The Regulation and Quality Improvement Authority

Review of Hospitals at Nights and Weekends

July 2013
The Regulation and Quality Improvement Authority

The Regulation and Quality Improvement Authority (RQIA) is the independent body responsible for regulating and inspecting the quality and availability of health and social care (HSC) services in Northern Ireland.

RQIA’s reviews are designed to identify best practice, to highlight gaps or shortfalls in services requiring improvement and to protect the public interest.

Our reports are submitted to the Minister for Health Social Services and Public Safety and are available on the RQIA website at www.rqia.org.uk

Membership of the Review Team

Mrs Anne Brooks - RQIA Lay Reviewer
Mr Paul Carter - Clinical Director of Surgery (The Royal Liverpool and Broadgreen University Hospitals NHS Trust)
Ms Liz Coles - Senior Patient Safety Manager (Guy’s and St Thomas NHS Foundation Trust)
Dr Steven Kinnear - Registrar in Acute Medicine and Medical Manager (HSC Board Liaison Group)
Mr Peter Vance - Lead Nurse – Hospital 24/7 (University Hospital Birmingham)
Dr David Stewart - Director of Reviews and Medical Director, RQIA

Dr Hall Graham - Head of Primary Care, RQIA
Ms Patricia Corrigan - Project Administrator, RQIA
Mr Jim McIlroy - Project Manager, RQIA

People who assisted with the fieldwork for the review

Mrs Sheelagh O’Connor - Inspector Infection Prevention/Hygiene Team, RQIA
Mrs Lyn Gawley - Inspector Infection Prevention/Hygiene Team, RQIA
Mrs Margaret Keating - Inspector Infection Prevention/Hygiene Team, RQIA
Mrs Liz Colgan - Senior Officer Infection Prevention/Hygiene Team, RQIA
Ms Mary McClean - Project Manager, RQIA
Mr David Philpot - Project Manager, RQIA
Ms Liz Hynes - HR Advisor on Medical Staffing Issues (HSC Board Liaison Group)
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary .......................................................................................... 1</td>
</tr>
<tr>
<td>Section 1 - Introduction .................................................................................. 2</td>
</tr>
<tr>
<td>1.1 Terms of Reference .................................................................................. 2</td>
</tr>
<tr>
<td>1.2 Background ............................................................................................... 4</td>
</tr>
<tr>
<td>1.3 Methodology ............................................................................................... 9</td>
</tr>
<tr>
<td>Section 2 - Findings ....................................................................................... 11</td>
</tr>
<tr>
<td>2.1 Leadership and Organisational Structure ............................................... 11</td>
</tr>
<tr>
<td>2.2 Services Available at Nights and Weekends ............................................. 13</td>
</tr>
<tr>
<td>2.3 Hospital at Night Teams ............................................................................. 19</td>
</tr>
<tr>
<td>2.4 Handover Arrangements .............................................................................. 21</td>
</tr>
<tr>
<td>2.5 Nurse Staffing at Nights and Weekends .................................................... 26</td>
</tr>
<tr>
<td>2.6 Medical Staffing at Nights and Weekends .................................................. 29</td>
</tr>
<tr>
<td>2.7 Communication Arrangements ..................................................................... 33</td>
</tr>
<tr>
<td>2.8 Safety ......................................................................................................... 35</td>
</tr>
<tr>
<td>Section 3 - The Experience of Patients ......................................................... 38</td>
</tr>
<tr>
<td>3.1 Information Obtained Through Surveys .................................................... 39</td>
</tr>
<tr>
<td>3.2 Availability of Services for Patients and Families ...................................... 50</td>
</tr>
<tr>
<td>Section 4 - Conclusions and Recommendations ............................................. 51</td>
</tr>
<tr>
<td>4.1 Conclusions ............................................................................................... 51</td>
</tr>
<tr>
<td>4.2 Recommendations ....................................................................................... 60</td>
</tr>
<tr>
<td>Glossary ........................................................................................................... 63</td>
</tr>
</tbody>
</table>
Executive Summary

The delivery of safe care for patients at nights and weekends is a key area of focus for all hospitals. A growing body of evidence has highlighted increased risks during these periods. Negative impacts of factors on patient’s sleep, including noise at night, are increasingly recognised. New models of care are being established to improve access, quality and safety of services outside the normal working week.

The aim of the review was to examine the arrangements in place to ensure the safe delivery of care, during nights and weekends, in acute hospitals across Northern Ireland. The review also considered the experience of patients. Evidence for the review was collected using a range of methods. These included completion of a self-assessment questionnaire by health and social care trusts; focus groups with hospital staff; observations of evening handovers in each hospital admitting emergency medical and/or surgical patients; meetings with trust leads; and two patient surveys.

RQIA found that there were differences between hospitals in the availability of services, staffing, policies and procedures, communication arrangements and access to information for patients. There is a general need to review arrangements for handover back after night shifts, to staff coming on duty.

At times, pressures to accommodate emergency admissions can lead to the transfer of patients between wards at night although hospitals do seek to minimise this. There can also be difficulties in providing staff to accompany patients, who need to be transferred between hospitals at night.

RQIA found many examples of good practice in the delivery of care at nights and weekends in hospitals in Northern Ireland. The introduction of multidisciplinary Hospital at Night teams has enhanced care coordination and handover arrangements. A regional network of Hospital at Night Coordinators has been established to share good practice across the region.

There was evidence of increasing weekend access to a range of services. Hospitals had introduced local innovations to enhance services at nights and weekends, for example: a discharge facilitation service; electronic record systems; an emergency nursing team; specialist consultant ward rounds; formal weekend handovers; and the use of robots to enhance pharmacy and facilitate consultant opinion.

The experience of patients was explored through surveys. Although many patients reported positively on their hospital experience, a large number reported that their sleep was disturbed during their stay. Noise was the main factor but brightness and temperature control were also highlighted.

RQIA has made 29 recommendations for improvement as a result of the findings of this review. Several of these relate to the standardisation of procedures across hospitals in Northern Ireland.
Section 1 - Introduction

Effective and safe management of patients during nights and weekends is increasingly being emphasised as a key challenge for hospitals.

Concerns have been raised that there is not equality of access, to optimum diagnosis or treatment, for patients admitted outside the Monday to Friday, 8am to 6pm, period. Researchers have described increased mortality rates for patients admitted at weekends. Medication errors have been reported to be more frequent during nights and weekends. Staffing levels and working patterns of nurses and doctors have been identified as critical to delivering effective care during this time.

Following public consultation in 2011, the Regulation and Quality Improvement Authority (RQIA) developed a programme of reviews to be carried out during the three year period, 2012-2015. This review was included within the programme, to examine the arrangements in place to ensure the safe delivery of care during nights and weekends.

1.1 Terms of Reference

The terms of reference for this review were:

1. To describe the arrangements in place, in HSC hospitals across Northern Ireland, for the management of acute medical and surgical patient admissions at nights and weekends.

2. To review the systems in place to ensure the safety and quality of care in hospitals at nights and weekends, with a specific focus on medical and surgical patients.

3. To collect information on the experiences of patients using hospital services during nights and weekends.

4. To report on the findings and make recommendations for improvements to the provision of care in hospitals at nights and weekends.

---

1 NHS Improvement, 2012: Equality for all. Delivering safe care- seven days a week.
3 Dr Foster Hospital Guide, December 2012: Fit for the Future
4 Aujesky et al: Weekend versus weekday admission and mortality following acute pulmonary embolism, Circulation: 2009 119(7) 962-968
7 Royal College of Physicians, October 2012: Acute care toolkit 4. Delivering a 12-hour 7 day consultant presence on the acute care unit.
For the purposes of this report, the term out-of-hours is also used to describe the nights and weekend period. While there are different interpretations of the out-of-hours period, for this review this period was considered to include public holidays and all periods outside of Monday to Friday, 8am to 6pm.

The focus of the review was specifically on hospitals which admit adult emergency medical and surgical patients. The review did not include:

- Community hospitals.
- Mental health and learning disability hospitals.
- Maternity services (which have been subject to a review of intrapartum care in the RQIA Review Programme published in May 2010).
- Accident and emergency/emergency departments, paediatric departments.
- The following out-of-hours services: general practitioner (GP) services, general dental and community pharmacy services, mental health and other social care services. A review of GP out-of-hours services was carried out by RQIA in 2009-10.
1.2 Background

Risks Associated With Out-of-Hours Care

There is a growing body of research linking poorer outcomes of hospital care to admissions taking place at weekends. There is limited evidence of increased risk when patients are admitted during weekday nights.\(^8\)

In 2010, the Dr Foster Unit at Imperial College London reported there was a higher mortality rate for patients admitted as an emergency at weekends to hospitals in England. Conditions included: heart attacks, heart failure, stroke, some cancers and aortic aneurysms. There was, on average, a 7% higher mortality rate for these patients compared with those admitted between Monday and Friday.\(^9\)

In 2012, the results of a study\(^{10}\) were reported which analysed all admissions to NHS hospitals in England, during the financial year 2009-10. All patients were followed up for 30 days after admission. The authors reported that admission at the weekend is associated with increased risk of subsequent death within 30 days of admission. The authors did find that the likelihood of death actually occurring on a weekend day is less than on a mid-week day. The findings were similar for both emergency and elective admissions at the weekend. The study included information about some hospitals in the United States of America (USA) and the pattern there was consistent with the results from England.

