital setting. IUs provide treatment to patients with conditions that are unlikely to need admission to hospital and can be situated within a hospital or within a community setting.

In Ireland, as in other developed countries, there is high patient demand for these emergency services. Prior to the Covid-19 pandemic, there were 1,506,343 ED presentations from January 2019 to December 2019, an increase of 2.6% from the previous year (HSE, 2019). People in the 65 and older age group represent an increasing proportion of ED discharges each year, rising from 36.5% of discharges in 2012 to 41.3% in 2018 (Department of Health, 2019). While it was identified that prior to the Covid-19 pandemic there was a year-on-year increase in ED attendances, the advent of the Covid-19 pandemic in 2020 significantly impacted on the number, type and pattern of ED presentations. As a result of the pandemic, ED attendances fell to 1,278, 283 in 2020, a 15.14% decrease on 2019 and below the projected activity of 1,547,713 attendances (HSE 2020). This decrease in ED attendances was also evident in certain time periods in 2021, this was particularly the case during periods of lockdown with ED activity decreasing between 10% and 25% (HSE 2021). However, as the country exited Covid-19 restrictions, ED activity returned, and in some case exceeded pre-pandemic activity.

EDs in Ireland, as in other countries, have a number of challenges including increasing attendances, crowding, long waiting times and a high proportion of patients remaining in the ED for admission. A large number of patients on trolleys<sup>4</sup> awaiting admission is a particular issue in EDs in Ireland and poses challenges in identifying nurse staffing levels for both patients requiring emergency care and for those remaining in the ED whose emergency care is complete but are awaiting admission.

There have been a number of key reports published in Ireland that have made recommendations related to the nursing workforce in emergency care settings. The *Emergency Department Nursing Workforce Planning Framework* (HSE, ONMSD 2016) outlined key indicators that need to be taken into consideration when determining nurse workforce planning in the ED, including, demand for care, operational characteristics of the emergency setting, workforce capacity and capability and nursing outcomes. In addition, the document, *Role Profiles for Nursing Staff in Emergency Care settings in Ireland* (HSE/ONMSD 2018) outlines the roles of each nursing grade including Staff Nurse, Shift Leader, Clinical Facilitator, General Practice Liaison Nurse and Nurse Managers and provides a comprehensive overview of the roles in relation to competencies required in ED settings.

In relation to IUs, the *Guidance Document on Staffing for Injury Units* (HSE/ONMSD 2019) outlines a number of considerations that need to be taken into account when determining staffing levels for these settings.

The reports outlined above were, in association with the work of the Taskforce and a review of the literature and the policy-impact research, instrumental in informing the recommendations outlined in this Framework.

### 1.4.2 Future Demand for Emergency Services in Ireland

It is projected that activity in EDs will increase by between 16% and 26% up to 2030 (Wren *et al.* 2017). This increased demand can present a number of challenges for emergency services including the issue of crowding, infrastructure, and ensuring that there is a well-resourced workforce to provide urgent and emergency care. This projected growth in demand over the next decade requires the development and implementation of systematic, evidence-based approaches to determine the nursing workforce required in emergency care settings that is based on patient need. A nursing workforce that is based on patient need will be in a position to ensure that patients will receive high quality and safe and effective care on each step of their process through emergency care settings.

<sup>4</sup>Trolleygar is the HSE system that monitors daily the number of patients on trolleys in ED awaiting admission to an in-patient hospital bed (see <http://137.191.241.85/ed/>).



### 1.4.3 Covid-19 in Ireland

The outbreak of SARS-COV-2 in late 2019 led to a worldwide pandemic and an unprecedented public health crisis. This resulted in severe pressure on the provision of health services, including emergency care. The outbreak coincided with the pilot testing of the Framework within the emergency care settings as the first confirmed case of Covid-19 in the Republic of Ireland was announced on 29 February 2020 (Government of Ireland, 2020).

In response to the increasing number of cases and in line with international guidelines, the Government of Ireland introduced a series of containment measures at the onset of the pandemic, culminating in the introduction of strict 'stay-at-home' lockdown measures on midnight of 27 March 2020 (Government of Ireland, 2020). Such measures were implemented to reduce the pressure on the healthcare system, with the capacity of intensive care units a focus of attention. The novel and evolving nature of the situation compelled health services to engage in a radical and rapid transformation of how care was delivered. This was evident in emergency care settings where staff introduced modified patient flow pathways, with divergent streams for potential or suspected cases of Covid-19 infection where possible (Health Service Executive, 2021). In some cases, separate infrastructure and staffing were put in place for Covid-19 and non-Covid-19 pathways, through consideration of guidelines in relation to local circumstances and risk assessments, with the protection of patients and staff central to the recommendations. In addition, a number of staff in IUs (including the IU in the pilot testing) were redeployed to care for patients admitted with Covid-19 in acute in-patient settings. The pandemic, despite the numerous challenges it presented, provided an opportunity to further test the model outlined in this policy for its flexibility and adaptability.

In addition to the challenges afforded by the pandemic, on 14 May 2021, the HSE was subjected to a cyber-attack; this severely affected data retrieval from the pilot sites. It is acknowledged that both the Covid-19 pandemic and the cyber-attack had not only a profound effect on the work of RN and HCA staff but also on the wider health system including data systems required for data collection and associated decision making.

## 1.5 Policy Objectives

Phase 2 of the Taskforce focused on the development of a Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings.

The objectives of the Taskforce were to:

- Develop a staffing (RN and HCA) and skill mix ranges Framework related to emergency care settings based on best available international evidence.
- Set out clearly the assumptions upon which the staffing and skill mix ranges are determined.
- Make recommendations around implementation and monitoring of the Framework including the necessary education, training, and guidance required.
- Present a written report to the Minister for Health.

## 1.6 Purpose of the Framework

The previous *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland (Phase 1)* (Department of Health 2018) was the first of its kind nationally to provide the basis upon which to recommend the implementation of a national systematic approach to determine levels of nurse staffing and skill mix in these settings. The Framework for Safe Nurse Staffing in Adult Emergency Care Settings (as outlined in this document) is the next step in a programme of work being undertaken by the Chief Nursing Officer's Office to develop, strengthen and advance systematic and comprehensive approaches to the determination of safe nurse staffing and skill mix in a number of care settings that will be used to optimise positive patient outcomes arising from investment in the nurse staffing resource.

One of the primary purposes of the Framework is to support the positive impact of safe nurse staffing on patient outcomes through the recommended use of systematic approaches to determine nurse staffing and skill mix requirements based on patient need. The Framework is underpinned by key assumptions outlining the necessary elements for inclusion in safe nurse staffing and skill mix decisions, while recognising that the nursing team is part of, and integral to, the wider healthcare team.

The Framework also sets out the essential organisational responsibilities to ensure nurse staffing workforce governance to oversee the implementation and monitoring of nurse staffing and skill mix decisions and their impact on patient outcomes. Furthermore, the Framework outlines the wider consideration of external influencing factors potentially impacting on the nursing workforce at organisational level. Collectively integrating these elements, this Framework sets out the essential principles to ensure consistent informed decision-making using a sound rational base. Critical to the success of the Framework is the assessment of the impact on patient care and central to any approach to determine optimum nurse staffing requirements is the necessity to measure their effectiveness. Appropriate

monitoring and governance at organisational and national level are essential. To support this, a National Lead for Safe Nurse Staffing and Skill Mix is established within the HSE and is further developing a unit to support national implementation and oversight of the Frameworks.

### 1.6.1 Timelines

Figure 2 below outlines the timelines of the development and testing of the Framework including baseline data collection, the implementation of staffing adjustments and the provision of the associated policy research reports.

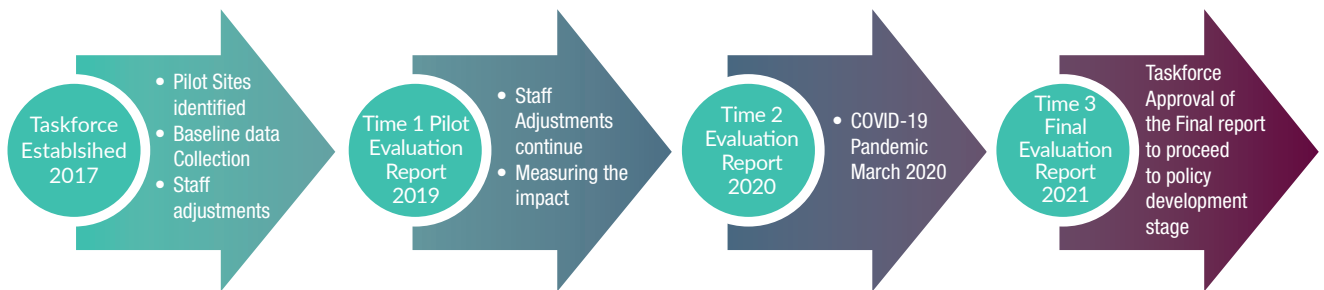


Figure 2 Evaluation Timelines in the Development of the Framework



# Chapter 2:

## Approach to the Development of the Framework

**This chapter provides an overview of the approaches taken to develop and test the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings*. It includes key findings from evidence reviews and stakeholder engagement, along with the approach, results and recommendations from the pilot testing of the Framework undertaken between 2018 and 2021.**

### 2.1 Introduction

Consistent with the approach used in Phase 1<sup>5</sup>, a Taskforce Steering Group was established and chaired by the Chief Nursing Officer with both national and international membership from a number of key stakeholders. The membership of the Taskforce Steering Group consisted of experts in emergency care settings, health policy, research and health services management to oversee the development of the Framework (Appendix I).

The approach taken to the development of the Framework, as in Phase 1, can be described under two distinct stages: a) developmental stage, whereby the Taskforce published an Interim Report and Recommendations on a Safe Nurse Staffing and Skill Mix Framework for Adult Emergency Care Settings; and b) a pilot testing stage, whereby the Interim Framework was pilot tested across three EDs and one IU nationally. The outcomes from the research subsequently informed the final Framework and recommendations contained in this policy document.

To inform the development of the Framework and recommendations, the Taskforce Steering Group engaged in a variety of activities that included consultation and engagement with key stakeholders, presentations from national and international experts, an evidence review and a national baseline staffing evaluation. Based on this initial work, the Taskforce published an Interim Report and Recommendations in 2018 which recommended proceeding

to a pilot to test the capability of the Framework to deliver on its intended outcomes.

The following sections provide a summary of the steps undertaken in each stage:

- i. Establishing the Taskforce.
- ii. Literature review including national and international consultation.
- iii. Baseline nurse staffing evaluation.
- iv. Policy impact research, including a summary of the pilot test approach, and findings and recommendations.

### 2.2 Establishing the Taskforce

A collaborative Taskforce was formed to develop a Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings. The process involved reviewing the literature on nurse staffing in emergency care settings; this included a review of both patient, staff and organisational outcomes associated with nurse staffing and models / approaches to determining staffing levels in emergency care settings. The Taskforce also provided oversight on the testing and implementation of approaches to determine nurse staffing in the pilot sites as well as receiving feedback and advising on the process of the research testing the efficacy of the Framework.

<sup>5</sup> Framework for Safe Nurse Staffing and Skill-Mix in Adult Medical, Surgical and Specialist Settings in Ireland (Department of Health 2018).

