Delivering Care
Phase 2
Emergency Departments
Staffing Model

A Policy Framework for Nursing and
Midwifery Workforce Planning
in Northern Ireland
Introduction

Delivering Care aims to support the provision of high quality care, which is safe and effective in hospital and community settings, through the development of a framework to determine staffing ranges for the nursing and midwifery workforce in a range of major specialities.

Phase 2 of this work focuses on the Nurse staffing in core, Type 1 Emergency Departments (EDs).

This summary paper is intended to complement the Phase 2 framework policy document which provides a more detailed overview of the development of the staffing model for Emergency Departments in Northern Ireland (NI). This paper also seeks to provide an update on the progress to date for members of the Steering Group and Working Group to identify the current workforce baselines for ED Nursing and to identify workforce priorities for the next planning period.

It is also important that planning processes include the triangulation of findings from any recognised workforce planning tools alongside Key Performance Indicators (KPI's) for safe, effective, person-centred care. This work has been developed in the context of the principles of Quadruple Aim, which combines a focus on population health and wellbeing, safety, quality and experience, cost and value with experience of care givers.

Context

The subject of nurse staffing in EDs continues to be a matter for debate. Ensuring appropriate staffing has been referenced in inquiries and reviews, shown in research evidence and is viewed by patients and their carers as a key element in influencing the quality of care.

The second phase of the Delivering Care project builds on the methodologies and learning of the first Phase completed January 2014.

DOH policy sets out a strategic direction for services in NI, including principles for urgent and emergency care models for the future. The staffing model presented in this paper provides a flexible, considered approach to determining nursing staffing establishments for services within a changing model of provision.

The system of urgent care aims to ensure each community has local access to urgent health and social care services. Emergency care, specialist care and planned care services will be provided in hospitals for people whose health and care needs cannot be met in their own homes or their own communities. Triage services and patient transport will be critical to ensuring that individuals access the care appropriate to their needs on a timely basis.

The scope of Phase 2 was to: Develop a staffing ranges approach related to Type 1 Emergency Department care settings in Northern Ireland.
It is recognised that it will take time and resources to implement some of the recommendations and associated actions.

Work within organisations in relation to the provision of community and ambulatory assessment services, specialist assessment and admission units and speciality assessment teams continue to assist the flow and efficiency of service through EDs in the region.

The total number of A&E attendances in NI has changed significantly over the last 5 years. Trends between departments vary year on year across NI, but the general trend has been one of increase in attendances and therefore requirement for additional nursing expertise.

The process for determining the appropriate staffing establishment of each Type 1 ED in NI has been agreed by the project groups of the Delivering Care Project. It includes a review of relevant data for each ED, which demonstrates activity levels and number of people attending the ED, staffing models for the clinical areas of the department and consideration of the leadership and experience profile required.

Evidence

There has been significant research undertaken into Nurse staffing levels and skill mix, which shows a clear association between lower numbers of registered Nurses and significant reduction in the quality of patient outcomes. However, the specific evidence relating to Type 1 core EDs is more limited.

Where evidence has been collected, it indicates an association between lower Nurse staffing levels in EDs and a negative impact on patient outcome measures including longer waits for treatment and an increase in the number leaving the department without being seen.

Drivers

In the development of this staffing model, a range of strategic and operational drivers have been considered including:

- Demographic data and total attendance patterns in geographical areas across NI.
- Geographical location of the department.
- Recommendations of RQIA and other reviews.
- Demand on emergency care departments and changing profile of urgent and emergency care services.
- Feedback from patients and their families through, for example, 10,000 voices.
- Outcome of the Unscheduled Care task groups to improve patient outcomes, patient flows.
- Specific requirements for children’s and mental health services in an ED based on the type of nursing need which is being presented to the ED by the population that the Health and Social Care Trust (Trust) serves.
Benchmarking

Accessing benchmarking data to compare staffing arrangements within NI and across the UK is difficult as services vary considerably and data is not publically available.

Nonetheless, to support this work, information has been shared from two Trusts in the UK, and from a benchmarking analysis completed by Keith Hurst, a UK-based Independent Researcher, on attendances, throughput and workforce across 33 core Type 1 core EDs in England.

Assessment of the information and figures received showed a significant difference in Senior Clinical Nurse Presence (Band 6 and above) compared to all Level 1 core EDs in NI.