Studies into the risks of mortality for specific emergencies have reported higher death rates, following weekend admission, for pulmonary embolism\(^{11}\) and myocardial infarction.\(^{12}\) Higher mortality rates for myocardial infarction were considered to be possibly linked to lower rates of invasive procedures taking place in hospitals for these patients at weekends.

In an extensive study, for the period 2000 to 2007, survival rates of patients following cardiac arrest taking place in hospitals in USA, were found to be lower during nights and weekends.\(^{13}\)

The risk of medication errors linked to time of day has not been extensively studied. Although one hospital in USA found there was a higher rate of errors during evening and night time shifts compared to daytime shifts. Rates were higher during

---

8 Mourad M., Adler J. Safe, high quality care around the clock: What will it take to get us there?, J Gen Intern Med, 2011, Sept 26(9) 948-950  
9 Dr Foster: Inside your hospital, Dr Foster Hospital Guide 2001-2011.  
13 Poberty MA et al, Survival from in-hospital cardiac arrest during nights and weekends, JAMA. 2008 Feb 20;299(7):785-792
weekends compared to weekdays. The authors recommended that, while further research was needed to validate these findings, error prevention efforts should be instituted for evening, night-time and weekend medication dispensing and administration.  

In USA, a tool was developed by Dr David Shulkin to help assess risks to hospital safety on nights and weekends. The Safety on Weekends and Nights (SWAN) tool considers eight categories of hospital based services. The tool is designed to assist clinical and administrative leaders in understanding services and processes of care that may eliminate differences in outcomes between day and night care. This tool has been used to inform the data collection processes for this review.

**Medical Staffing Arrangements at Nights and Weekends**

In recent years there have been fundamental changes in the pattern of medical staffing of hospitals during nights and weekends. Hospitals traditionally relied on tiers of specialty-specific, resident, on-call doctors. These were usually doctors in training. Consultants were non-resident during the night and at weekends, but available on-call from home. Concerns about this approach focused on the impact of working excessive hours on the quality of care provided to patients and the mental and physical health of doctors in training.

The introduction of the European Working Time Directive (EWTD) acted as a major catalyst in changing the working patterns of doctors in training. When fully implemented in 2009, the EWTD limited doctors in training to a maximum 48 hour week, averaged over a six month period. The EWTD also set minimum requirements in respect of rest periods and annual leave.

Several approaches were developed to support the implementation of the EWTD for junior doctors while aiming to maintain or improve the quality of patient care. One system, which was introduced in many hospitals in the United Kingdom, was the Hospital at Night model (Section 2.4 below).

There is an increasing focus on the benefits of having consultant-delivered care in hospitals. Changes have also been taking place in the arrangements for consultant cover at nights and weekends. In 2012, the Academy of Medical Royal Colleges published a report of a review of the evidence for medical care being delivered by consultants. The key benefits identified in the evidence were found to be:

- rapid and appropriate decision making
- improved outcomes

---

15 Shulkin D.J. Assessing hospital safety on nights and weekends: the SWAN tool, J Patient Safety, 2009 Jun; 5(2) 75-78
16 Academy of Royal Colleges 2012; The benefits of consultant-delivered care
more efficient use of resources
enhanced GP access to the opinion of a fully trained doctor
meeting patient expectations of access to appropriate and skilled clinicians and information
benefits for the training of junior doctors

The report attributed the increased mortality among patients treated in hospitals at weekends to decreased consultant involvement in care.

In October 2012, the Royal College of Physicians (RCP) and the Society for Acute Medicine (SAM) published an acute care toolkit Delivering a 12-hour, 7-day Consultant Presence on the Acute Medical Unit. The aim of the toolkit was to provide guidance and describe working practices to help achieve this objective.17

In December 2012, the Academy of Medical Royal Colleges published a set of three patient-centred standards for the delivery of consistent inpatient care, irrespective of the day of the week.18 The standards are designed to reflect the importance of daily consultant review and the consequent actions, to ensure progression of the patient's care pathway. The standards are:

1. Hospital inpatients should be reviewed by an on-site consultant at least once every 24 hours, seven days a week, unless it has been determined that this would not affect the patient’s care pathway.

2. Consultant-supervised interventions and investigations along with reports should be provided seven days a week if the results will change the outcome or status of the patient’s care pathway before the next normal working day. This should include interventions which will enable immediate discharge or a shortened length of hospital stay.

3. Support services both in hospitals and in the primary care setting in the community should be available seven days a week to ensure the next steps in the patient’s care pathway, as determined by the daily consultant-led review, can be taken.

The Hospital at Night Model

The Hospital at Night model was developed by the Joint Consultants Committee (representing the British Medical Association and the Academy of Medical Royal Colleges) and the Modernisation Agency. It was designed to help trusts comply with the EWTD. The approach proposed that a multidisciplinary team comprising doctors, nurses and allied health professionals, provide clinical care across the hospital, outside normal working hours.

17 Royal College of Physicians: Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit, October 2012.
18 Academy of Royal Colleges 2012; Seven day consultant present care.
Key elements underpinning the approach include: multidisciplinary handovers, bleep filtering (i.e. minimising the inappropriate bleeping of doctors and helping to redistribute work effectively) and extended roles of practitioners other than doctors\(^ \text{19} \).

An evaluation of the pilot projects for this model demonstrated that it had achieved the aims of: helping trusts comply with the EWTD; improve the working lives of clinical staff; and improve clinical care. Team working was found to provide valuable support to staff at night. Through handover and improved clinical coordination, the model was found to result in better clinical prioritisation and management of patients.

In Northern Ireland, health and social care trusts have been putting in place Hospital at Night systems, supported by the Health and Social Care Board. A regional network of Hospital at Night coordinators has been established to share good practice across the region.

**Nurse Staffing Arrangements**

There is a growing body of research examining the relationships between nurse staffing levels and patient outcomes. A study of one large hospital concluded that, when staffing levels of registered nurses fell below target levels, this was associated with increased mortality of patients.\(^ \text{20} \) In this study, day and evening shifts were more likely to be below target levels than night shifts.

A systematic review has been carried out of the literature relating to the impact of ‘off-shifts’ (nights, weekends and/ or holidays) on quality and employee outcomes in hospitals.\(^ \text{21} \) The review concluded that a slight majority of the published studies found working at nights and weekends may be associated with poor patient and employee outcomes. Nurses working at night were found to suffer more from fatigue, sleep disturbance and reduced well-being compared to those who worked during the day.

The authors recommended further research is carried out to determine if there are differences between the day and out-of-hours nursing workforces. They considered there should be increased education and training opportunities for permanent night nurses and the rotation of day nurses to work at nights and weekends should be minimised. Arrangements should be put in place to encourage night nurses to self-schedule working times to decrease fatigue, sleep disturbance and improve well-being.

\(^{19}\) The implementation and impact of Hospital at Night pilot projects: An evaluation report (Department of Health (The University of Manchester Business School/ York Health Economics Consortium, August 2005)


Focus on Provision of “24/7 Care”

In December 2012, NHS Improvement published a guide for health services which describes case studies where services are being extended, outside standard working hours, and across the weekend period. The guide sets out four levels for services to consider, in moving towards improved service access at nights and weekends.

Level 1 - Services limited to one department or service which is beginning to deliver some services beyond the 8am-6pm, Monday to Friday, period.

Level 2 - Services that are delivered seven days per week, but not always offering the full range of services that are delivered on week days.

Level 3 - A whole service approach to seven day service delivery that requires several elements to work together to facilitate clinical decision or treatment, often covering more than one work force group.

Level 4 – A whole system approach to seven day service delivery by integrating the requirements for elements of seven day services across more than one specialty area.

The guide sets out practical examples which have demonstrated service improvement at each of these levels.

Patient Experience

The impact of noise has been the most frequently reported, negative experience by patients spending nights in hospital.

In 2010, the NHS Confederation publication: Feeling Better? Improving Patient Experience in Hospital, highlighted the Care Quality Commission inpatient surveys in England which had shown 21% of respondents reported being bothered by noise at night from hospital staff. This had risen from 18% in 2005.

The Scottish Inpatient Patient Experience Survey for 2012 reported that 30% of patients felt they were bothered at night by noise, during their hospital stay. Improvements were reported in scores from some Health Boards, most noticeably NHS Forth Valley, following the opening of a new hospital.

In USA, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a national standardised survey of patients’ experience of hospital
care. Survey participants are asked; During this hospital stay how often was the area around your room quiet at night? In December 2012, the HCAPS report identified the national average of patients who responded to this question as always, was 60%. State responses varied from 49% in New York to 73% in Louisiana. Some hospitals in USA are now instituting strategies to reduce noise at night.

A recent study has examined the relationship between sleep disruption and hospital noise. The authors concluded that hospital sounds during sleep influence both cortical brain activity and cardiovascular function. They considered that it is essential to improve the acoustic environments of new and existing healthcare facilities, to enable the highest quality of care.

1.3 Methodology

During the planning of the review, it was identified that the HSC Board Liaison Group was undertaking its annual review of the Hospital at Night teams across the trusts. As both pieces of work were similar in nature, after discussion, it was agreed the two organisations would work together. This would reduce duplication of work in this area and minimise the workload for the trusts.

The methodology adopted for this review was designed to gather information about each hospital, including the views of staff and patients, about hospitals at nights and weekends. The methodology included the following steps:

1. A review of relevant literature was undertaken to examine the context for the review. Lines of enquiry were developed to explore the operation of hospitals at nights and weekends. A tool for the safety assessment of hospitals at nights and weekends (SWAN Tool) was identified which had been used in the United States. The author, David J. Shulkin, M.D., was contacted and gave permission for the tool to be adapted for use in Northern Ireland.