## 2.3 Literature Review

A literature review was undertaken by the research team to identify models used to determine nurse staffing levels in emergency care settings and outcomes associated with nurse staffing and skill mix. This built on a previous evidence review, which was undertaken by members of the research team to identify outcomes related to nurse staffing in EDs (Recio-Saucedo *et al.* 2015). Unlike medical and surgical settings, there was less evidence available on the association between nurse staffing and patient outcomes in emergency care settings. Although there were limitations in the evidence reviewed, it appeared to indicate that levels of nurse staffing in the ED were associated with time waiting to be seen, patients leaving without being seen, ED care time and patient satisfaction. No studies were identified that measured the association between nurse staffing and economic outcomes. Overall, the evidence that was identified indicated that lower staffing levels of nurse staffing were associated with worse patient outcomes.

### 2.3.1 Approaches Considered to Determining Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings

A number of approaches were trialed as part of the research process in testing and identifying an instrument to determine staffing levels in emergency care settings. These included:

- The Baseline Emergency Staffing Tool (BEST) (incorporating the Jones Dependency Tool) (Jones 1999; RCN 2014).
- The Nursing Hours per Patient Presentation (NHpPP) / Nursing Hours per Patient Day (NHpPD) approach in combination with patients’ classification on the Manchester Triage System (Department of Health Western Australia 2002; Department of Health Tasmania 2011).
- Nurse to patient ratios in EDs, including unpublished National Institute of Health and Care Excellence (NICE) recommendations on safe nurse to patient ratios in emergency care settings (NICE 2016).

A number of consistent themes were evident in the literature that are associated with nurse staffing in EDs and were therefore used to determine the impact of the Framework.

Patients Leaving Without Being Seen:	Emergency Department Care Time:	Length of Stay:	Patient Experience:	Waiting to be Seen:
<p>There is evidence that lower levels of nurse staffing in emergency departments is associated with a higher proportion of patients leaving without being seen (Brown <i>et al.</i> 2021; Hoxhaj <i>et al.</i> 2004; Greci <i>et al.</i> 2011; Weichenthal and Hendey 2011; Ramsey <i>et al.</i> 2018; Anderson <i>et al.</i> 2016) Anderson <i>et al.</i> 2016</p>	<p>ED care time is defined as the time from registration to the time a decision is made to admit or discharge a patient. An association between lower levels of nurse staffing and increased emergency department care time was identified in the studies reviewed (Chan <i>et al.</i> 2010, Ramsey <i>et al.</i> 2018)</p>	<p>This is defined as the overall length of time patients remain in an ED. It was identified that patient length of stay decreased as staffing levels increase (Rathlev <i>et al.</i> 2016); however other factors can also impact on length of stay including hospital occupancy, number of patients admitted both to general and intensive care beds (Rathlev <i>et al.</i> 2016; Ramsey <i>et al.</i> 2018; Henneman <i>et al.</i> 2015)</p>	<p>Studies identified an association between care provided by a higher proportion of RNs (skill-mix) and staffing levels and an enhanced patient experience (Daniel 2012; Nelson <i>et al.</i> 2018)</p>	<p>An increase in nurse staffing was associated with a reduction in time to diagnostic evaluation and patients waiting to be seen by a key decision maker (Harris and Sharma 2010; Shindul-Rothschild <i>et al.</i> 2017)</p>

Figure 3 Patient Outcomes Associated with Adult Emergency Departments

- Ratios used in California in the US and New South Wales in Australia.
- The Emergency Department Nursing Workforce Planning Framework (HSE/ONMSD2016).

Each of these models were trialled both in practice and using a desktop review process in the early phase of the research to determine their usability and validity in the three pilot EDs (see Drennan *et al.* 2019 for an overview of the outcomes from the models tested).

### 2.3.2 Recommendations from the Literature Review and Pilot Testing of Model

Based on the review of the literature, variables associated with nurse staffing at patient, staff and organisational levels were identified. Patient outcomes included time to triage, ED care time, time to be seen and leaving without being seen. Staff outcomes included burnout, job satisfaction, intention to leave and care left undone events. Organisational outcomes included, quality of care provided and the extent to which staff would recommend their unit to family, friends and colleagues.

Of the models reviewed and the outcomes associated with testing them within the pilot settings, the NHpPP was identified as the most applicable model. The rationale for using this model was based on the unique requirements of patient presentations and length of patient stay in EDs in

Ireland as well as the availability of routinely collected data including number of patient presentations, patients' triage scores, proportion of patients leaving without being seen and timings related to each step on the patient journey through the ED.

## 2.4 Baseline ED Workforce Survey

The research team, in collaboration with the Chief Nursing Officer's Office, developed four separate surveys to collect data on the workforce at hospital level and acute floor level; this included: 26 adult EDs<sup>6</sup> and 9 IUs<sup>7</sup>.

Of the EDs surveyed, 18 (69%) were identified as mixed; that is, they provided emergency care for both adults and children, with the remaining providing adult only emergency care.<sup>8</sup> Patient presentations to the EDs surveyed, ranged from approximately 20,000 per annum to 65,000 per annum. The mean number of cubicles was 19 and these ranged from 8 to 38. All EDs were surveyed used the Manchester Triage System to triage adult patients on arrival.

Of the IUs surveyed, the vast majority operated between 08.00 hours to 20.00 hours<sup>9</sup>. IUs had an average of 4.1 cubicles ranging from 3 to 8. The average number of presentations to IUs at the time of the survey was 8,263 ranging from 4,450 to 16,133.

<sup>6</sup> The EDs included in the survey were adult only or mixed adult and children's offering 24-hour, seven day a week care as part of a Model 4 or Model 3 hospital.

<sup>7</sup> There are 11 IUs in Ireland with nine responding to the survey.

<sup>8</sup> EDs that are part of a children's hospital were excluded from the Framework development.

<sup>9</sup> IU opening hours ranged from 08:00 to 18:00; however, operating hours ranged from 08:00 to 20:00.



### 2.4.1 Key Findings from Baseline Staffing Evaluation

Indicator	Emergency Department	Injury Unit
Nurse to Patient Ratios	There was a variation in the number of RNs employed per thousand patient presentations to ED. The average was 1.0 RN per thousand presentations, and this ranged from a low of 0.7 per thousand presentations to a high of 1.5 per thousand presentations.	Overall, there was variation in the number of RNs employed per thousand patient presentations to IU. The average was 2.2 RNs per thousand presentations, and this ranged from a low of 1.0 per thousand presentations to a high of 3.1 per thousand presentations.
RN to HCA Skill Mix	On average, the skill mix in EDs surveyed was 85% RN and 15% HCA. This was relatively consistent across all EDs ranging from 77% RN and 23% HCA to 95% RN and 5% HCA.	On average there were 3.74 RN WTEs employed in the nine IUs surveyed, ranging from 1.0 to 5.6. Three IUs had a HCA in post ranging from 0.5 to 2 WTEs.
Clinical Nurse Manager Supervisor time	On average, CNM 2s were allocated 90% supervisory time; that is, when acting as shift leader, they did not take a patient caseload in the ED. This ranged across the hospitals surveyed, from 75% supervisory time to 100% supervisory time.	Eight of the nine IUs had a CNM 2 in post; WTEs ranged from 0.25 to 1.0 with an average of 0.83 WTE. These posts were not exclusively supervisory.
Clinical Skills Facilitator	Of the 26 EDs surveyed, 54% had an ED Clinical Skills Facilitator in post.	No Clinical Skills Facilitator post was identified that was dedicated to the IU.
RN Experience Level	Overall, 54.5% of RNs working in EDs in Ireland were classified as senior staff <sup>10</sup> with 45.5% classified as junior staff. However, there was wide variability with proportion of senior staff employed in EDs ranging from a low of 19% to a high of 89%. Approximately 42% of EDs surveyed had less than 50% of senior staff in post.	The majority of nursing staff working in IUs had three years or more clinical experience in that setting.
RN Education Level	40% of RNs held a specialist qualification in emergency nursing. This ranged from a low of 24% to a high of 66%.	18% of RNs employed in IUs held a specialist qualification in emergency nursing. This ranged from a low of 0% to a high of 50%.
Working Patterns	The vast majority of RNs and HCAs in EDs were rostered to work 12-hour shifts.	The vast majority of RNs worked shifts according to the operating hours of the IU (08:00 to 20:00). HCAs' working hours ranged from 7.5 hours to 12.0 hours.
Advanced Nurse Practitioner to Patient Ratios	Overall, there was variability in the number of Advanced Nurse Practitioners (ANPs) employed in EDs. On average, there were 2.6 WTE ANPs per ED; this ranged from 0 to 6.69 WTEs. On average, there was 1 ANP for every 43.5 patient presentations per day <sup>11</sup> .	On average there were 1.75 WTE ANPs in post per IU, ranging from 1.0 to 4.3 WTE. Three IUs indicated that they did not have an ANP in post at the time of the survey. Of those that did have ANPs in post, there was variation in the number of ANPs employed per thousand patient presentations to IU. The average was 6.0 ANPs per thousand presentations; this ranged from a low of 2.3 per thousand presentations to a high of 10.6 per thousand presentations.

<sup>10</sup> Seniority was defined as those with at least 3-years' experience and deemed competent by the CNM.

<sup>11</sup> This is the ratio of ANPs to total presentations and does not indicate the number of patients seen by an ANP in ED.

## 2.4.2 Summary Conclusions from the Baseline Survey

In relation to EDs, it was identified that there was variation in the ratio of RNs to patients throughout the system; in addition, a relatively high proportion of EDs are predominantly staffed by RNs with fewer than three years' experience in emergency nursing. Skill mix was identified as being relatively stable throughout the ED system with an average of 85% of RNs providing patient care. The vast majority of CNM 2 posts in ED when acting as shift leader are allocated between 90% and 100% supervisory time. However, the majority of RNs working in EDs at the time of the survey were identified as not holding a specialist emergency nursing qualification.

In relation to IUs, there was variation in the levels of RN staffing per thousand patient presentations. This was also evident in the proportion of ANPs employed in IUs, with a number of units at the time of the survey having no ANPs in post.

## 2.5 Policy Impact Research

Following an open application process, pilot sites to test the Framework were identified by the Department of Health. The planned pilot testing was to be underpinned by research commissioned by the Health Research Board. Building on the development of the *Framework for Safe Nurse Staffing and Skill-Mix in General and Specialist Medical and Surgical Care Settings in Adult Hospitals* (Department of Health 2018), the first of the activities under this research programme was the pilot testing of the Framework. The information below outlines the approach and findings from the pilot testing of the Framework.

### 2.5.1 Approach to Policy Impact Research – Pilot Test

The pilot implementation of the Framework was undertaken across three EDs and one IU. The aim of the policy research was to measure the impact of implementing the

recommendations of the Framework on patient outcomes, nurse staffing outcomes and organisational factors in each of these sites. In addition, the research measured the economic impact of implementing the Framework.