Emergency Department (Type 1) Nurse Staffing Range

On the basis of the Benchmarking exercise and detailed local assessment of recently commissioned core staffing requirements in two 2 NI Type1 core EDs, it has been concluded that staffing levels for Type 1 core EDs should be in the broad range 1:700 - 1:850 nurse to attendance ratio. Table 1 shows the staffing ranges from the UK Benchmarking sites and the local NI sites.

<table>
<thead>
<tr>
<th>Site</th>
<th>Attendance (15/16)</th>
<th>WTE staff</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK specific site</td>
<td>80,000</td>
<td>113</td>
<td>1:708</td>
</tr>
<tr>
<td>UK specific site</td>
<td>100,000</td>
<td>117</td>
<td>1:856</td>
</tr>
<tr>
<td>UK (33 SITES)</td>
<td>Variable</td>
<td>Variable</td>
<td>1:705 - 1:933</td>
</tr>
<tr>
<td>NI 1</td>
<td>89,000</td>
<td>119</td>
<td>1:747</td>
</tr>
<tr>
<td>NI 2</td>
<td>78430</td>
<td>97.6</td>
<td>1:803</td>
</tr>
</tbody>
</table>

However, it should be noted that this range is only a starter for discussion. It is not the final prescribed staffing numbers for every department as this must be developed in discussion with staff, managers and commissioners. This will also be dependent on a range of local factors which impact on the Emergency Department and should shape the planning processes. These factors, below, (in addition to attendances) will need to be considered in determining the target staffing numbers for individual departments:

- Site Locations within Trust to consider rural/urban.
- Geographical Distance from Regional Centre, which requires the availability of Nurses for transfers.
- Smaller Departments – despite having lower attendances, Out-of-Hours’ still require staffing in preparation to respond.
• Large Footprint
• Building Design/layout.
• RQIA Acute Hospital Inspections and other local and National inquiries, in relation to recommendations, specifically regarding Nursing Workforce and Quality Indicators.
• NIAS Triage, Dedicated NIAS triage area and the availability of nursing staff has a direct influence on NIAS turnaround times and overall impact on Patient experience.
• Children’s Services to consider availability/location of liaison services, ambulatory and inpatient children beds.

Discussions held around dependency measuring within EDs concluded that, whilst it is an important issue, acuity across sites would be comparable and therefore does not need to be considered as a separate influencing factor.

**ED Target Staffing**

Delivering Care seeks to address the association demonstrated between lower nurse staffing levels in EDs and a negative impact on patient outcome measures such as increased patient waiting times, increased number of patients leaving the department without being seen, time to triage, compliance with NEWS guidance, and administration/assessment of effectiveness of pain relief.

The adoption of a model approach was agreed through which a number of tools and methodologies could contribute to the final determination of a target funded establishment for each Type 1 core ED in NI.

The approach is built on several components that are outlined in the main Phase 2 framework document which includes the range of Nurse to attendance ratio, key staffing requirements including appropriate skill mix and a number of influencing factors. Staffing levels can only be established when all three elements of this model are considered.

**Senior Staffing Requirements**

The benchmarking exercise indicated that the levels of seniority of Nursing staff in NI were lower than elsewhere in the UK.

**Tables 2 and 3** below show a recommended, but not prescriptive, senior staffing requirement which will ensure that all key areas of the ED have an experienced nurse to provide expert clinical knowledge at all times to ensure that patient pathways function seamlessly throughout the department to improve patient safety and enhance their experience in the Department.
The skill mix takes account of an allocation of 100% of a ward sister/charge nurse’s time to fulfil their ward leadership responsibilities; supervise clinical care; oversee and maintain nursing care standards; teach clinical practice and procedures; be a role model for good professional practice and behaviours; oversee the clinical environment and assume high visibility as a nurse leader for the Department (Delivering Care Phase 1, 2014), (RCN, 2009), (Frances, R, 2013).

Table 2

<table>
<thead>
<tr>
<th>SMALLER EDs</th>
<th>WTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Band 7 Supervisory Ward Sister/Charge Nurse</td>
<td>1.00</td>
</tr>
<tr>
<td>1 Band 7 12 hrs Day peak activity</td>
<td>2.80</td>
</tr>
<tr>
<td>2 Band 6 Daytime / 12 hrs</td>
<td>5.60</td>
</tr>
<tr>
<td>2 Band 6 Night time / 12hrs</td>
<td>5.60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15.00</td>
</tr>
</tbody>
</table>