2. A self-assessment questionnaire, based on the SWAN Tool, was forwarded to each hospital included within the scope of the review. The questionnaire included sections on organisational structure, services available, staffing, communication and safety.

3. Observation visits to each hospital were undertaken during the evening period, to view how the handover of information about patients and the hospital, was communicated between staff going off and coming on duty. Although hospitals differed in relation to the composition of teams on duty, observations of handovers were carried out for patient flow teams, medical

---

27 Shulkin David J. - Safety Assessment on Nights and Weekends- The SWAN Tool (Safety at Weekends and Nights) - Journal of Patient Safety- Accepted on Publication - January 2009
and surgical nursing teams and the Hospital at Night team in each of the hospitals visited. Additional observations were also carried out for critical care outreach teams at two of the hospitals and one weekend handover was observed.

4. The view of staff was a key element of this review. Focus groups were held with key staff in all hospitals. Staff interviewed included: senior clinical and nursing leads for medicine and surgery; nursing staff from medical and surgical wards; junior doctors; staff from other services, such as medical records, pharmacy, radiology, laboratories, allied health professionals and portering.

5. A survey was carried out to obtain the views of patients who had been admitted to medical and surgical wards. To maximise the number of responses, two approaches were adopted. Current patients and those being discharged were given questionnaires by hospital staff and asked to complete and return them directly to RQIA. RQIA also worked in partnership with the Patient Client Council28 (PCC) who emailed the questionnaire to all people on their membership list. The PCC asked for members or members with relatives who had stayed on a medical or surgical ward to complete the questionnaire.

6. Validation visits were undertaken to HSC trusts to meet representatives of senior management and senior clinical and nursing leads responsible for each hospital.

7. Publication of a report on the findings from the review, including recommendations for improvement.

---

28 The Patient and Client Council is an organisation that was established in Northern Ireland to represent the interests of the public, by engaging with them to obtain their views on health and social care services. The PCC operates a voluntary membership scheme for anyone interested in health and social care and regularly engages with the membership to obtain their views about particular services.
Section 2 - Findings

2.1 Leadership and Organisational Structure

The review team found each hospital to have clear accountability arrangements in place for the delivery of services at nights and weekends.

On each hospital site there is a senior nurse who has a lead role in the management of the hospital. The title of this nurse differs between hospitals and could either be the night sister, the patient flow coordinator or the bed manager. The roles, however, are similar and include: nurse staffing management, coordination of patient flow, liaison with services within and outside the hospital, and responding to incidents and emergencies. In most hospitals, these nurses generally work only at nights or weekends in a single hospital. However, in some hospitals they alternate between days and nights. In the Belfast Health and Social Care Trust (Belfast Trust), patient flow coordinators rotate between the three different hospital sites, resulting in the sharing of experience between sites. In all trusts, there was no succession planning in place for this role, although in some hospitals, ward sisters can be asked to cover during periods of leave.

The medical cover arrangements differ between hospitals depending on the services provided. There are clear lines of accountability between on-site doctors, who may be doctors in training, and on-call consultants for individual specialties.

Arrangements are in place in each trust to enable issues, emerging at nights or weekends, to be escalated to on-call senior managers. The Southern Health and Social Care Trust (Southern Trust) has developed a protocol that sets out the escalation arrangements. All trusts maintain logs of issues, and serious adverse incidents, which are identified out-of-hours. Issues arising can be escalated to senior management teams and boards of organisations when required.

Some trusts provided examples of issues relating to nights or weekends which had been placed on organisational risk registers such as the risks of staff working alone at night and the isolated location of some wards. Trusts do not maintain separate risk registers for services at nights and weekends, although this was being considered by some organisations.

All trusts advised there are systems capable of identifying issues or trends, which might occur during the out-of-hours period. The Southern Trust, Northern Health and Social Care Trust (Northern Trust), South Eastern Health and Social Care Trust (South Eastern Trust) and Western Health and Social Care Trust (Western Trust), each advised that relevant quality and safety indicators are recorded and monitored separately for the out-of-hours period. The South Eastern and Belfast trusts advised report on mortality rates for the out-of-hours period, but other trusts did not, at the time of the review.
The review team met with directors and senior managers in each trust. Each organisation is committed to ensuring the safety of patients, and improving the availability of services, at nights and weekends.

In general, it was found there are no regular arrangements in place in any trust for directors to carry out management visits to wards at night or weekends.

In the Western Trust, senior managers visit wards on bank holidays. In the Belfast and Western trusts, senior manager visits are carried out at night, in line with their established schedules. The Southern Trust has an established process of regular visits to all departments in Craigavon Area and Daisy Hill hospitals at nights and weekends by the assistant director on-call. The on-call head of service regularly visits specific services out-of-hours.

Trusts described strategic developments which have impacted positively on the delivery of services at nights and weekends. Examples include:

- In the Belfast Trust, new specialty-specific arrangements for consultant cover in medical specialties have improved access to relevant specialists.
- In the Northern Trust, patients are now admitted to individual sub-specialties, which enhances specialist care.
- In the South Eastern Trust, the Downe and Lagan Valley hospitals do not admit emergency surgical patients, which have eliminated difficulties in ensuring emergency surgical cover at these hospitals.
- In the Southern Trust, the introduction of robot technology has facilitated the delivery of specialist advice and assessment from intensive care consultants based in Craigavon Area Hospital, to patients in the high dependency unit at Daisy Hill Hospital.
- In the Western Trust, the new South West Acute Hospital provides patients with single rooms, thereby reducing problems from noise and light at night.

Trusts also described significant challenges in providing and enhancing services at nights and weekends. In particular, growing pressures for emergency admission are impacting on how services are being delivered. This can lead, for example, to the need to transfer patients between wards in hospitals during the out-of-hours period which creates additional pressures for staff. Evidence of transfers between hospital sites was also noted in the Belfast Trust. Trusts described arrangements to enhance the flow of patients, including having increased numbers of consultant ward rounds.

All trusts support the enhancement of services, in particular at weekends, to increase service access for patients and improve patient flow through hospitals. Identification of resources to achieve this objective is a challenge for all organisations.
2.2 Services Available at Nights and Weekends

The review team sought information from trusts about the availability of a range of services in hospitals at nights and weekends. Access to services was also discussed during focus groups with staff from all hospitals.

Medical Records

All trusts advised there is access to individual medical records at nights and weekends. However, differences were reported in the arrangements of how to access the records and the availability of medical records administrative staff during the out-of-hours period. The only hospitals to staff medical records at both nights and weekends were the hospitals in the Belfast Trust, the Ulster Hospital and Altnagelvin Hospital. Antrim Area Hospital staffed medical records at the weekend. In the Southern Trust hospitals and at the South West Acute and Causeway hospitals, the medical records departments are not staffed at night or weekends.

All hospitals advised they have documented procedures for accessing medical records in the out-of-hours period, with the exception of Altnagelvin Hospital.

During focus groups, staff from a range of disciplines advised that, in general, they could access most medical records at nights and weekends. Although in some instances, access to full medical records was not possible until the following day. Staff advised it can take time to retrieve previous medical records for patients who had received treatment in other hospitals. Staff from the Ulster and Daisy Hill hospitals reported favourably on electronic record systems at these hospitals, which enabled information to be provided more rapidly.

Pharmacy

Hospitals advised that pharmacy services are provided on an on-call basis at night. At weekends, the hospital pharmacy may be open for a limited period to facilitate dispensing. In the Southern Trust and at the South West Acute Hospital, the use of robots to facilitate pharmacy services has enhanced service delivery at nights and weekends.

Hospitals have different arrangements in place for accessing drugs when the pharmacy is closed. Staff at the focus groups advised they would often borrow drugs from other wards and replenish them when the pharmacy opened. At Lagan Valley and Downe hospitals, for example, there are central stores of commonly required drugs, which can be accessed when required.

During focus groups, staff from both pharmacy and other disciplines considered that increased hours of access to on-site pharmacy would enhance service provision and, potentially facilitate more rapid discharge of patients at weekends.
Radiology

In urgent situations all hospitals have arrangements in place for the reporting of radiological investigations by on-call radiologists. Routine reporting of plain x-rays is generally not available at nights and weekends.

All hospitals can arrange for a portable chest x-ray to be taken within 60 minutes at nights and weekends. All hospitals can arrange for a computerised tomography (CT) scan to be taken throughout the out-of-hours period. This can be reported within 30 minutes.

All hospitals advised that ultrasonography is available at nights and weekends, with the exception of hospitals in the Southern Trust. The use of Doppler ultrasound investigations²⁹ in possible cases of deep vein thrombosis was reported to be available in hospitals in the Northern and Western trusts, but not routinely at nights and weekends in other hospitals.

All hospitals advised they did not have continuous access to magnetic resonance imaging (MRI) scans at nights and weekends.

Belfast Trust advised there was access to interventional radiology at nights and weekends, but no other trust provided this.

Some trusts advised that initiatives have been put in place to improve access to radiology. In the South Eastern Trust, for example, routine CT sessions are being provided at weekends. All trusts advised there are arrangements in place to enable on-call radiologists to access radiological investigations remotely during the out-of-hours period.