Three policy impact reports were published that evaluated the pilot Framework between 2018 and 2021:

- *Evaluation of the Pilot Implementation of the Framework for Emergency Care Settings – Report 1 - Baseline Report* (Drennan et al. 2019).
- *Evaluation of the Pilot Implementation of the Framework for Emergency Care Settings – Report 2* (Drennan et al. 2020).
- *Evaluation of the Pilot Implementation of the Framework for Emergency Care Settings – Report 3 – Final Report* (Drennan et al. 2022).<sup>12</sup>

Key findings presented here are a summary of the final report and are the basis for the recommendations outlined in this policy document. The final policy impact report also presents the findings in relation to the impact of the Covid-19 pandemic on nursing staff working in the pilot sites.

In addition, the evaluation measured the economic impact of implementing the Framework and provides an evidence-based assessment of the adoption and implementation of the initiative in practice to guide future national rollout decisions.

The objectives of the research were to:

- Examine the extent to which patient outcome measures changed over time as a consequence of the introduction of the recommendations in the Framework.
- Measure the impact of the intervention on care left undone events.
- Measure the extent to which the Framework impacted on staff and patient experiences and to measure the impact of the implementation of the Framework on organisational factors.

<sup>12</sup> Report 1 provided baseline patients, nurse and organisational data from the three pilot sites; this Report also tested various models for determining staffing levels in emergency settings. Report 2 reported on patient, staff and organisational outcomes following adjustments to nurse staffing based on the pilot testing of the staffing model (Nursing Hours per Patient Presentation). Report 3, the Final Report, identified the ongoing impact of the introduction of the staffing model on outcomes over time as well as the impact on emergency nursing staff of the Covid-19 pandemic.



## 2.6 Key Findings

A summary of the key findings from the policy impact research for the three pilot EDs and the IU are presented under patient, staff and organisational outcomes below:

### 2.6.1 Patient Outcome Measures

#### Emergency Departments

- **Presentations:** Overall, there were approximately 443,158 patient presentations in the three pilot EDs recorded over the duration of the study – January 2018 to April 2021.
- **Time to Triage:** All EDs, following the introduction of the recommendations in the Framework, demonstrated a reduction in time to triage for patients. Overall, time to triage decreased from an average of 0.31 hours prior to the introduction of the Framework to 0.20 hours following the introduction of the Framework, an overall percentage decrease of 35.4% in time to triage.
- **Time from Triage to Be Seen:** Time from triage to being seen by a decision maker showed improvements following the introduction of the Framework. Decreases in time from triage across the three pilot EDs reduced from 1.41 hours prior to the introduction of the Framework to 0.80 hours following the introduction of the Framework. An overall percentage decrease of 43.2% in Time from Triage to be Seen.
- **Registration to Seen by A Decision Maker:** Following the implementation of the Framework, the median time waiting by patients to being seen by a decision maker reduced. Time reduced from 1.74 hours to 1.43 hours following the introduction of the Framework, An overall percentage decrease of 17.8%.
- **ED Care Time:** This was defined as the time in hours from ED registration to the time of decision to admit or ED discharge<sup>13</sup>. The median ED Care Time decreased across all three pilot sites from 5.14 hours prior to the introduction of the Framework to 4.90 hours

following the introduction of the Framework, an overall percentage decrease of 4.6%.

- **Patient Experience Time (PET):** PET was defined as the time in hours from ED registration to the time of departure from the ED following discharge/admission, inclusive of boarding time following the decision to admit. The median PET decreased across all three pilot sites from 6.14 hours prior to the introduction of the Framework to 5.89 hours following the introduction of the Framework, an overall percentage decrease of 4.0%.
- **Leaving Without Being Seen (LWBS):** LWBS was defined as patients who left an ED prior to the completion of their treatment.<sup>14</sup> The proportion of patients LWBS decreased overall following the introduction of the Framework, with a 52.3% percentage decrease in patients LWBS.

#### Injury Unit

- **Presentations:** Overall, 28,705 patient presentations were recorded in the IU during the period of the research (January 2018 to April 2021).
- **Time to Triage / Assessment:** The IU, following the introduction of the recommendations in the Framework, demonstrated a decrease in time to triage / assessment for patients. Time to triage / assessment reduced from 0.29 minutes at baseline to 0.24 minutes following the introduction of the Framework; a 17% decrease in time to triage / assessment.<sup>15</sup>
- **LWBS:** The proportion of patients LWBS decreased overall following the introduction of the Framework in the IU. LWBS decreased from 1.6% at baseline to 0.5% following the introduction of the Framework.

<sup>13</sup> This excludes the time a patient spends in the ED once a decision to admit has been made.

<sup>14</sup> LWBS includes patients who both left without being seen by a key decision maker and those who left prior to completion of treatment.

<sup>15</sup> Time from Triage to be Seen by a Decision Maker was not analysed for the IU as patients tend to be triaged and seen within the same time period in these units.



- **PET:** In 2018, the average PET time in the IU was 2.30 hours, decreasing to 2.26 hours in 2019, and to 2.23 hours in 2020. This downward trend was also seen among patients ≥75 years, with average PET time falling from 2.59 hours in 2018 to 2.24 hours on average in 2019, then decreasing further to 1.93 hours in 2020. In 2021, (January 1st to April 30th) average PET was 2.98 hours<sup>16</sup>.

## 2.6.2 Staff Outcome Measures

Surveys of RNs and HCAs in the three EDs and the IU were undertaken at baseline (prior to the introduction of the Framework) and following the introduction of the Framework.

### Emergency Departments

- **Nurse to Patient Ratios:** Prior to the introduction of the Framework, RNs in the pilot EDs cared for, on average, 14.87 patients per shift, following the introduction of the Framework, this decreased to 11.27 patients per shift.
- **Education Level:** Prior to the introduction of the Framework in the three EDs, 44.4% of RNs had a specialist qualification in emergency nursing, increasing slightly to 46.1% following the introduction of the Framework.
- **Practice Environment:** Measures of staff perceptions of the working environment saw improvements following the introduction of the Framework. Overall, there were increases in nurses' participation in hospital affairs, perceptions of quality of care delivered, nurse manager leadership and nurse doctor relations. In particular, there was a significant increase in RNs' positive rating of staffing and resource adequacy.
- **Quality of Care:** The proportion of ED nursing staff that identified care provided as good or excellent increased from 52% at baseline to 66% following the introduction of the Framework. Similarly, grading of patient safety (very good / excellent) increased from 14% at baseline to 30% following the introduction of the Framework.
- **Care Left Undone Events:** In relation to the measurement of care left undone, baseline measurements showed 78.8% of nurses reported that at least one item of care was left undone on their last shift this decreased to 72.5% following the implementation of the Framework. Similarly, baseline measurements showed that an average of 3.32 care activities were left undone per shift due to a lack of time to complete these tasks, whereas this decreased to, on average, 2.76 activities left undone. following the implementation of the Framework.
- **Missed Meal Breaks:** At baseline, 40.7% of nursing staff reported missing a meal break on their last shift; this decreased to 21.8% following the introduction of the Framework.
- **Job Satisfaction and Intention to Leave:** Overall job satisfaction increased from 54.4% of staff reporting being either satisfied or very satisfied with their current job at baseline to 80.0% following the introduction of the Framework. In addition, two-thirds of staff reported that they were satisfied with being a nurse in at baseline, which increased to 90.0% following the introduction of the Framework. Overall intention to leave also decreased from 55.2% at baseline to 45.6% following the introduction of the Framework.
- **Recommending the ED:** Nursing staff who reported that they would probably or definitely recommend the department to a colleague increased from 53.7% at baseline to 75.6% following the introduction of the Framework in the three ED sites. In addition, the proportion of nursing staff that stated that they would probably or definitely recommend their ED to family or friends, increased from 69.3% prior to the introduction of the Framework to 81.4% following its introduction.
- **Burnout:** The Maslach Burnout Inventory (Maslach et al., 1996)<sup>17</sup> was used to measure three areas of

<sup>16</sup> These are measured as decimal hours; for example, 2.98 hours is 2 hours, 58 minutes and 48 seconds.

<sup>17</sup> The MBI-Human Services Survey Medical Personnel (MBI-HSS MP) is composed of 22 items across three subscales: emotional exhaustion; depersonalisation; personal accomplishment. The emotional exhaustion subscale addresses feelings of being emotionally overextended by work. Depersonalization subscale assesses an impersonal response to recipients of care and personal accomplishment subscale measures feelings of competence and achievement in one's work. Items are measured on a 7-point scale of 0 to 6 (never = 0, to everyday = 6). High scores in emotional exhaustion and depersonalisation and low scores in personal accomplishment indicate burnout

burnout in nursing staff: emotional exhaustion; depersonalisation; and personal accomplishment. Levels of emotional exhaustion showed the greatest improvement decreasing from a mean of 3.31 prior to the introduction to a mean of 2.95 following the introduction of the Framework. Overall scores on depersonalisation also decreased (i.e., improved) at Time 2 (post introduction of the Framework), while levels of personal accomplishment remained relatively stable for Time 1 (Baseline) and Time 2 (post introduction of the Framework).

- **Nursing Staff Experience of Violence and Aggression:** Overall, prior to the introduction of the Framework, 76.5% of staff reported that they experienced a physical assault, 94.0% psychological / verbal mistreatment and 97.8% conflict with patients over the last three months. Following the introduction of the Framework there was a very slight decrease with 74.2% of staff reporting that they experienced physical assault, 93.3% experiencing psychological / verbal mistreatment, and 94.7% experiencing conflict with patients.

## Injury Unit

- **Nurse to Patient Ratios:** Prior to the introduction of the Framework, RNs in the IU cared for on average 9.11 patients per shift, following the introduction of the Framework, this increased to 12.25 patients per shift.
- **Education Level:** The proportion of RNs with a specialist qualification in emergency nursing remained unchanged at both time points: 23.8%, both at baseline and following the introduction of the Framework.
- **Practice Environment:** Measures of staff perceptions of the working environment saw improvements in some areas following the introduction of the Framework. Overall, there were increases in staff perceptions of nursing foundations for the provision of quality care (mean 2.77 prior to, and 3.04 following the introduction

of the Framework) and staffing and resource adequacy (mean 2.21 prior to, and 2.75 following the introduction of the Framework)<sup>18</sup>.

- **Quality of Care:** The proportion of IU nursing staff that identified care provided as excellent increased from 20.0% at baseline to 33.3% following the introduction of the Framework. Grading of patient safety (very good/excellent) increased from 42.9% at baseline to 62.0% following the introduction of the Framework.
- **Care Left Undone Events:** Baseline measurements for care left undone events in the IU showed 36.4% of nurses reported that at least one item of care was left undone at Baseline, which decreased to 15.8% following the introduction of the Framework. Overall, baseline measurements identified that an average of 1.36 necessary care activities were left undone per shift, this decreased to, on average, 0.21 activities left undone following the introduction of the Framework.
- **Job Satisfaction and Intention to Leave:** Overall levels of job satisfaction remained high at both timepoints: 90% both at baseline and following the introduction of the Framework. In addition, 77% of staff reported that they were satisfied with being a nurse at baseline, which increased to 90.5% following the introduction of the Framework. Overall intention to leave increased from 15.4% at baseline to 23.8% following the introduction of the Framework.
- **Recommending the IU:** Over 95% of nursing staff would recommend the IU to a colleague both at baseline and following the introduction of the Framework. In addition, 100% of nursing staff that stated that they would probably or definitely recommend the IU to family or friends at both time points.
- **Burnout:** In the IU, levels of emotional exhaustion decreased (i.e., improved) on the Maslach Burnout Inventory (Maslach *et al.*, 1996)<sup>19</sup> from a mean of 1.75 at baseline to 0.82 following the introduction of the

<sup>18</sup> At Time 2, the IU saw little change scores for three items on the NWI: Nurse Participation in Hospital Affairs, Nurse Manager Ability, Leadership, and Support of Nurses and Collegial Nurse-Doctor Relation. It should be noted that both Time 1 and Time 2 cross-sectional data from staff were above the mid-point values for the NWI and were quite positive prior to the introduction of the Framework.