Table 3

<table>
<thead>
<tr>
<th>LARGER EDs</th>
<th>WTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Band 7 Supervisory Ward Sister/Charge Nurse</td>
<td>1.00</td>
</tr>
<tr>
<td>1 Band 7 24/7</td>
<td>5.60</td>
</tr>
<tr>
<td>3 Band 6 x 12 hr daytime 2 Band 6 Night Duty</td>
<td>14.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20.6</td>
</tr>
</tbody>
</table>

**Non-registered staff**

It is recommended that given the complexity of patient need and the skills and competence required to meet this need, the non-registered workforce should generally be working to a Band 3 Health Care Assistant role. It is accepted, however, that Trusts will continue to utilise their current Band 2 practitioners. Whilst this might cause initial inconsistencies, it is envisaged that this will improve when NIPEC completes their current work on the role of the HCA. The publication of the NIPEC project in 2016/17 will also inform any proposed review of recommendations on the Registered /non-registered skill mix ratio which is currently at 80/20. The following Tables 4 and 5 are the recommendations for the unregistered staff resource within larger and smaller EDs across NI.
Table 4

<table>
<thead>
<tr>
<th>Larger EDs</th>
<th>WTE</th>
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</thead>
<tbody>
<tr>
<td><strong>Non-registered Staff:</strong></td>
<td></td>
</tr>
<tr>
<td>4 WTE 12hrs daytime</td>
<td>11.11</td>
</tr>
<tr>
<td>3 WTE night duty</td>
<td>8.33</td>
</tr>
<tr>
<td>(7 WTE x 24/7)</td>
<td></td>
</tr>
<tr>
<td><strong>Total (WTE)</strong></td>
<td><strong>19.44</strong></td>
</tr>
</tbody>
</table>

Table 5

<table>
<thead>
<tr>
<th>SMALLER EDs</th>
<th>WTE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-registered Staff:</strong></td>
<td></td>
</tr>
<tr>
<td>2 WTE Daytime / 12hrs</td>
<td>5.60</td>
</tr>
<tr>
<td>2 WTE Night duty</td>
<td>5.60</td>
</tr>
<tr>
<td><strong>Total (WTE)</strong></td>
<td><strong>11.2</strong></td>
</tr>
</tbody>
</table>

The Band 5 staffing requirement will be calculated by deducting the proposed Band 7 / 6 and 3 resource from the overall WTE required for the Department.
Influencing Factors

Workforce planning for nursing staff is both complex and diverse. The application of processes or approaches to determine the number of competent individuals required to provide the appropriate level of care for a particular client group can be a challenge. As part of the Delivering Care Framework, a number of factors that impact on the opportunity to deploy staff to provide safe and effective person-centred care have been identified and will be considered to agree the final staffing model for each Type 1 core ED in each Trust.

Workforce

- Optimal rostering of staff shift patterns to deliver safe and effective care will require deployment of appropriate skill mix availability within the nursing workforce to match the variations in the workload.
- The 100% allocation of the Department sister/charge nurses time for overall responsibility of the Department.
- Management of recruitment and the management of planned and unplanned absence allowance to ensure effective deployment of staffing resources.

Environment and Support

- The geographical layout, location, including proximity to the regional trauma centre and size of the department and clinical environment, impacts on the provision of safe and effective person-centred care.
- In addition, the technology and support of admin and portering staff impacts on the supportive staff infrastructure and ability to streamline care appropriately.

Activity

- The planned/unplanned attendances and patient dependency influence workload requirements and are an important workload indicator which must be reviewed at regular intervals.
- Seasonal variations, service developments, quality and safety reviews, can result in shifting workloads.
- Trends in lengths of stay in the department will impact on staffing levels and therefore assisting the flow through the Department to reduce the time spent in the Department is a vital influencing factor.
Professional Regulatory Activity

- Revalidation and time allocated to support nurses in their practice, supervision and preceptorship are regulatory standards that are incorporated into the planned and unplanned absence allowance of 24% for NI.

Monitoring

Implementation of the factors identified and local governance requirements to deliver on agreed key performance indicators requires a sufficient nursing workforce to deliver safe and effective care. On occasions when nurse staffing may be outside the policy range, the Executive Director of Nursing must provide assurances about the capacity of the workforce to provide quality Nursing care to patients, and the efficient use of resources through internal and external professional and other assurance frameworks, including KPI dashboards.

Implementation

As with the Delivery Care Model the final staffing for each Type 1 core ED will be agreed following a discussion with the Trust Workforce Lead, the Trust Clinical Nurse Lead and the Commissioning Nurse Consultant.

Review

This model will be reviewed in 2019.