Staff at focus groups advised that access to radiology at nights and weekends is generally good, with urgent x-rays, and opinions on x-rays, available when required. One issue raised by staff was in relation to delays in transporting patients to radiology, as there was not always sufficient capacity in portering services.

Laboratory Services

All trusts provided details of the access to laboratory services at nights and weekends.

Haematology services are available at all times. Results for urgent samples are available between 30 minutes and one hour for all hospitals. There is 24 hour access to medical haematology telephone advice.

²⁹ A Doppler ultrasound uses reflected sound waves. It can assess the flow of blood in veins and arteries. It can be used to determine if the patient has a deep vein thrombosis (DVT) when blood has stopped flowing due to clotting in a vein.
Clinical biochemistry services are also available at all times. All trusts advised that results for urgent samples are available between 30 minutes and one hour. There is 24 hour access to telephone advice in relation to clinical biochemistry for all hospitals. All trusts advised that previous laboratory results can be accessed at hospitals at all times.

Four trusts advised there is continuous access to Toxbase, an online database, established by the National Poisons Information Service. The Northern Trust advised that access to this database is not available at nights and weekends in Antrim Area or Causeway hospitals.

In all hospitals, there is equipment available for point of care testing at nights and weekends. This enables trained medical and nursing staff to carry out specific tests. The range of investigations that can be carried out differs within and between hospitals, reflecting local circumstances. Examples of available tests include: blood gas analysers; blood glucose monitoring; troponin levels (which assist in diagnosis of suspected myocardial infarction); monitoring of drugs of abuse; and urinalysis.

Trusts advised that technology is available for on-call clinicians to access laboratory results remotely from hospitals in the Belfast, South Eastern and Southern Trusts. Such access is not available at hospitals in the Northern or Western Trusts.

Staff in focus groups stated that access to laboratory services at nights and weekends is generally good. Some staff indicated there can be delays at night in getting results from laboratories. An example of this was in the South West Acute Hospital. Here the laboratory only had one member of staff on duty that covered haematology, bloods and biochemistry, which may account for any delays. Laboratory staff advised that, at night, there may be occasional delays in telephones being answered by staff at ward level, when they are phoning through results.

**Cardiac Services**

Each hospital has access to a cardiac crash team on a 24 hour basis to respond to emergency situations.

The Belfast Trust advised that there is access at all times for patients to a cardiac catheterisation laboratory within 90 minutes of request. The Northern, Southern and South Eastern trusts advised that there is access within 90 minutes for patients through a referral pathway to cardiac catheterisation provided by the Belfast Trust. The Western Trust advised there is not continuous out-of-hours access to a cardiac catheterisation laboratory, within 90 minutes of request, for Altnagelvin or South West Acute hospitals.

Four trusts reported there is not access to stress testing and/or echo scanning, throughout the out-of-hours period. The Southern Trust advised that access is provided to echo testing at weekends, with planned sessions on Saturdays and for urgent inpatients on Sundays.
Staff did not raise any specific issues with the review team at focus groups about access to cardiac services at nights and weekends.

**Pain Management**

With the exception of the Belfast Trust, where a pain management service is provided for hospitals at the weekend, no other hospital provided a pain management service out-of-hours. The other trusts advised there was access to pain management advice at nights and weekends if required.

Staff attending focus groups indicated they could access advice out-of-hours, usually from anaesthetic colleagues, the consultant or from voluntary organisations.

**Critical Care**

Hospitals informed the review team there are staff available, at all times, who can intubate and ventilate a patient. These staff are available on-site, with the exception of Downe and Lagan Valley hospitals, where they are on-call at nights and weekends.

The review team asked if two types of intervention were available at nights and weekends. All hospitals have continuous access for patients in acute medical units to non-invasive positive pressure ventilation (NIPPV) which can assist patients with lung conditions. All hospitals, with the exception of the Downe Hospital, reported they had access to continuous positive airway pressure (CPAP) for patients at nights and weekends.

The review team also asked if hospitals had access to critical care outreach teams at nights and weekends. There is continuous access to this model of care in the Royal Victoria Hospital. At the weekend, there is also access to a critical care team at Altnagelvin Hospital. In the focus group meeting in Altnagelvin, staff advised they would like this service extended to cover the full out-of-hours period.

At Daisy Hill Hospital there is 24 hour access to clinical advice from consultant intensivists from Craigavon Area Hospital through the use of a telepresence robot.

**Theatres**

All trusts advised that those hospitals which provide inpatient surgical services can access an operating theatre throughout the out-of-hours period. The Downe and Lagan Valley hospitals do not provide inpatient surgical services.

Each hospital that provides theatre services at nights and weekends advised that a theatre can be fully staffed within 30 minutes for an emergency, during the out-of-hours period.
In each hospital, a second theatre can be made ready, if required out-of-hours. On average a second theatre can be available within 30 minutes to one hour for hospitals in the Belfast, South Eastern, Southern and Western trusts. The Northern Trust advised that a second theatre can be made available within one to two hours.

For most hospitals that provide theatre services at night, there are on-site nurses to staff the theatre. In the South West Acute Hospital, theatre nurses are on-call at nights, however, they are expected to be on-all from the hospital accommodation.

Each hospital providing surgery has on-site anaesthetists. Surgeons may be on site or on-call.

During focus groups no specific issues were raised about difficulties with providing access to theatres when required at nights and weekends.

**Physiotherapy**

Trusts advised that physiotherapy is generally not available on-site at nights and weekends, with the exception of Daisy Hill and Craigavon Area hospitals where on-site services are provided. During out-of-hours, physiotherapy can be accessed through an on-call service, if required. As part of an initiative to enhance provision of physiotherapy at the weekend, services are being extended at the Ulster Hospital. At the time of the review, physiotherapists at Antrim Area and Causeway hospitals were providing a service to facilitate discharge at weekends and bank holidays, which was funded non-recurrently.

During focus groups with staff, daily access to physiotherapy was considered to be an essential service for each hospital, even if it is not available on-site at all times. In particular, medical and nursing staff emphasised the requirement to provide chest physiotherapy for patients at weekends.

**Speech and Language Therapy**

Neither on-site nor on-call speech and language therapy is provided at any hospital at nights and weekends.

During focus groups, the review team was advised that at several hospitals there were trained nurses available to carry out a swallowing assessment for patients. In some wards, where a trained nurse was not available, a nurse could attend from another ward if required, although this was dependent upon the pressures in the wards. In some wards, lists were available of nurses who had been trained in swallow assessment.
Occupational Therapy

On-site occupational therapy services are not provided at nights and weekends at any hospital. However, the Northern Trust provided an on-call service at Antrim Area and Causeway hospitals.

Social Work Services

The only provision for on-site social work during the full out-of-hours period was at Antrim Area Hospital. The Ulster Hospital provided on-site social work cover at the weekends. In other hospitals, there is a mixed pattern of on-call provision. A regional on-call social work service for the out-of-hours period can be accessed by all trusts.

During focus groups, it was evident that the level of on-call social work service varied between hospitals. Staff at both the Downe and Lagan Valley hospitals advised the on-call social worker was Belfast-based and considered this limited the service they received. In Altnagelvin Hospital, staff advised there were on-call arrangements, but on occasion, had difficulty accessing the service. The review team was advised that a lack of access to social work can delay arranging discharge of patients. However, even when social work services are available, a lack of access to community services at weekends was described as a factor in delaying discharge.

In an attempt to improve discharge at weekends, the Northern Trust has appointed discharge facilitators at Antrim Area Hospital. Staff at focus groups considered this was a very useful enhancement to services.

Cleaning Services

While trusts advised of cleaning services being available during the out-of-hours period, staff in the focus groups advised this was not always the case in several hospitals. Staff in the Craigavon Area and Ulster hospitals reported no issues with accessing cleaning services. At the Royal Victoria, Antrim Area and Causeway hospitals, staff advised that access to cleaning services had improved, but at times there were issues with accessing this service at nights and weekends. At the Downe and Lagan Valley hospitals cleaning services were available up to either 8pm or 9pm and after that time; nurses would assume responsibility for cleaning. At Daisy Hill Hospital there is an on-call responsibility within domestic services for the provision of emergency cleaning services out-of-hours, for example terminal cleaning\(^\text{30}\). At Altnagelvin Hospital cleaning services were available up to 1am, with one cleaner on duty via bleep after 9pm.

\(^{30}\) Terminal cleaning is the thorough cleaning/disinfection of all surfaces including floors and reusable equipment either within the whole care facility or within a particular part of the facility (e.g. an individual ward/department/unit). - Public Health Agency - Advice on the Management of Incidents and Outbreaks for Nursing & Residential Homes - Page 21
During the focus groups staff at several hospitals highlighted the need for increased cleaning support out-of-hours, particularly when a terminal clean of a bed or room was required.

**Portering Services**

Portering services are available in all hospitals at nights and weekends. In six of the hospitals, the porters also had responsibility for security duties.

During focus groups, staff at Lagan Valley, Antrim Area and Causeway hospitals reported having no issues with portering services. Staff at several other hospitals considered there were not enough porters on duty at nights and weekends. Both a lack of porters, and porters having to carry out security duties were reported to lead to delays on the wards, such as taking bloods to laboratories for testing.

### 2.3 Hospital at Night Teams

All hospitals advised they have Hospital at Night teams in place, except Downe and Lagan Valley hospitals.