<sup>19</sup> The MBI-Human Services Survey Medical Personnel (MBI-HSS MP) is composed of 22 items across three subscales: emotional exhaustion; depersonalisation; personal accomplishment. The emotional exhaustion subscale addresses feelings of being emotionally overextended by work. Depersonalization subscale assesses an impersonal response to recipients of care and personal accomplishment subscale measures feelings of competence and achievement in one's work. Items are measured on a 7-point scale of 0 to 6 (never = 0, to everyday = 6). High scores in emotional exhaustion and depersonalisation and low scores in

Framework. Overall scores for depersonalisation also decreased (i.e., improved) from 1.42 at baseline to 0.38 post introduction of the Framework. Overall, higher levels Personal Accomplishment were reported in the IU in Time 1 with a slight decrease in Time 2 (Time 1 = 5.02; Time 2 = 4.76).

- **Nursing Staff Experience of Violence and Aggression:** Overall, prior to the introduction of the Framework, 76.5% of staff reported that they experienced a physical assault, 94.0% psychological/verbal mistreatment and 97.8% conflict with patients over the last three months. Following the introduction of the Framework there was a very slight reduction with 74.2% of staff reporting that they experienced physical assault, 93.3% experiencing psychological/verbal mistreatment, and 94.7% experiencing conflict with patients.

- As a consequence of the introduction of the NHpPP approach, there was a decrease in agency RN and HCA staff required following the introduction of NHpPP approach. Overall, agency use in the EDs decreased by approximately 19% following the introduction of the Framework.
- Overall total agency spending decreased, on average, by 22% across the three ED sites.
- The introduction of the NHpPP model was used to ensure an 85% RN, 15% HCA skill mix was in place.

## 2.6.3 Organisational Outcome Measures

### Emergency Departments

#### NHpPP, Agency Use, Skill Mix

- Using data for the year 2018 as a baseline, the Nursing Hours per Patient Presentation (NHpPP) model determined that the three ED sites required adjustments to RN and HCA staffing to ensure the delivery of safe and effective patient care based on the patient's triage category. Recruitment of the required staff took place over an extended period, with the new staff recruited undergoing a mandatory period of induction and adaptation to the department.
- Agency staff were required to provide care in the ED and, in particular, for patients whose emergency care was complete and awaited admission to a ward<sup>20</sup> during this period; therefore, this study reports on those patients who required ED care only and excludes those patients whose process of ED care had finished but were awaiting a bed.

### Injury Unit

#### NHpPP, Agency Use, Skill Mix

- Due to the nature of the presentations, the NHpPP model was not deemed suitable for the IU but an adjustment of 2 HCAs was deemed necessary to assist in the performance of non-nursing tasks that staff within the IU were engaged with such as cleaning, stock ordering and waste management, adversely impacting on their available direct patient contact time.
- The IU did not use agency staff throughout the timeframe of the study.

## 2.7 Conclusion

The testing and implementation of the Framework resulted in a number of adjustments to RN and HCA staffing and skill-mix in the three EDs and one IU. These adjustments were based on testing the Nursing Hours per Patient Presentation (NHpPP) model in EDs to determine safe nurse staffing levels which considers patients' triage category and their ED care time. The adjustments to staffing and skill mix allowed the research team to compare patient, staff, and organisational outcomes pre and post the testing of the Framework.

personal accomplishment indicate burnout

<sup>20</sup> This study did not calculate staffing requirements for those patients who were in the ED awaiting allocation to a bed in the hospital. The staffing requirements for patients whose ED process of care is complete are outlined in WRC Agreement

Following the introduction of the NHpPP model in determining safe nurse staffing levels and skill-mix, there were a number of positive staffing outcomes when comparing data across the years of the study period. Overall, as a result of the staffing adjustments, there was a decrease in agency use in the EDs as well as a decrease in agency spend. Skill-mix was adjusted to ensure that direct patient care was provided by 85% RN and 15% HCA.

There were also positive outcomes in a number of key patient indicators including: a decrease in time to triage, time to be seen, ED care time, PET and the number of patients LWBS. In addition, following the introduction of the Framework, RNs reported that they were caring for fewer patients per shift. There were also improvements identified in the practice environment, in particular an increase in ED RNs positive rating of staffing and resource adequacy. Following the introduction of the Framework, there were also improvements in quality of care, a decrease in the number of care left undone events and increase in job satisfaction and a decrease in intention to leave with a high proportion of nursing staff stating that they would recommend the ED to other colleagues and family and friends. Levels of burnout reported by nursing staff also

decreased following the implementation of the Framework in the three sites.

The NHpPP model was not deemed suitable to use in the IU, however, there was an adjustment to skillmix with the addition of HCAs to the nursing team. Following this adjustment, the IU also recorded an improvement in a number of patient outcomes, including time to triage / assessment, a decrease in the proportion of patients LWBS and a decrease in PET. Outcomes related to nursing staff in the IU remained relatively stable when data pre and post the implementation of the Framework were compared. There was an increase in staff perceptions of the quality of care delivered as well as staffing resource and adequacy following implementation of the Framework; in addition, there was a substantial decrease in the number and frequency of care left undone events. Overall, levels of job satisfaction remained high throughout the study with a slight increase in the proportion of nursing staff intending to leave the unit. The majority of nursing staff reported that they would recommend the unit to colleagues and family and friends at both time points. Levels of burnout, overall, decreased following the introduction of the Framework.



# Chapter 3:

## The Framework

This chapter presents the scope of the Framework, the assumptions underpinning it and greater details their corresponding elements, inclusive of specific recommendations for implementation of the Framework in practice.

### 3.1 Scope of the Framework

The scope of the Framework presented in this document is adult emergency care settings (ED and IUs). The rationale for this decision by the Taskforce is outlined in Chapter 1.

The Framework presented in this document is built on research and the work of the Taskforce that informed its development. Although not within the scope of the research underpinning the Framework, guidance relating to unscheduled care / acute floor settings, such as, Acute Medical Assessment Units (AMAU) and Acute Surgical Assessment Units (ASAU) are outlined in sections 4.6. This guidance is based on the research outlined in this document underpinning the development of the Framework as well as *The Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland* (Department of Health 2018) and *Setting the Direction: A Development Framework Supporting Nursing Practice Skills and Competencies in Acute Medical Assessment Units (AMAU) and Medical Assessment Units (MAU)* (HSE 2016).

The Framework identifies the assumptions, and nursing governance structures to determine safe nurse staffing and skill mix for RNs and HCAs. The use of the term nursing hours denotes the inclusion of both RNs and HCAs (excluding multi-task attendants) unless otherwise specified.

The Framework is relevant to all those at national, regional, and organisational level whose responsibility it is to ensure safe nurse staffing and skill mix in emergency care. The Framework is targeted at three core audiences covering the diverse range of roles and responsibilities at local, regional, and national level. The three target audiences are as follows:

1. Frontline nurses, middle and senior nurse managers, Directors of Nursing and Chief Directors of Nursing at hospital group level, to facilitate them to guide and support a consistent approach to determine safe nurse staffing and skill mix.
2. Senior hospital management teams and hospital boards of management to support the implementation of appropriate governance requirements at organisational and group hospital level to adequately monitor the impact on patient care outcomes secondary to investment in the nurse staffing resource.
3. HSE Managers / Directors, to support national service planning in the management of acute hospital services, to support national implementation by the HSE National Safe Staffing Unit, nursing and midwifery services, clinical care programmes and strategy, quality and patient safety and human resources.

The Framework will also be of relevance to regulators, particularly the Health Information and Quality Authority (HIQA) and the Nursing and Midwifery Board of Ireland (NMBI) as well as higher education institutions (HEIs) involved in the education of nurses for unscheduled emergency care settings.

### 3.2 Assumptions

In this section, each of the assumptions and their corresponding elements are outlined in greater detail, inclusive of specific recommendations for implementation of the Framework in practice.

#### 3.3 Assumption 1 – Patient Care Needs Differ

This first assumption is underpinned by the belief and evidence that all patients are not the same and therefore their care needs are different. Thus, the elements influencing the determination of safe nurse staffing and skill mix are those directly related to the patient.



Consequently, to determine the right staffing and skill mix, requires the measurement of patient care needs systematically and consistently. The HIQA *National Standards for Safer Better Healthcare* (HIQA 2012a) include Standard 6 – Workforce; this Standard outlines the requirement for services to plan their workforce needs to take account of the assessed needs of the population being served, the changes in workload and the size, complexity and specialities of the service being provided.

The results of the policy impact research, undertaken in the test sites (Drennan *et al.* 2022) demonstrated that assumptions 1 and 2 were evident; that is patient care needs differ and nurse staffing numbers, profile and skill mix are key to ensuring safe, high-quality care for patients.

For this report, acute floor settings include EDs, IUs, and AMAUs/ASAU that meet the model of care requirements.

Number	Recommendation
1	It is recommended that a systematic, triangulated evidence-based approach to determine safe nurse staffing and skill mix based on patient need be implemented nationally in emergency care settings.
2	It is recommended that application of the evidence-based model to determine the required nurse staffing complement be supported by data that is routinely collected in emergency care settings. This data includes the number of patient presentations by triage category as well as patient outcome indicators.
3	It is recommended that the number of RNs allocated to triage in ED should be determined by the number of patient presentations.  EDs with annual presentations greater than 40,000 should have a minimum of two RNs allocated to triage per shift, 24/7.  EDs with annual presentations less than 40,000 patients should have a minimum of one RN allocated to triage per shift, 24/7.  The assessment of staffing for triage must always take the professional judgement of the senior nursing management team into consideration.
4	The recommended minimum frequency to re-assess nurse staffing requirements in EDs is at six monthly intervals per annum using routinely collected patient data to identify seasonal variation. More frequent measurements may be required if, for example, there is a change/redesign of the service.

### 3.3.1 Translating the Recommendations into Practice:

- Workforce planning and the use of appropriate patient acuity and dependency measurement tools will support the standardisation of staffing levels, grade and skill mix which match with each type of emergency service throughout the system (National Emergency Medicine Programme (EMP) 2012). It is recommended that an evidence-based tool be used consistently and systematically to determine safe nurse staffing and skill mix in adult emergency care settings. Based on testing and the assumptions in the Framework, the NHPPP approach was recommended to determine safe nurse staffing levels and skill mix in adult EDs.
- A key success factor to accurately and consistently determine safe staffing and skill mix requirements at ED level, is support for measurement at management level. The recommended minimum frequency to re-assess nurse staffing requirements in EDs is at six monthly intervals per annum using routinely collected patient data in the ED to identify seasonal variation, and this data is verified with the National Lead for Safe Nurse Staffing and Skill Mix. More frequent measurements

may be required if, for example, there is a change/redesign of the service or in the professional judgement of the senior nursing management team in response to changing demands on the service.

- In some circumstances, there may be the requirement for additional nursing supervision or intervention due to specific patient needs. Ideally these specific patient requirements should be captured in the assessment of staffing needs and used to inform the safe nurse staffing requirements. These examples can include:
  - o The requirement for one-to-one care / close and constant supervision (often referred to as one-to-one special / enhanced care).
  - o Increased risk of clinical deterioration as evidenced by the patient’s Emergency Medicine Early Warning System (EMEWS)<sup>21</sup>.
  - o Increased care needs to manage psychological, mental health or intellectual disability needs.
  - o It is recommended that patient-related information is captured regularly to inform decisions on the determination of nurse staffing requirements. See Table 1 for key patient information data to be collected.

**Table 1 - Key Patient Information Data**

	ED/IU	Unscheduled Care /Acute Floor Area (e.g. AMAU/ASAU)
Patient Volume & Attendance Patterns	Number and pattern of patient presentations: (daily/weekly/monthly/seasonal) including new and return patients. Time to triage; Time to be Seen by a Senior Decision Maker; ED Care Time; PET	Number and pattern of patient presentations: e.g., daily/ weekly/ monthly/seasonal, new or return, Bed occupancy and bed utilisation rates and patterns of utilisation – daily/weekly/ monthly/seasonal.
Patient Profile	Triage category of patient as determined by the Manchester Triage System Patient age; number of patients aged over 75 years. Number of patients who leave without been seen Mental health capacity Frail older adult	Patient classification type (medical/ respiratory/ neurology/surgery etc.) Age Mental health capacity Frail older adult
Admission rate	Admission rate of all presentations to the department/readmission numbers within seven days.	Admission rate from unit to an in-patient ward / Rate of timely discharge / patient turnover
Transfer and escort	Number of patient transfers, time spent on transfer and reason for transfer (transfers both in and out of the ED)	Number of patient transfers, time spent on transfer and reason for transfer (transfers both in and out of the acute floor setting)
Average Length of stay	Average length of stay in the department	Average length of stay in the unit

Table 1 – Key Patient Information Data

<sup>21</sup> <https://www.hse.ie/eng/about/who/cspd/ncps/deteriorating-patient-improvement-programme/emergency-medicine-early-warning-system-emews/>

- Capturing data on patient volume and attendance patterns, patient profile, admission rates and average length of stay provides important information on the profile of the emergency care setting and the overall activity level. In analysing the data, patterns of predictable higher presentations/acuity may become apparent.
- Where the emergency and acute floor settings are located in proximity to each other, it is suggested that the patterns and profile of presentations are used to determine the nurse staffing requirements collectively across the services rather than in isolation; the aim is to enable optimisation of the entire workforce capacity and capability. Notwithstanding this, where there are mixed EDs (adults and children), the specific requirements for children's nurses will be a factor for consideration as outlined under Assumption 2.

### 3.4 Assumption 2 – Nurse Staffing Number, Profile and Mix are Key to Ensuring Safe, High-Quality Care to Patients

The second assumption is underpinned by the evidence that the size and skill mix of the nursing care team is important to delivering high-quality, safe care to patients (Aiken et al. 2014, Kane et al. 2007). Nurse staffing numbers, profile and skill mix are key to ensuring safe, high-quality patient care.





Number	Recommendation
5	It is recommended, that the RN: HCA skill mix ratio for EDs is 85:15 once a safe nurse staffing level exists.
6	It is recommended that the assessment of staffing requirements must always take the professional judgement of the senior nursing management team into consideration. Professional judgment should also take into account the physical environment of the department and associated services.
7	It is recommended that organisations support leadership and professional development of all grades of CNMs in emergency care settings (CNM1, CNM 2 and CNM 3).
8	It is recommended that staff should have access to the expertise of a Clinical Skills Facilitator in unscheduled emergency care settings as it is recognised that these roles are essential for the maintenance of competencies of nurses caring for emergency care patients and will significantly enhance the department's ability to oversee induction, training and ongoing professional development requirements of staff.
9	It is recommended that RNs in unscheduled emergency care settings should be supported to achieve the capabilities and competencies as outlined in the enhanced nurse contract.
10	It is recommended that staff commencing in emergency care settings, including graduates, should be provided with a structured induction programme and the opportunity to undertake a relevant Level 8 foundation programme in order to develop the future emergency nursing workforce.
11	It is recommended that RNs in emergency care settings should have access to relevant continuing professional development, higher/postgraduate diploma and master's level education to facilitate the development of the workforce and succession planning for future clinical, leadership, management and advanced practice roles.
12	As recommended in the <i>Review of the Role and Function of the Healthcare Assistant</i> (HSE, 2018) <sup>22</sup> , all HCAs working in emergency care settings will have QQI Level 5 as a minimum qualification or be provided with a supportive pathway to acquire this qualification.
13	It is recommended that all EDs have a minimum of one HCA over a 24/7 period, and that this must be considered when applying the recommended skill mix.

### 3.4.1 Translating the Recommendations into Practice:

- A national survey of EDs in Ireland identified that the skill-mix ratio in EDs was, on average, 85% RN and 15% HCA. Following the pilot, it is recommended that the RN / HCA skill mix is a ratio of 85:15 once a safe nurse staffing level exists. It is recommended that professional judgment by nursing staff at each stage of the process to determine safe nurse staffing and skill mix requirements across all adult emergency care settings is used in conjunction with the systematic approach to identify safe nurse staffing levels.
- The skill mix for IUs should be determined by professional judgment. This is to reflect the variation on size in services and staffing required. The role of the HCA offered an important contribution in releasing nursing time to care during the pilot testing of the Framework.

<sup>22</sup> See <https://www.hse.ie/eng/staff/resources/hrstrategiesreports/health-care-assistant-review-final-report-2018.pdf>

- Due to the variability in size of units within other unscheduled care / acute floor setting e.g., AMAUs, ASAs, professional judgement should be used in determining the skill mix in these settings. The role of the HCA offered an important contribution in releasing nursing time to care during the pilot testing of the Framework and should be considered in all unscheduled emergency care settings.
- Planning for and investment in the ongoing leadership and professional development of all grades of CNMs in emergency care settings is important to provide the necessary leadership and provision for effective succession planning.
- Information on the nursing team profile across all unscheduled care emergency settings should be collected and collated. This information needs to consider a number of variables including education level, skill set, competence, skill mix (proportion of care provided by RNs) and grade mix<sup>23,24</sup>. Once collected and analysed, it is recommended that the information on staff profiles is used to target education and continuing professional development needs to meet current and emerging patient care requirements in unscheduled emergency care settings. Specialist clinical skills/competencies should also be determined based on patient and department profile. For example, there is a specific clinical skill requirement for specialist input into children's services (including mixed adult and children's EDs) that identifies a number of variables that need to be considered in any workforce and skill mix plan.
- The EMP Guide to Enhance Advanced Nurse Practitioner (ANP) Services across Emergency Care Networks in Ireland (2020) should also be referred to and used to inform decision making processes. The development of Advanced Clinical Skills, Clinical Nurse Specialist (CNS) and ANP roles, across all care settings, should be informed by patient profile data; for example, patients attending emergency care/acute floor settings with

long-term illness, frailty in older adults, people who are homeless and people with mental health needs. These roles should enable the optimisation of the nursing workforce across all clinical settings with deployment of the resource based on patient need; the size of the resource should be determined by patient type and demand.

- It is important that planned and unplanned absence is factored into the calculation of the nurse staffing establishment across all emergency care and acute floor settings. Planned and unplanned absences are a reasonable expectation in any staffing resource. Allowing for a planned and unplanned absence calculations is essential to determine nurse staffing and skill mix requirements. The current percentage allowance in Ireland is 20%; however, this is subject to on-going review. As maternity leave rates can vary considerably between organisations, this 20% figure does not include maternity leave; therefore, maternity leave may be factored in in addition to planned and unplanned absences. The setting of an absence allowance at organisational level is recommended with built in flexibility for maternity leave calculations.

### 3.5 Assumption 3 – The Organisational Environment has an Impact on Nursing Staff to Deliver Safe and Effective Patient Care

The third assumption is underpinned by the evidence that organisational factors, including the culture and climate of the unit, along with system factors such as organisational care processes, capacity, and geographical layout, may have a direct impact on the ability of the nursing team to deliver safe and effective care. The evidence has shown a positive organisational culture and ward/unit climate where staff are respected, supported, and developed, results in better outcomes for both patients and staff (Schneider et al 2019; Connolly et al. 2018).

<sup>23</sup> Includes mix of Health Care Assistant, Registered Nurse, Clinical Nurse Manager, Clinical Nurse Specialist and Advanced Nurse Practitioner).

<sup>24</sup> The EMP Guide to Enhance Advanced Nurse Practitioner Services across Emergency Care Networks in Ireland (2020) and the ANP Development Framework Supporting Nursing Practice Skills and Competencies in AMUs and MAUs are used as a guide in determining the nursing team profile.



Number	Recommendations
14	It is recommended that, as outlined in the Workplace Relations Commission (WRC) agreement of 2016 <sup>25</sup> , where the issue exists, patients whose emergency care is complete and remain in the ED while awaiting admission to a ward are staffed separately from patients receiving emergency care. The staffing model for this cohort of patients should be based on the WRC Agreement and the <i>Framework for Safe Nurse Staffing and Skill-Mix in General and Specialist Medical and Surgical Care Settings in Adult Hospitals in Ireland</i> (Department of Health 2018).
15	It is recommended that nurse staffing rosters in the ED should clearly identify RN and HCA staff allocated to provide emergency care, and those staff allocated to provide care to patients whose emergency care is complete and are awaiting admission to a ward should this issue exist.
16	It is recommended that recruitment processes be streamlined to deliver timely recruitment to avoid gaps in staff replacement in emergency care settings.
17	It is recommended that 100% of the CNM 2 role is in a supervisory capacity when they are in place as a shift leader in an ED. This acknowledges the need to ensure that senior leadership is in place 24/7.
18	It is recommended that each hospital where the <i>Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings</i> is implemented, will put in place a Local Implementation Group (LIG) that comprises collaborative representation from nursing, finance, human resources, IT, quality and safety and representation from the office of the Lead for Safe Nurse Staffing and Skill Mix in the HSE.
19	It is recommended that the LIG be chaired by the Director of Nursing and will consult with the Executive Management Team at hospital level and Chief Director of Nursing at Hospital Group level.
20	It is recommended that, where Safe Nurse Staffing Coordinators are established, they include emergency care settings to support existing governance and oversight systems in line with safe nurse staffing policy.
21	It is recommended that the Director of Nursing, as Chair of the LIG, based on the recommended evidence-based approach, endorses the safe nurse staffing and skill mix requirements to the Hospital's Executive Management Team. These recommendations should be verified by the LIG in coordination with the National Lead for Safe Nurse Staffing and Skill Mix.