The hours of cover provided by the teams differ between hospitals. Cover generally starts at an agreed time between 7pm and 9pm. At Daisy Hill Hospital cover starts at 5pm. At Ulster Hospital cover starts at 5pm Monday to Friday and at 1pm at weekends and public holidays. Cover ends at an agreed time between 7am and 8am, except at the South West Acute Hospital, where cover finishes at 1am.

All Hospital at Night teams provide cover during the weekend and public holidays.

The teams have some differences as to which specialty areas they cover:

- All teams provide cover to medical patients in emergency departments (if available), with the exception of Craigavon Area Hospital.
- All teams provide cover to general surgery and inpatient surgical subspecialties with the exception of Antrim Area Hospital.
- All teams provide cover to general medicine and medical sub-specialties.
- Some teams provide cover to other specialties, such as in the Royal Victoria Hospital, to obstetrics and gynaecology.

All hospitals advised that resident Hospital at Night teams are supported by on-call registrars and consultants. There are some differences between hospitals as to the escalation arrangements for teams to call senior doctors. Formal escalation protocols are in place for hospitals in the Belfast and Southern trusts.

The constitution of Hospital at Night teams differs to reflect the size of the hospital and the specialties covered. There are some differences in the job titles, between teams, for staff who carry out similar roles:
All teams have a senior nurse known as either the clinical nurse coordinator or Hospital at Night Coordinator.

All teams have members known as either health care assistants or practitioner assistants, who can carry out a specified range of clinical activities.

Junior doctors on teams are generally led by an on-site medical registrar or middle-grade doctor.

Other team members are in line with local medical or surgical cover arrangements.

RQIA discussed Hospital at Night teams with staff from each hospital during focus groups. RQIA also met with members of the regional forum, which has been established to bring together Hospital at Night teams across Northern Ireland to share good practice.

There is strong support for this model of working across disciplines. The majority of staff who attended the focus groups spoke highly of the Hospital at Night teams and the service they provided. Teams are considered to have enhanced patient safety; used staff time more effectively; and facilitated better coordination of care at nights and weekends. Teams are recognised as having been particularly beneficial in ensuring that care is delivered effectively to patients outlying from their main specialty ward. In most hospitals, staff spoke highly of the service provided by the practitioner assistants and considered they were invaluable in assisting the running of the wards.

In the Northern Trust, staff considered that if the services which the Hospital at Night team could provide, were promoted more, the benefits of the service could be utilised better within the wards.

Some staff suggested improvements which could be beneficial to the functioning of teams including:

- adopting the same job title for similar roles in teams across the region would avoid confusion for junior medical and agency nursing staff, who move between hospitals
- ensuring that teams have access to a dedicated room for handovers
- standardising bleep filtering policies between hospitals
- standardising early warning score charts between hospitals with common escalation arrangements
- extending the team cover to surgical services, where this is not provided and, in some hospitals, greater input by surgical staff to teams
- standardising documentation between teams
- increasing the number of practitioner assistants within the team
- ensuring all team members are able to deploy a minimum skillset, such as: practitioner assistants trained to site and flush venflons; clinical nurse coordinators trained to prescribe and administer intravenous fluids, common and emergency drugs, in line with patient group directives
team leaders being more easily identifiable, such as an alternative coloured uniform

2.4 Handover Arrangements

Effective handover is recognised as an essential component of safe practice in hospitals. RQIA carried out visits to each hospital to observe evening handovers. Observations generally included the following types:

- patient flow handovers
- nursing handovers in a surgical ward and a medical ward
- handovers to the Hospital at Night team or the medical team coming on duty

In addition, RQIA observed critical care outreach handovers at the Royal Victoria and Ulster hospitals and a weekend handover at Daisy Hill Hospital.

Patient Flow Handovers

Patient flow handovers usually took place at a fixed time between 7:30pm and 9pm and lasted for a period of 15 to 30 minutes. At the Ulster Hospital, RQIA observed a handover that took place at 5:30pm.

Handovers involved the respective coordinators going off and coming on duty, with other nursing or medical staff occasionally attending the handover. The coordinators involved in the handovers were experienced nurses. The coordinator role at night is a key management role in the hospital and is usually filled by the most senior nurse on duty.

RQIA found that handovers require the coordinators to share information about a wide range of significant issues. This included current and projected bed states, as well as information about patients, staffing issues and service issues. Handovers observed started on time, with the relevant staff present. The time for the handovers was adequate on most occasions, but less so when hospitals were very busy.

The handovers were led by the coordinators going off duty and were considered effective as they were focused and structured. In most cases, the handover commenced with an introductory briefing to provide situational awareness of issues, such as current and predicted pressures on beds.

The arrangements for documenting the information being transmitted at handovers differed between hospitals. Methods observed included:

- the coordinator finishing a shift verbally providing information, which was written down by the coordinator starting a shift
- the coordinator finishing a shift providing both verbal and written information to the coordinator starting a shift
• the use of electronic information systems to support information sharing, such as the Electronic Patient Management System (EPMS)\textsuperscript{31} at the Ulster Hospital

Most handovers took place in an office environment and were not impacted by external noise. During some handovers, bleeps and telephone calls were answered; however, this did not appear to impact negatively on the communication of relevant information.

The handovers between patient flow coordinators were effective and efficient. Factors contributing to this included:

• coordinators were very experienced practitioners
• coordinators had significant background knowledge of the hospital where they were working
• coordinators were clear as to what information should be communicated at the handover
• coordinators knew each other
• the methods of communicating and documenting information for that hospital were understood by those involved in the handover

\textbf{Nursing Handovers}

RQIA observed the evening nursing handover at ward level in each hospital. These were usually scheduled to start at a fixed time between 7:30pm and 8:45pm. Although most handovers started at the scheduled time, several were delayed due to pressures in the wards, or staff not being available at the start time.

Handovers lasted for different periods of time. Most lasted between 15 and 30 minutes, but the range observed varied between 5 and 60 minutes. Observers considered the shorter handovers sometimes appeared rushed whereas the longest could reduce the time available to complete ward tasks, particularly if they involved several staff. Some staff advised that on their wards, adequate time was not allocated for handover, with consequent delays for nurses going off duty.

The number of nurses present at the handover varied within, and between, hospitals. Some handovers were on a one-to-one basis between the nurses in charge of the ward. Others involved several nurses going off, or coming on, duty.

Handovers were usually led by the senior nurse going off duty. Most were focused and structured. Observers attended some handovers where significant pressures in the ward at the time impacted on the handover. This led to less structured communication of information and the lead nurse being interrupted to respond to issues on the ward. There was some evidence of handovers taking longer if staff coming on duty had not previously worked on that ward.

\textsuperscript{31} The Electronic Patient Management System (EPMS) is a web based software solution for managing the flow of information and tasks on the acute medical take and streamlines the communication process.
Most handovers did not commence with introductions as staff usually knew each other. Observers noted different practices in relation to situational briefing on issues such as bed pressures in the ward or hospital. Some handovers included this, but others focused more on specific issues such as the transfer of patients. All handovers were observed to include information about patients who were unwell. Where available, the use of standardised and sometimes populated handover sheets was observed to facilitate a more effective handover.

Observers considered that nurses referred to patients respectfully. At several handovers, information provision to relatives was included during the briefing.

Most handovers were effective and delivered by nurses who were competent in the role. Factors which were observed to contribute to handovers being less effective included:

- very busy wards at the time of the handover
- staff not available for the scheduled start of the handover
- staff starting a shift who were not familiar with the ward
- the handover sheet structure not being followed
- extensive information being provided, leading to a longer handover
- some staff being required to undertake other ward functions, or awareness training, at the start of a night shift
- patients being admitted at handover time
- multiple new admissions to the ward before handover, resulting in patient information not being available

**Handovers to the Hospital at Night Team**

To operate effectively, the Hospital at Night team model is dependent on effective handover arrangements from staff going off day duty to the team covering the night. RQIA observers attended handovers in each hospital, where this model is in operation. Medical handovers were observed at Downe and Lagan Valley hospitals, which do not have Hospital at Night teams.

Hospitals at Night handovers were scheduled to take place at a fixed time between 8:30pm and 9:30pm at each hospital. Handovers generally started on time, or a few minutes late. A delay of 20 minutes was observed at one hospital due to several staff attending an emergency case. Handovers lasted between 20 and 35 minutes.

Observers considered the time taken for the handovers was generally adequate to communicate the required information.

Attendance at the handovers varied. Members of the Hospital at Night team were always present, including the clinical nurse coordinator and the medical registrar or middle grade doctor. The senior nurse on duty for the hospital that night was usually present throughout the handover. Doctors from the medical team going off duty
were always present. However, the attendance of doctors from surgical teams varied from no doctors being present to several doctors at different grades being present. Observers noted that some staff did arrive late at several handovers, and others left to answer telephone calls or bleeps.

Observers noted some differences in who acted as lead for the handover. Most commonly, the lead was the most senior doctor from medicine going off duty (medical registrar or middle grade doctor). In some hospitals, clinical nurse coordinators were observed to lead the handovers.

Observers considered that most handovers were effectively led and were focused and structured. Areas noted for potential improvement in handover practice included:

- Several handovers did not follow an agreed written agenda structure.
- Handovers did not always start with introductions, even when it was clear that some staff were not known to each other.
- A short situational briefing was provided at some handovers but this was not universal practice.
- The approach to communicating information is not standardised between hospitals. In some cases SBAR\textsuperscript{32} was observed.
- There were different approaches to transferring information. At several handovers, photocopies of written information were provided, but at others, communication depended on staff writing down information shared verbally.
- Good practice was observed in some handovers where there was clear delegation, to specific individuals, of the prioritised tasks to be carried out. At others, observers were unclear as to who was responsible for taking forward specific, agreed actions.
- It was not always clear to observers what the policy was at handovers in relation to bleeps or pagers. Staff sometimes answered calls in the handover room and sometimes left the room to take calls.