<sup>25</sup> <https://www.hse.ie/eng/staff/resources/hr-circulars/hrcircular0072016.html>

### 3.5.1 Translating the Recommendations into Practice:

- These recommendations will support development of a clinical and organisational culture that embraces nursing and midwifery professional values of care, commitment and compassion.
- Nurse leaders play a significant role in patient safety as they lead and manage a workforce which has the highest level of contact and the most diverse range of interactions with patients (Riley 2009). It is therefore recommended that organisations invest in unit leader capacity by ensuring that 100% of the role of the CNM 2 as Shift Leader is safeguarded to fulfil their supervisory and leadership role across ED settings. It is further recommended that the CNM 2 role as shift leader in the ED operates over a 24/7 period for those EDs that operate on this basis.
- The occupancy level<sup>26</sup> of the ED is an important element to capture in determining safe nurse staffing levels and is an essential factor in determining if overcrowding is occurring. The number of patients who are receiving emergency care as well as those patients who are in the department awaiting admission should be taken into consideration when determining nurse staffing levels. It is recommended that the NHpPP approach is used to determine nurse staffing levels for those who are receiving emergency care with the Nursing Hours per Patient Day (NHpPD) approach, as outlined in the WRC Agreement (2016), used to determine nursing staffing levels for those patients whose process of emergency care has been completed but remain in the department awaiting admission.
- Consideration be given to the potential impact of future health service changes relevant to the emergency/ acute floor setting; for example, the recommendations outlined in the report, *A Trauma System for Ireland: Report of the Trauma Steering Group* (Department of Health 2018)<sup>27</sup> which includes the development of a National Trauma Network. The development of a National Trauma Network will require the nursing workforce plan in these locations to consider the skills, education, and role development to meet the requirements of a trauma network and to ensure that patients are provided with safe and effective care.
- Identifying initiatives such as patient streaming, systems of triage, rapid assessment and treatment and ANP roles in the ED and unscheduled care / acute floor setting, are all processes that should be reviewed to determine the most efficient operational outcomes aligned with the subsequent identification of the most appropriate resource<sup>28</sup>.
- The Director of Nursing, in collaboration with local/ national human resources, must lead timely recruitment and/or replacement of staff in unscheduled emergency care settings. This must include the active monitoring of staff turnover rates and recruitment process at unit / department level and hospital and hospital group level in order to ascertain the effectiveness and responsiveness of current processes to maintain safe nurse staffing levels
- Within unscheduled emergency care settings, any organisational processes that support teamwork and safe, effective and efficient care delivery should be examined and necessary changes made as appropriate.
- Department size and layout – there is little published research on the impact of the geographic size and layout on the workforce requirements; however, evidence from practice shows it is an important factor for consideration. The clinical environment affects the amount of nursing time spent on patient escort, the ability to provide effective patient surveillance and the ability to keep staff and, ultimately, patients safe, all of which may have an impact on resources available for patient care.
- System factors are notably those that are external to the clinical area, but nonetheless require consideration. Organisational bed capacity, organisational processes, such as discharge planning and changes in service infrastructure, can impact on the maintenance of the safe nurse staffing resource in emergency care settings. It is therefore suggested that organisations regularly review the system factors that may currently, or in the future, impact on emergency care settings.

<sup>26</sup> Number of patients on trolleys awaiting admission from the emergency department can be ascertained through the use of TrolleyGar data system – see <http://137.191.241.85/ed/>.

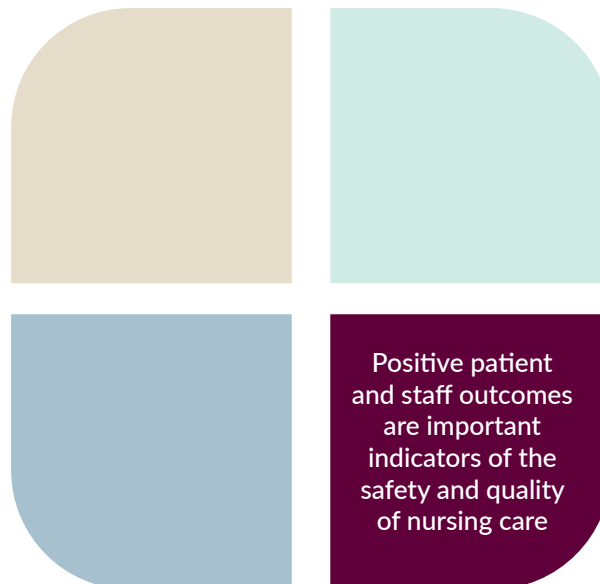
<sup>27</sup> See <https://assets.gov.ie/10116/70fd408b9ddd47f581d8e50f7f10d7c6.pdf>

<sup>28</sup> Section 2 of the *Emergency Nursing Workforce Planning Framework* (HSE/ONMSD 2016) should be used to support decision making in this regard.

- Senior hospital management and hospital boards of management, as demonstrated through high profile reports on patient safety (The Mid Staffordshire NHS Foundation Trust Inquiry chaired by Robert Francis QC, 2010, HIQA, 2012) have full responsibility for the governance of patient care. This includes the nurse staffing capacity and capability to deliver timely, safe and quality care. The key principle for governance in this context is assurance that patients receive safe and effective care throughout the hospital, including emergency care settings, delivered by the optimum nursing workforce. The governance arrangements must provide the assurance of sufficient staffing capacity and capability informed by robust evidence-based systems and processes to ensure patients receive the care they need in the clinical area in which they are located. In the context of nurse staffing levels and skill mix, appropriate governance is required to ensure autonomy, authority and accountability is in place at various points in the system. This takes account of the day-to-day nurse staffing decisions in addition to the wider governance of the nursing workforce.

### 3.6 Assumption 4 – Positive Patient and Staff Outcomes are Important Indicators of the Safety and Quality of Nursing Care

The fourth assumption is based on the emerging and available evidence that the measurement of both patient and staff outcomes is an important factor in determining safe nurse staffing and skill mix levels. There is considerable evidence demonstrating the association between nurse staffing levels and skill mix with improved patient and staff outcomes in in-patient settings<sup>29 30</sup>. In contrast, the evidence specific to the emergency care settings is only beginning to emerge. Recio-Saucedo et al. (2015) highlighted that evidence on this subject is even more challenging due to the variable demands and patient volume in emergency care settings. Nonetheless, the available evidence/indicators on the association between nurse staffing and patient and staff outcomes in emergency care settings are included in this section as a key component to determining safe nurse staffing and skill mix levels.



<sup>29</sup> (Aiken et al 2014; Aiken et al 2012; Duffield et al 2011; Griffiths et al 2014; Simon et al. 2014).

<sup>30</sup> (Aiken et al 2014; Aiken et al 2012; Duffield et al 2011; Griffiths et al 2014; Simon et al 2014).

Numbers	Recommendations
22	It is recommended that on-going research in the emergency care settings is continued. This will facilitate the future support of a longitudinal evidence-based approach to policy on safe nurse staffing and skill-mix in response to changes in population health.
23	It is recommended that emergency care setting and organisation wide mechanisms are put in place to measure and monitor, at a minimum, routinely collected outcomes related to nurse staffing in emergency departments, including, but not limited to, patients leaving without being seen, time to triage, time to be seen, ED care time and patient and staff experiences. Consideration should be given to incorporating these outcomes in IT systems at ED level, should these systems become available.
24	It is recommended that LIGs collate relevant patient, staff and organisational outcome data to provide longitudinal evidence to support Directors of Nursing and Chief Directors of Nursing to support the governance and monitor the impact of the <i>Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings</i> .

### 3.6.1 Translating the Recommendations into Practice:

- In addition, another success factor is the ongoing monitoring of indicators, which are applied to the ward to board structure which ensures that all levels of the organisation are engaged with the governance structure. Ward/Unit to board governance and accountability is necessary to ensure safe patient care outcomes and was a critical success factor from Phase 1 of the Framework. The consistent measurement of patient, staff and organisational data is necessary for creating longitudinal evidence relating to the impact of the Framework.
- Organisations should put in place mechanisms to measure patient outcomes systematically and consistently to indicate the capability of the nurse staffing skill mix and level to meet patient need. International evidence has identified outcome indicators associated with nurse staffing and skill mix level in emergency care settings (Recio-Saucedo et al. 2015). It is recommended that these outcome indicators should be included for collection<sup>31</sup> in an Irish context as follows:
  - o Patients leaving without being seen (proportion of attendances that are recorded as left before being seen or before treatment has been completed).
  - o ED care time – total time spent in the department from arrival to decision to admit, transfer or discharge (this excludes the time the patient waits to be admitted).
  - o Time to triage – time from arrival / registration to being triaged.
    - o Patient experience of nursing care.
    - o Incidences of violent and aggressive episodes towards staff.
    - o PET – PET is measured from ED arrival to ED departure (time admitted to a ward or discharge from the ED).
- It is suggested that the acute floor areas collect patient outcome data in line with the measures outlined in the National Acute Medicine/Surgical Programmes. These measures include:
  - o Percent of patients registered in acute floor care settings who experience a PET time of <6hrs from registration to discharge or decision to admit.
  - o The proportion of patients seen by the medical registrar / ANP within one hour of registration.
  - o Number of patients referred from ED.
  - o PET.
  - o Referral source.
  - o Length of stay.
  - o Patient experience.
- It is advised that the Director of Nursing as chair of the LIG ensures collation, at agreed time periods, of patient and staff related outcome data to provide oversight of the positive impact of the Framework. This includes oversight patient indicators to identify areas of care that require additional attention or support. Throughout the research process, these were captured as Safety CLUEs, and reported to the LIG.

<sup>31</sup> It is acknowledged that a number of systems will be required to collect this data. EDs routinely collect data through a software system on triage category, time to triage, ED care time, time to be seen, leaving without being seen and PET times. Data on episodes of violence and aggression towards staff can be collected via the National Incident Management System (NIMS) or periodic staff surveys. Data on the patient experience of ED can be collected at hospital level through the results of the National Patient Experience Survey.

# Chapter 4:

## Calculating the Staffing Requirement

This chapter outlines the approach to calculating the staffing requirement and presents examples of the NHpPP. It also outlines the recommended approach for IUs set out in the National Emergency Medicine Programme Guidance Document on Staffing of Injury Units (HSE, 2019) and guidance for other unscheduled / acute floor areas, such as AMAU / ASAU.

### 4.1 Emergency Departments

A variety of models were trialled to determine the most effective means of determining the required staffing level within the ED sites (see Drennan *et al.* 2019 for a discussion of the models tested). The NHpPP formula uses the patient's Manchester Triage System category as a measure of acuity and dependency in its calculation to estimate the number of whole-time equivalent (WTE) nursing staff needed to care for patients. Using data that are routinely collected in each of the sites, the NHpPP model was the selected systematic approach for determining required staffing levels.

The NHpPP calculation of nurse staffing is inclusive of ED and triage activity and includes all staff that provide direct patient care (CNM 1, RN and HCA). Each triage category is assigned a mean number of hours of care. The allocation of NHpPP is based on a number of measures, including:

- Number of patient presentations – this can also be used to determine triage staffing levels.
- Patient's Manchester Triage System score.
- Average ED Care Time for each triage category.

During the research study, an average weighting was calculated across the three sites (see Figure 3 below). This weighting was multiplied by the number of category presentations to determine the total number of nursing hours required per triage category, with these subtotals summed to give the total hours of care required. Annual hours of care are calculated at 2,028 hours (39 hours per week\*52 weeks). Any future changes to standard weekly working hours will need to be reflected in future calculations during implementation. Total hours of care are divided by annual hours of care to give the RN and HCA WTEs required. A 20% staff replacement rate for covering absences/study leave/vacation is then added to the clinical WTE (plus the percentage maternity leave for that unit) to produce the total WTE required for each site. The total WTE is then divided in a ratio of 85:15 to determine the number of RN (85%) and HCA (15%) WTEs required to achieve the recommended skill mix.

It is important to note that the NHpPP calculation is not used to determine staffing levels for patients where a decision to admit has been made but who remain in the department while waiting for a bed to become available. The staffing for such patients is determined under the terms of the 2016 WRC agreement.<sup>32</sup>

### 4.2 Calculating the NHpPP

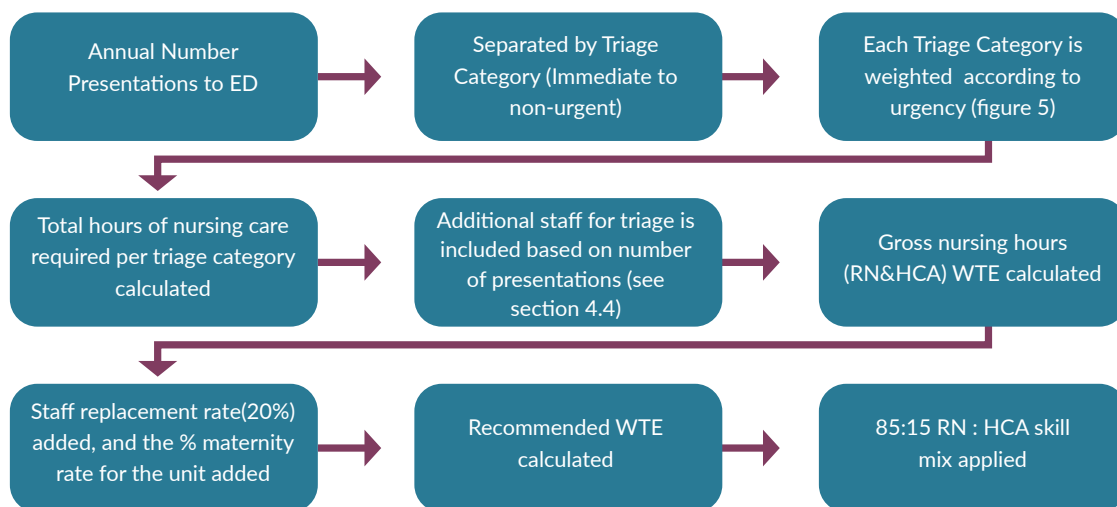


Figure 4- Calculation of NHpPP

<sup>32</sup> <https://www.hse.ie/eng/staff/resources/hr-circulars/hrcircular0072016.html>



Figure 5 - data required to calculate NHpPP

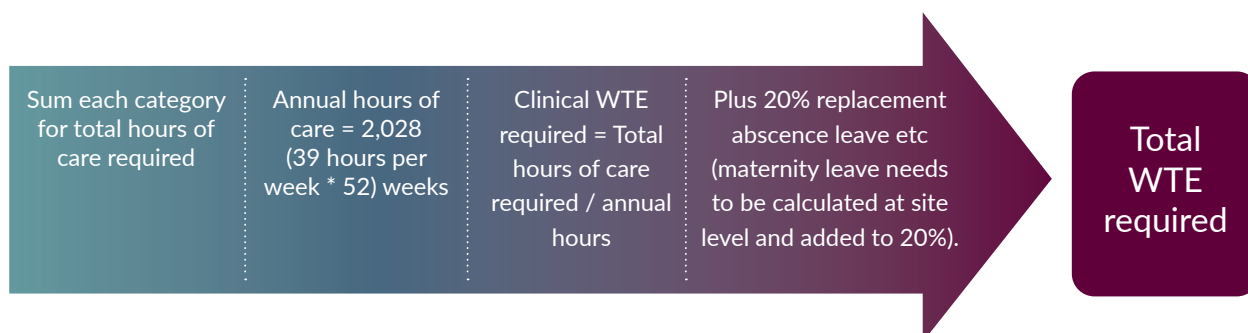


Figure 6 - To calculate the total number of nursing care hours required

### 4.3 Examples of the NHpPP Approach

#### 4.3.1 Example of Calculation for Hospital with Greater than 40,000 Annual Presentations

Table 2 - Total WTE Required in an Emergency Department with 66,300 Patient presentations per Annum*				
Number of Yearly Presentations to ED	Manchester Triage Category	Number of Attendances per Triage Category	Number of Hours of Care per Triage Category**	Total Number of Hours Required (Step 2Xstep 3)
66,300	Immediate	430	6.13	2,635.90
	V. Urgent	17,660	3.83	67,637.80
	Urgent	33,370	2.33	77,752.1
	Standard	13,405	1.42	19,035.10
	Non-urgent	1,435	0.58	832.30
<b>Total Number of Nursing Hours per Patient Presentation</b>				<b>167,893.2</b>

\*Excludes nursing staff required for Triage, CNM 2 post or staff caring for patients who have completed their emergency care but remain in the ED waiting for a bed.

\*\*Standardised Hours or ED Care Time can be validated



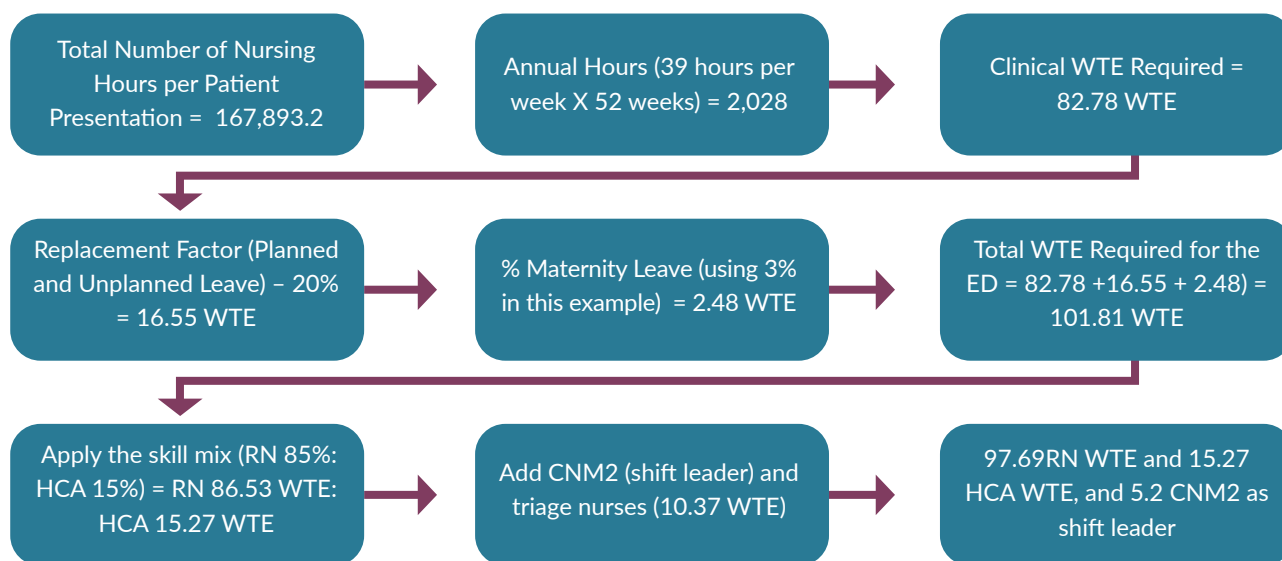


Figure 7 – Hospital with Greater than 40,000 Annual Presentations Example Calculation

## 4.4 Calculating Nurse Staffing for Triage

Triage in ED in Ireland is predominantly undertaken by RNs with experience in emergency care. Triage is an extremely important role, and, for many patients, it is their first point-of-contact with staff in the ED. Accurate triaging of patients, using the Manchester Triage System, is essential to ensure that patients receive safe and effective care according to their level of urgency. No models were identified that can be used to determine the number of nursing staff required to provide triage; however, benchmarking with hospitals and reports internationally that have similar levels of presentations to Model 3 and Model 4 EDs in Ireland was undertaken. Previous reviews of the Australian ED system have identified that, although there is inconsistency across the service, the number of nurses required to provide triage is associated with ED activity. In general, EDs with presentations similar to Model 3 hospitals have one triage

RN on each shift, 24 hours per day. EDs with presentations similar to Model 4 hospitals generally have two triage RNs per shift; in some cases, when there are large volumes of patients attending, this may increase to three triage RNs per shift (Health Policy Principal Committee 2011; Vardell *et al.* 2019).

It is recommended that the number of RNs allocated to triage in ED is based on the number of annual patient presentations. In general, EDs with annual presentations greater than 40,000 should have a minimum of two RNs allocated to triage per shift, 24/7. EDs with less than 40,000 presentation per year, should have a minimum of one RN allocated to triage per shift, 24/7. The assessment of staffing for triage must always take the professional judgement of the senior nursing management team into consideration.

### 4.4.1 Example of Calculation for Hospital with Greater than 40,000 Annual Presentations

Table 3 – Calculating Nursing Staff Required for Triage per Annum for an ED with greater than 40,000 presentations per annum

Number of RNs Required for Triage	Hours Required	Total Nursing Hours Required	Clinical WTE Required*	Replacement Factor (Planned and Unplanned Leave) – 20% WTE**	Total Direct WTE Required for Triage
2 Nurses	24	48	8.64	1.73	10.37

\*48X365/2028 (Annual Hours) \*\*20% of WTE Required

### 4.4.2 Example of Calculation for Hospital with Less than 40,000 Annual Presentations

**Table 4- Total WTE Required in an Emergency Department with 29,840 Patient presentations per Annum\***

Number of Yearly Presentations to ED	Manchester Triage Category	Number of Attendances per Triage Category	Number of Hours of Care per Triage Category*	Total Number of Hours Required (Step 2Xstep 3)
29,840	Immediate	201	6.13	1,232.13
	V. Urgent	7,386	3.83	28,288.38
	Urgent	12,451	2.33	29,010.83
	Standard	8,685	1.42	12,332.70
	Non-urgent	1,117	0.58	647.86
<b>Total Number of Nursing Hours per Patient Presentation</b>				<b>71,511.90</b>

\*Excludes nursing staff required for Triage, CNM 2 post or staff caring for patients who have completed their emergency care but remain in the ED waiting for a bed.