The location and facilities for handover varied between hospitals. Very good facilities were observed at a number of sites, such as the Mater Hospital, where there is a dedicated Hospital at Night room. Located close to clinical areas, the room is large enough to enable all those attending to sit and the door can be closed to afford privacy. Computers, printers and a supply of all relevant forms are available in the room. On a white board, there is a list recording everyone who is on duty for the night, including their name, grade, bleep and phone numbers.

In some hospitals, the room was not large enough to accommodate all who attended the handover. Some rooms did not have access to phones or computers. At the time of the review, Antrim Area Hospital did not have access to a room for the

\textsuperscript{32} SBAR is a structured method of communicating critical information that requires immediate attention and action. SBAR stands for Situation, Background, Assessment and Recommendations.
handover which took place in the outpatient waiting area, with no resources to support the handover.

At all handovers, unwell patients were identified to the team coming on duty. In some handovers this led to a short discussion on individual patients between the staff present. During some handovers, such information was discussed but not always documented.

Observers noted the use of electronic information systems facilitated communication where these could be accessed during the handover. For example, the Electronic Patient Management System (EPMS) system at the Ulster Hospital provided useful information on new patients being admitted as emergencies to the hospital that night.

Following the programme of observational visits, the observers concluded the task of effective leadership of a Hospital at Night handover does require specific skills. These were clearly displayed by several of those observed who had obvious experience in the role. The development of a training package would be beneficial to prepare staff to take on this role.

Critical Care Outreach Handovers

RQIA observers attended handovers involving members of critical care outreach teams at the Ulster and Royal Victoria hospitals. At the Ulster Hospital, the handover was between the critical care outreach nurse going off duty and the Hospital at Night clinical nurse coordinator, coming on duty. At the Royal Victoria Hospital, the handover was between the critical care outreach nurses going off and coming on duty.

Both handovers started on time. The handovers were well structured and were on a one-to-one basis. The handovers took place in rooms that were free from unnecessary distraction. At both, there was access to relevant information on computers.

Unwell patients were identified and relevant information was shared. Outstanding tasks were identified and documented. Participants discussed relevant points in relation to the information provided.

At the Royal Victoria Hospital, the information was provided verbally and in writing. A desk diary is maintained to record activity and patients to be handed over and to facilitate the passing of messages from one day shift, through the night shift, to the subsequent day shift. The nurses use baton bleeps to facilitate contact by other staff. At the Ulster Hospital, information was provided verbally and in writing.

---

33 The use of a baton bleep is where a bleep is passed to person coming on duty from the person going off duty. This means that the member of staff on duty can be contacted easily using a consistent bleep number, without reference to a list of named individuals on a rota.
Observers considered the handovers were effective in leading to clear plans of action.

At the Royal Victoria Hospital, the critical care outreach team has seven nurses who all know each other. Bank nurses are used very occasionally.

At the Ulster Hospital, the critical care outreach team is available from 8am to 8pm Monday to Saturday. Further funding is being sought to expand the service to Sundays. The team previously handed over patients at the Hospital at Night meeting. The change to having a dedicated handover was found to be more appropriate and efficient. As this handover occurs before the Hospital at Night meeting, the coordinator is aware of relevant information to take to the later meeting.

**Weekend Handover**

RQIA observers attended a weekend handover at Daisy Hill Hospital. The weekend handover had been developed as a local initiative to plan for the care of medical patients. It also provided an educational opportunity for members of the medical team.

At Daisy Hill Hospital, the weekend handover takes place at 12:45pm each Friday and lasts for around 45 minutes. The handover includes medical staff from across the hospital and is led by a consultant physician.

RQIA observed the handover was well attended by consultants and junior doctors. The handover was very well structured and followed a clear format. This enabled information to be shared, usually at consultant level, on medical patients across the hospital, where intervention was required or anticipated at the weekend.

The handover made effective use of an electronic data system. When patients were required to be seen, they were flagged on the system to have either a consultant review, or a junior doctor review, as appropriate. A summary list of patients was then generated at the end of the handover which set out the agreed reviews and tasks to be undertaken at the weekend.

RQIA was advised that weekend handovers also take place at Downe Hospital. Junior doctors at this focus group considered this to be a helpful innovation.

**2.5 Nurse Staffing at Nights and Weekends**

**Levels of Staffing**

All trusts advised they have recommended nurse to patient staffing ratios for medical and surgical wards at nights and weekends.

From figures provided by trusts, the review team noted there were some differences in ratios between organisations. During the focus groups, staff indicated that the
ratios did not always reflect the dependency of patients. Recommended staffing at ward level can reflect differences in the types of patient looked after and the ward environment. The Western Trust, for example, indicated the single room environment of the South West Acute Hospital has required an increase in nurse to patient ratio.

Trusts informed RQIA that a regional benchmarking exercise for nurse staffing is being carried out by the Director of Nursing and Allied Health Professional at the Public Health Agency (PHA) to which they are all contributing.

Trusts were asked how often their staffing levels of nurses meet the recommended nurse to patient staffing ratios:

- For general medical wards, all trusts advised they regularly met these levels. The Southern Trust advised they had a floating member of out-of-hours staff to mitigate short notice sick leave, to assist in achieving recommended staffing levels.

- For general surgical wards, the Belfast, Northern, Southern and Western trusts advised that they regularly met the levels. The South Eastern Trust advised that at the Ulster Hospital, the recommended levels of nurse staffing were met regularly.

Trusts were asked to advise of nurse vacancies at the time of completion of self-assessment questionnaires.

- For general medical wards, there were no nurse vacancies for the out-of-hours period at hospitals in the South Eastern or Southern trusts, or at Causeway Hospital. All other hospitals did have vacancies.

- For general surgical wards, all trusts, with the exception of Belfast Trust, advised they had no nurse vacancies for the out-of-hours period.

Patterns of Work

RQIA asked trusts if there were any nurses who only work during the out-of-hours period.

- The Northern Trust advised that at Antrim Area and Causeway hospitals there are nurses who only work at night in both medical and surgical wards. At Antrim Area Hospital there are some nurses who only work at weekends.
- The Belfast Trust advised there are some nurses in each hospital who only work at night or at weekends, in both medicine and surgery.
- The South Eastern Trust advised there are no nurses who only work out-of-hours in general medicine. In general surgery, there are some nurses who only work out-of-hours at the Ulster Hospital.
- The Southern Trust advised there are some nurses who work only at night, but none who work exclusively at weekends.
- The Western Trust advised there are no nurses working only out-of-hours on general surgical wards. There are a small number of nurses in the general medical wards at Altnagelvin and South West Acute hospitals who only work out-of-hours. The trust advised these staff had requested this work pattern, in keeping with flexible working.

The Belfast Trust advised that electronic rostering for nurses, is being rolled out across the trust. This will facilitate nurse managers and nurses in scheduling periods of duty and ensuring appropriate cover.

**Providing Cover for Nursing Vacancies**

All trusts have a nurse bank arrangement to enable nurses to be contacted and invited to cover shifts when required. Bank offices generally operate during traditional office hours, between Monday and Friday and close between 5pm and 6pm.

Trusts advised that, as far as possible, bank staff are used to cover short term vacancies, with agencies contacted to provide staff only if trust staff are not available.

The Western Trust advised that, at Altnagelvin Hospital, two additional staff are available each night who can be allocated by the senior nurse on duty to where they are most required.

RQIA observed this model in action. It was clear that it facilitated the provision of nurse cover in circumstances such as a nurse phoning in sick or the need to provide cover when a nurse was required to support a patient transfer.

In focus groups, nursing staff indicated there can be issues in relation to the use of temporary staff including:

- The opening hours of bank offices means the use of bank staff is restricted to situations where a need for cover is known during the weekday period.
- The training and experience of bank staff may restrict the areas they can cover, particularly in specialty areas, and this may lead to the transfer of other staff between wards to provide suitable cover.
- The willingness of some bank staff to only work in locations or specialties where they have previous experience.
- The requirement for agency staff at short notice means they may not have sufficient training or experience to cover a specific hospital or a particular service area.
- If the vacancy requires a nurse to have a specific skill set, it may be difficult to identify a suitable nurse at short notice to provide cover.
Trusts have arrangements with specific agencies and advised that agency staff often have worked previously in the hospital needing cover. The agreements with agencies are designed to ensure there are appropriate governance arrangements in place.

**Education and Training**

The Northern and South Eastern trusts informed RQIA they have documented procedures that set out how policies and procedures are provided to staff who work out-of-hours. Belfast, Southern and Western trusts advised that their procedures relate to all staff, including those working out-of-hours.

At focus groups, nurses did not raise particular concerns about access to education and training if they work at night. However, the training was usually only provided during the day, as the level of staff available at night does not generally enable staff to have training at that time. Staff advised they had to attend the training in their own time. While most staff got time off in lieu, some staff were unable to get this time back. In an attempt to better facilitate training at appropriate times, more courses were being delivered through online packages.