\*\*Standardised Hours or ED Care Time can be Calculated

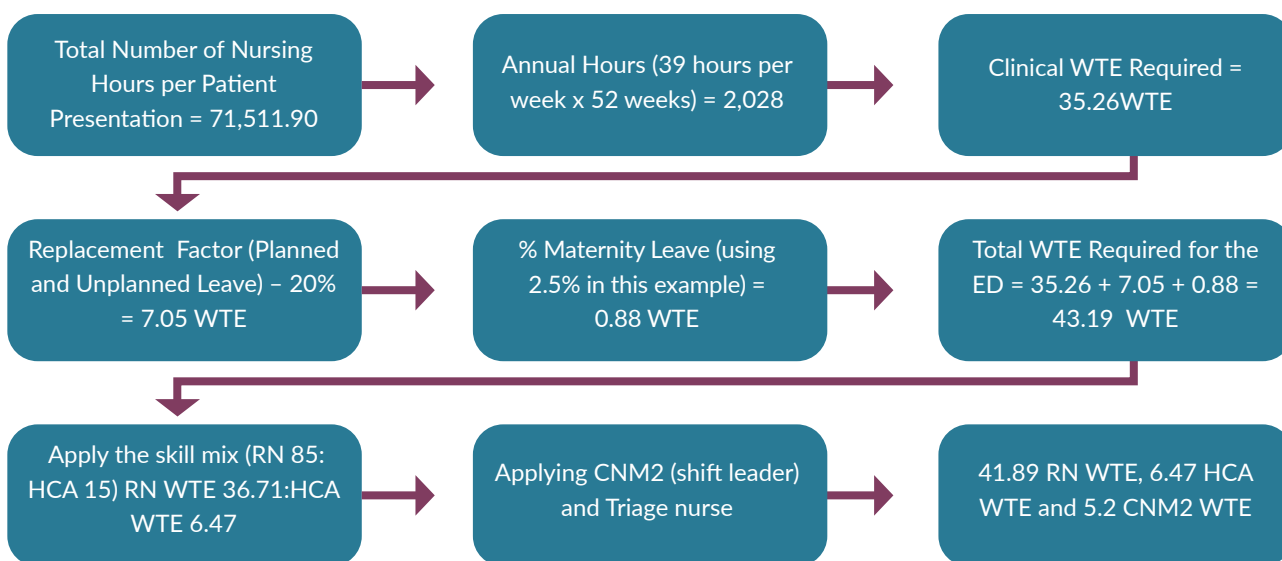


Figure 8 - Hospital with Less than 40,000 Annual Presentations Example Calculation

**Table 5- Calculating Nursing Staff Required for Triage per Annum for an ED with less than 40,000 presentations per year**

Number of RNs Required for Triage	Hours Required	Total Nursing Hours Required	Clinical WTE Required*	Replacement Factor (Planned and Unplanned Leave) - 20% WTE**	Total Direct WTE Required for Triage
1.0 WTE	24	24	4.32	0.86	5.18

\*24X365/2028 (Annual Hours) \*\*20% of WTE Required

## 4.5 IU Example

It was identified that neither the NHpPD or NHpPP models were appropriate to use to determine staffing levels in IUs. This conclusion was reached based on:

- The NHpPD model applies to wards that provide 24/7 care, where patients are expected to remain as inpatients for at least 24 hours. This is not in line with the aims and operating hours of IUs.
- The NHpPP model assesses the staffing required based on number of presentations and triage score. The triage assessment is a key undertaking in the assessment and is not routinely used in IUs.

Based on the minimum staffing requirements identified, attendance volumes and clinical need (HSE 2019), Table 6 sets out the recommended WTE required for an IU. The Framework endorses the recommended approach set out in the *National Emergency Medicine Programme Guidance Document on Staffing of Injury Units* (HSE, 2019), including the incorporation of 20% estimated leave for nursing staff with the addition of the local maternity leave percentage.

## 4.6 Unscheduled / Acute Floor Areas (e.g., AMAU / ASAU)

A subgroup of the Taskforce consisting of Department of Health and National Care Programme for Acute Medicine and for Acute Surgery representatives convened specifically to review the options and evidence available in relation to

the acute floor areas such as the Acute Medical Assessment Unit and Surgical Assessment Unit. The subgroup tested the mechanisms and principles of the NHpPD, NHpPP and IU models/approaches to staffing acute floor units. It was determined that neither the NHpPD or NHpPP models are appropriate to the acute floor care environments and the IU model best represents the determination of staffing and skills mix in line with the model of care as defined by the national clinical care programmes for Acute Medicine and for Acute Surgery. This conclusion was based on the following:

- The NHpPD model applies to wards providing care over a 24/7 spectrum, where patients are expected to remain as inpatients for at least 24 hours. This is not in line with the objectives of either the National Acute Medical or Surgical Programmes.
- The NHpPP model assesses the staffing required based on the number of patient presentations and triage category. The triage assessment is not routinely used within the assessment and admission process into an Acute Medical or Acute Surgical unit.
- The IU approach recognises the nursing care required for short stay urgent care setting and would align with the principles of the Acute Medical or Acute Surgical Models of Care.

The Taskforce agreed that the IU approach of the Framework could be adopted by unscheduled care / acute floor settings that meet the approved models of care as set out by the Acute Medical or Acute Surgical care programmes.

Table 6 - WTE for IU as set out in EMP Guidance Document for Staffing IU (2019)

Grade	Availability	Requirement (hours per annum)	WTE required
ANP	1,716	1 ANP / shift for 4,380 hours p.a. = 2.7 WTE * plus 0.3 WTE to ensure other functions of the role such as education, research & CPD	3.0 WTE
CNM 2	1,623		0.5 WTE
Staff Nurse	1,623	1 Staff Nurse / shift for 4,380 hours p.a.	2.7 WTE

## 4.7 Conclusion

In the previous sections, the Framework assumptions, macro level factors, nursing workforce governance, along with a practice step-by-step guide have been outlined in order to provide a comprehensive approach underpinned by evidence to determine the optimum nurse staffing resource.

The recommendations set out in this Framework represent a significant change in the way in which current nurse staffing resources are determined in emergency care settings. This,

therefore, will require hospitals and hospital groups to commit to a structured plan, involving nurses at all levels, in different roles to engage and lead on the implementation of this framework. The key learning from the policy impact research (Drennan et al. 2022) provides the evidence on the impact of implementing the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings* and the patient, staff and organisational outcomes. It is therefore recommended that the Framework be rolled out nationally on a phased basis; this recommendation is further detailed in Chapter 5.



# Chapter 5:

## Framework Implementation- Making it Happen

This chapter presents the governance and oversight structure responsible for leading and delivering on the implementation of the Framework.

### 5.1 The Position – Nursing Workforce Informed by Evidence

Since the development of the *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland* (Department of Health 2018), the determination of safe and appropriate nurse staffing levels and skill-mix in the Irish healthcare system is no longer based on historical need or legacy issues but is informed by a systematic structured approach. This acknowledges the crucial and well documented relationship between safe nurse staffing levels and patient outcomes (Ball and Catton 2011; Francis Report 2013; Keogh Review 2013; Cavendish Review 2013; Berwick Report; Aiken *et al* 2014, Kane *et al* 2007, Griffiths *et al* 2014).

The advancement of frameworks for safe nurse staffing in Ireland are now highlighted in a number of policy and industrial relations agreements. Furthermore, implementation of Phase I and II of the Framework is a deliverable of the National Service plan (2022). This places the nursing profession in a strong position to deliver a robust implementation plan in a phased approach across service priority areas.

Recognising the requirement for robust governance and oversight and the need for timely implementation of the Safe Staffing Frameworks, the Department of Health invested in developing a National Lead for Safe Nurse Staffing Unit within the HSE led by a designated Director of Nursing. This Unit is providing significant support to deliver the implementation of each of the phases at both hospital and hospital group level.

### 5.2 Key Benefits

Significant investment has been secured to deliver national roll out of the *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland* (Department of Health, 2018) due to its key benefits both to deliver safer and better outcome for patients whilst simultaneously delivering a safe working environment for staff. Wider value improvement across those clinical areas where implementation is in progress is also expected.

With the health system currently under major reform through the delivery of Sláintecare, there is a requirement to promote the delivery of efficient and effective integrated care. Delayed access to essential diagnosis and treatment has been a common feature of the public's experience of emergency departments which requires a system-wide response, including investment. Furthermore, careful workforce planning to meet current and future staffing needs, and measures to ensure that clinical environments are attractive places to work for experienced, high-quality staff is identified as a key Sláintecare deliverable.

The testing of the pilot *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings* provided some key insights on the benefits of the introduction of a Framework that have included:

1. Patient benefits: decreased ED care time, reduced time to triage, reduction in number of patients who left ED prior to completion of their treatment and a reduction in levels of care left undone.
2. Staff benefits: increased perceptions of care quality, reduction in missed meal breaks, improved nurse to patient ratios, decreased levels of burnout and increased levels of job satisfaction.

3. Organisational benefits: efficiency savings through reduced agency usage.

Based on the above benefits, implementation of the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Setting* across the health system is a policy priority; however, future roll out must be informed by the Chief Directors of Nursing and Midwifery as the operational leads at hospital group level to ensure planning is realistic and deliverable in the context of the wider health system priorities and challenges.

### 5.3 Key Requirements for Successful Implementation

The *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland* (Department of Health 2018) was made available to the HSE to commence implementation in 2018. In preparation for implementation of the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings*, there are a number of critical success factors to consider when preparing a clinical site for implementation:

- The National Safe Staffing Implementation Group was established to guide, support and monitor the HSE implementation of the *Framework for Safe Nurse Staffing and Skill Mix in General and Specialist Medical and Surgical Care Settings in Ireland (2018)*. The group has designed structures and processes for implementation of the Safe Nurse Staffing and Skill Mix Framework in the HSE. It is recommended based on learnings from implementation of Phase 1, that the HSE continues to evolve this governance structure ensuring alignment with the Report of the Expert Review Body on Nursing and Midwifery (2022).
- A National Lead for Safe Nurse Staffing and Skill Mix was established in 2020 to oversee and deliver implementation of the Framework. This senior leadership position plays a key role in coordinating national implementation of the Framework. The National Lead should work closely with Directors of Nursing and Chief Directors of Nursing and Midwifery at hospital group level in implementing the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings*.
- The National Lead for Safe Nurse Staffing and Skill Mix will coordinate the necessary steps with the Director of Nursing or designate (e.g., Safe Nurse Staffing Coordinator) in the implementation of the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings*.
- A LIG will be established in each hospital for implementation of the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings*.
- The National Lead for Safe Nurse Staffing and Skill Mix should work closely with Directors of Nursing and Chief Directors of Nursing and Midwifery at hospital group level to determine the indicators that will be reported to measure the impact of implementing the *Framework for Safe Nurse Staffing and Skill Mix in Adult Emergency Care Settings*. Monitoring the longitudinal impact of the Framework on patient, staff and organisational outcomes is necessary. The LIG is ideally placed to provide this oversight function in the initial phases of implementation.

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## Appendix 1 Taskforce Phase 2 Membership

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Dr Siobhan O' Halloran (Chairperson until February 2020)	(Former) Chief Nursing Officer	Department of Health

1. **Ms Karen Greene**  
Deputy Chief Nursing Officer, Department of Health
2. **Mr Ray Healy / Ms Helen Corrigan**  
Nursing Project Officer, Department of Health
3. **Ms Trina Doran**  
Acute Hospitals Division, HSE
4. **Mr Paddy Barrett**  
National Human Resources, Department of Health
5. **Ms Enda Hoare**  
HSE HR
6. **Ms Deirdre Mulligan**  
Office of the Nursing and Midwifery Services Director, HSE
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National Lead for Safe Nurse Staffing & Skill Mix, HSE
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10. **Dr Gary Courtney**  
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11. **Ms Aveline Casey**  
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12. **Mr Tony Fitzpatrick**  
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