### 2.6 Medical Staffing at Nights and Weekends

**General Medicine**

Trusts reported the following vacancies of doctors in general medicine at the time of the review:

- Belfast Trust was the only trust to have gaps in the F1\(^{34}\) medical rota, at the Royal Victoria, Belfast City and Mater hospitals.
- Causeway, Royal Victoria, Belfast City, Mater, Ulster, Daisy Hill and Craigavon Area hospitals all had gaps in the F2/CT medical rotas.
- Ulster, Daisy Hill and South West Acute hospitals had gaps in registrar/middle grade/specialty rotas.

Gaps in rotas were being filled using a range of approaches, including appointment of internal, external and agency locum doctors.

In all hospitals medical consultants are available on call at night. At weekends and on public holidays consultants carry out ward rounds.

Hospitals in the Belfast, Southern and Western trusts and Antrim Area Hospital reported they have documented procedures for calling medical consultants during the out-of-hours period.

---

\(^{34}\) After graduation, newly qualified doctors enter two years of Foundation Training known as F1 and F2 years. They then enter Specialist Training and are known as Specialty Registrars. The first year of specialty training is Core Medical Training 1 (CT1)
Antrim Area, Ulster, Craigavon Area and Daisy Hill hospitals reported having documented procedures for the induction of locum medical staff engaged during the out-of-hours period. Other hospitals did not have a documented procedure. In the focus groups, staff indicated there can be difficulties for locums being provided with passwords for clinical information systems and access control passes.

**General Surgery**

Trusts reported the following vacancies of doctors in general surgery at the time of the review:

- All hospitals providing general surgery, except Ulster, Altnagelvin and South West Acute hospitals, had gaps in F2/CT general surgical rotas.
- All hospitals except Ulster, Daisy Hill, Craigavon Area and Altnagelvin hospitals had gaps in registrar/middle grade/ specialty doctor general surgical rotas.

There were no gaps in F1 surgical rotas. The most commonly reported method of filling gaps in general surgical rotas was through the use of external agency locums.

In all hospitals, consultants in general surgery are available on call at night. At weekends, and on public holidays, consultants carry out ward rounds.

All hospitals, except Antrim Area and Causeway, reported they have documented procedures for calling general surgical consultants during the out-of-hours period.

Craigavon Area and Daisy Hill hospitals reported they have documented procedures for the induction of locum surgical staff engaged during the out-of-hours period.

**High Dependency and Intensive Care Units**

Trusts reported the following gaps in medical rotas for high dependency/ intensive care units (HDU/ ICU) at the time of completion of the self-assessment:

- In the Northern Trust, there were gaps in the registrar/ middle grade/ specialty rota at Causeway Hospital and a gap was anticipated at Antrim Area Hospital.
- In Belfast Trust, there were gaps in the F1 and F2/ CT rotas at Royal Victoria, Belfast City and Mater hospitals.
- In South Eastern Trust, there were no gaps in the rotas at Ulster. HDU/ICU is not provided at Downe or Lagan Valley hospitals.
- In Southern Trust, there were gaps in the F2/CT rota at Daisy Hill Hospital.
- In Western Trust, there were gaps in the registrar/ middle grade/ specialty doctor rota at South West Acute Hospital.

Trusts advised that internal or external agency locums were being used to fill gaps in rotas or sometimes they were being covered without locums.
All hospitals reported that consultant intensivists are available on-call at nights and weekends. Ulster Hospital advised they were generally not resident on site, but attend the hospital to carry out ward rounds.

All hospitals, except the Ulster Hospital, advised there are consultant intensivist ward rounds at nights and weekends. The Ulster Hospital has ward rounds at weekends.

At the time of the review visit, Daisy Hill Hospital had recently introduced a robot to the high dependency unit to facilitate consultant advice from Craigavon Area Hospital intensive care unit. Consultant intensivist ward rounds are provided through the telepresence robot for the HDU seven days a week. A consultant at Daisy Hill Hospital, who is responsible for the patient, also carries out daily ward rounds.

All hospitals had documented procedures for calling consultant intensivists during the out-of-hours period.

No hospitals had documented procedures for the induction of locum intensivist staff engaged to work during the out-of-hours period.

**Feedback from Focus Groups**

RQIA met with junior and senior medical staff at separate focus groups in each hospital. Junior doctors indicated that, in general, they had good access to on-call consultants at nights and weekends. Consultants responded positively when called and would come to the hospital if required. In some hospitals junior doctors felt a clearer system for central recording of which consultants were on-call for each specialty, would be beneficial.

Many of the junior doctors who took part in focus groups had experience of a number of hospitals. They described examples of systems and initiatives which they felt worked well including:

- At Causeway Hospital, the surgeon of the week model provided clear access to surgeons for emergencies.
- The appointment of weekend discharge coordinators at Antrim Area Hospital had been beneficial and reduced pressure on junior doctors.
- Consultant reviews at the weekend at the Royal Victoria Hospital in areas including the acute medical unit and gastroenterology facilitated decision making communication with junior doctors and the discharge of patients.
- At Belfast City Hospital, there was a culture of collaborating between specialty areas, which was beneficial.
- At the Mater Hospital, the Hospital at Night team arrangements were considered by the junior doctors to have been a successful initiative.
- Junior doctors at Lagan Valley Hospital considered the arrangements in place provided good opportunities to gain experience at nights and weekends.
- Formal weekend handovers at Downe and Daisy Hill hospitals were considered to set out clear plans for patient management and were good learning experiences.
- At Altnagelvin Hospital, specific protocols had been introduced for a number of conditions, including neutropenic sepsis and acute stroke, which clearly set out what actions were to be taken.
- At South West Acute Hospital joint ward rounds between the Hospital at Night nurse and F1 doctor after the evening handover were considered to be very useful.
- Junior doctors who had previously worked a rotation at the Ulster Hospital spoke highly of the EPMS system and the benefits it could provide.
- At Craigavon Area Hospital, junior doctors advised that access and availability of consultants during the out-of-hours period was good.

Junior doctors made a range of suggestions for improvements to facilitate care at nights and weekends:

- the use of electronic take/ workflow systems in those hospitals where these were not in place
- improving the arrangements for handovers in the morning as these were not standardised in several hospitals
- if not routine, increase on-site consultant presence at weekends
- standardise the arrangements for handover at weekends, as practice is variable within and between hospitals
- where not routine, enhance phlebotomy cover at weekends
- review rostering arrangements for junior doctors to ensure that busy periods are appropriately covered.

Senior clinicians raised issues at focus group about the availability of services and cover arrangements including:

- In Causeway Hospital the resident middle grade doctors cover the Ear, Nose and Throat (ENT) department as well as general surgery. There is an ENT consultant on-call.
- In Antrim Area Hospital, surgeons do not consider the Hospital at Night model is appropriate to cover general surgery, based on their experience of the model at other hospitals.
- In the Belfast Trust: nurse staffing levels were considered to be stretched to manage the complexity of patients in hospitals; clerical support is limited at weekends which can delay processes; there can be delays in discharging patients at weekends and transferring patients at night.
- At Ulster Hospital, nurse staffing was also considered to be stretched and arranging discharges and transfers could be difficult at nights and weekends.
• At Lagan Valley Hospital arranging transport for transfers and discharges can cause delays.

• At Craigavon Area Hospital, limited access to social work at weekends was considered to delay discharges.

• For Western Trust hospitals, transfers of patients to Belfast can require staff working at nights and weekends to leave the hospital for extended periods.

Senior clinicians suggested actions to improve delivery of services at nights and weekends including:

• Antrim Area Hospital is proposing the development of a surgical assessment unit to enhance rapid access to services. Physicians at the hospital would welcome increased availability of phlebotomy services at weekends.

• Belfast Trust clinicians recommended greater access to radiology, cardiac investigations, endoscopy and social work.

• At the Ulster Hospital, increased access to mental health services and allied health professionals would enhance service delivery at weekends.

• Downe Hospital welcomed the development of improved access to relatives facilities in the new hospital which could usefully be examined for other sites.

• At Daisy Hill Hospital the potential for enhancing service provision through further networked arrangements was proposed, following the experience of using a robotic link with Craigavon Area Hospital for intensive care.

• Clinicians at Craigavon Area Hospital recommended improved access at nights and weekends to ultrasound for guided drainage and enhanced cover arrangements for responding to bleeding oesophageal varices.

• Western Trust clinicians recommended that improved technology could be usefully examined for contact with staff in the hospital, as bleeps and phones can be very disruptive for patients.

2.7 Communication Arrangements

The review team requested information about the arrangements which are in place for effective communication with staff working at nights and weekends.

All hospitals in the Northern, Belfast and Southern trusts, and the Ulster Hospital, have documented handover protocols for shift changes between the normal working day and the out-of-hours period. In Downe and Lagan Valley hospitals there are tools in place to facilitate communication between the senior nurse on duty, medical
staff and the GP out-of-hours Services. The Western Trust advised there are documented protocols for medicine and surgery, but not intensive care.

Each hospital described policies and protocols which specifically relate to nights and weekends. Examples include:

- hospital at night policies (where Hospital at Night teams are in place)
- escalation policies in relation to hospitals at nights and weekends
- bleep / bleep filtering policies
- local protocols, for example, to bring in extra staff

Hospitals in Belfast, Southern and Western trusts, and the Ulster Hospital hold staff meetings during the out-of-hours period. In the Northern Trust and at Downe and Lagan Valley hospitals, staff can attend staff meetings during the day. Other methods used to keep staff up-to-date include: email; information from colleagues; the use of information files; and notice boards.

The review team asked if managers and clinical leaders from different areas, who are present out-of-hours, meet on a regular basis. Trusts advised this did happen in the following circumstances:

- In the Belfast Trust, there are monthly meetings of Hospital at Night coordinators and practitioner assistants from the Royal Victoria, Belfast City and Mater hospitals. The meetings include the sharing of information, learning and good practice across all three sites.
- In the Northern Trust, the senior manager on-call and the director on-call attend escalation meetings at weekends if these are required. Each night the patient flow coordinator, night service coordinator, doctors and Hospital at Night coordinator meet. Bed meetings with patient flow staff and ward managers take place at weekends. Senior managers are available on site at bank holiday weekends.
- In the South Eastern Trust, the Ulster Hospital advised that management and clinical leaders from different areas and disciplines, who are present during the out-of-hours period, meet on a regular basis. The trust advised the medical consultant and senior nurse on-call at Downe and Lagan Valley hospitals meet regularly through their normal working hours.
- In the Southern Trust, there are bi-monthly meetings involving relevant staff from both Daisy Hill and Craigavon Area hospitals and trust managers. These meetings are designed to inform teams about operational and managerial developments relating to them and the trust. Scheduled meetings also take place on a regular basis of the director/assistant directors with the Hospital at Night coordinators, the out-of-hours site managers and the patient flow manager to discuss relevant issues.
- In the Western Trust, there are formal meetings each night involving night managers, Hospital at Night clinical coordinators and the medical registrar on site for that night.
All trusts, except the Western Trust, advised that standard communication tools, such as SBAR, were used widely on medical and surgical wards.

During focus groups, staff described a number of issues and initiatives in relation to communication.

Junior doctors informed the review team that SBAR was not always used. They would prefer a standard agreed method for communicating information for action, to be in place at all hospitals, as they rotate between them.

Junior doctors, from the Belfast City hospital, advised they were provided with a contact list at induction which was very useful.

Consultants at Daisy Hill and Craigavon Area hospitals described formal arrangements which had been put in place for contact after evening handovers. At Daisy Hill Hospital, each evening, the on-call medical consultant telephones the registrar/ middle grade doctor in the hospital, to discuss any issues. At Craigavon Area Hospital, the doctor in the hospital is expected to contact the on-call consultant following the handover.

Junior doctors, nurses and senior staff raised issues about difficulties in ensuring that locum staff, especially when procured at short notice, had access to relevant information. These issues included having the knowledge and passwords required for accessing vital clinical information systems such as the laboratory results system. Increasingly, relevant information on policies and procedures is held on trust intranet sites. Staff advised there is a need to ensure that locum medical and temporary nursing staff are able to access this information when required. An issue of the availability of access control cards for locums was also raised.

2.8 Safety

The review team was advised that, in the Northern, South Eastern and Western trusts, the operation of hospitals, during the out-of-hours period, is considered independently. The Belfast Trust has a trust major incident plan. The Southern Trust advised that, although there is not a different plan for the out-of-hours period, there are specific references to processes, relevant to the out-of-hours periods, in the overarching major incident plan.

Trusts were asked to provide details as to whether disaster drills were practiced during the out-of-hours period:

- The Belfast and Northern trusts advised that disaster drills are practiced at weekends, but not at night. Weekend practices are carried out once per year at hospitals in these trusts.
- The South Eastern Trust advised that weekend practices are carried out less than once per year.
The Southern Trust advised that disaster drills are carried out routinely at nights, but not weekends. The Western Trust advised that at Altnagelvin Hospital, both night and weekend practices are carried out less than once per year. Practices at nights and weekends had not yet been carried out at South West Acute Hospital at the time of the review visit.

Trusts were asked if the following documents had considered the operation of the hospital during the out-of-hours period, independently from the operation of the hospital during week days:

- incident management plan
- fire safety plan,
- fire safety risk assessment
- business continuity plan

The Belfast, Northern, South Eastern and Western trusts confirmed this was the case for each document. The Southern Trust advised that each document had been prepared on a 24/7 basis.

Belfast, Southern and Western trusts informed the review team that there are fire safety officers on duty, during the out-of-hours period, at each of their hospitals. The Northern and South Eastern trusts advised that this was not the case for their hospitals.

Trusts provided the following information about fire drills at nights and weekends:

- In the Northern Trust, fire drills are carried out at hospitals, once a year at night, but not at weekends.
- In the Southern Trust, fire drills are carried out at hospitals, every six months at night, but not at weekends.
- Fire drills are not carried out at night or weekends at the Belfast, South Eastern or Western trust hospitals.

During focus groups, staff were asked if they had any concerns about their personal safety at nights and weekends. Views expressed differed between staff groups and sites. Concerns expressed included:

- acting as a lone worker in isolated departments at night
- distances at night from car parks to parts of the hospital, when responding to an on-call request
- black spots in some hospitals for bleeps and mobile phones
- limitations on the availability of security staff
- lack of practices for fire drills and emergencies

Trust staff at Altnagelvin Hospital, who had recent experience of responding to a fire at the hospital, advised that systems had worked well. Staff had volunteered to
come to the hospital to assist with the movement of patients. The trust was planning to evaluate the response, to identify any lessons which could be learned from this experience.
Section 3 - The Experience of Patients

Patients have the right to experience the same levels of quality and service, irrespective of when or where they are admitted to hospital. This review sought to gain insights into the experience of patients, using hospital services during nights and weekends.

This part of the review was based on the areas identified within the Patient and Client Experience Standards (DHSSPS 2008)\textsuperscript{35}. The standards set out the treatment people should expect from their health and social care services. The standards identify five important areas of focus to ensure a positive patient or client experience:

- respect
- attitude
- behaviour
- communication
- privacy and dignity

A patient experience questionnaire was developed to obtain the views of patients about hospitals at night. This was adapted from questionnaires currently used by trusts which are based on the Patient and Client Experience Standards.

Questionnaires were distributed to patients in hospitals by the trusts. In addition, the Patient and Client Council (PCC) distributed the same questionnaire to the people on their membership scheme, inviting those who had recent experience of hospitals at night to complete it.

- 1,200 questionnaires were distributed to patients through trusts (100 per hospital site). 340 responses were returned.
- Approximately 3,700 members of the PCC scheme were invited to complete a questionnaire if they had recent experience of hospitals at nights and weekends. 121 members of the scheme returned questionnaires.

The results of the surveys are presented at section 3.1 below. Information received through completed self-assessments for each hospital, relating to patient experience is described in section 3.2 below.

The response rate to the survey, as illustrated in Figure 1, identified differences in returns between hospitals, as well as differences in returns by hospital, between the trust respondents and the PCC respondents. After analysis of the responses, there were distinct differences in the reported experiences of patients from the trust respondents and the PCC respondents. Subsequently, the responses were not amalgamated for each hospital but are presented below for the two groups.

\textsuperscript{35} http://www.dhsspsni.gov.uk/improving_the_patient_and_client_experience.pdf
3.1 Information Obtained Through Surveys

Time of Admission

For the individual time periods (Figure 2), 52% of respondents were admitted to hospital during the 9am - 5pm weekday period, with admissions continuing at nights (31%) and weekends (17%). However, if the out-of-hours period is considered collectively, 48% of respondents were admitted during this period.

Figure 2 - Time of Admission to the Ward
Reception on Arrival

The experiences of patients were sought in relation to how they perceived they were treated upon arrival at the ward. The results are outlined in Table 1. While the overall opinions from the trust respondents and the PCC respondents were generally similar, there were distinct differences in the percentage response rates of opinions between the two groups.

The majority of respondents stated that staff were welcoming and had been expecting their arrival at the ward. However, there was a clear difference in responses between the two groups in relation to whether staff were prepared for their arrival and whether staff fully understood their presenting problems and personal circumstances. The trust respondents were significantly more positive in this area than the PCC respondents.

The results of the survey would indicate that in the majority of cases staff were welcoming and that patient information had been communicated to the wards prior to a patient’s arrival. In relation to the issues of preparation and understanding of patients’ conditions upon arrival, the results indicate that PCC respondents were less positive than trust respondents.

**Table 1 - Percentage Responses of Patient Recollections of How They Were Received on Arrival at the Ward**

<table>
<thead>
<tr>
<th>When you first arrives on the ward:</th>
<th>% Response by category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Trust PCC</td>
<td>Trust PCC</td>
</tr>
<tr>
<td>Were staff welcoming?</td>
<td>96.1</td>
<td>77.5</td>
</tr>
<tr>
<td>Were staff expecting you?</td>
<td>87.5</td>
<td>66</td>
</tr>
<tr>
<td>Were staff prepared for your arrival?</td>
<td>89.8</td>
<td>58.4</td>
</tr>
<tr>
<td>Were staff fully understanding of your condition/presenting problems?</td>
<td>88.4</td>
<td>52</td>
</tr>
<tr>
<td>Were staff fully understanding of your personal circumstances?</td>
<td>81.9</td>
<td>41.6</td>
</tr>
</tbody>
</table>
Respect

All health and social care staff should show respect in all contacts with patients. This is recognised when staff display a person centred approach in their care and treatment. An indicator of this was considered to be how staff dealt with interruptions when delivering treatment or care to patients.

Patients were asked if there were any occasions, during the night, when staff were interrupted when delivering treatment or care (Figure 3); how often the interruptions took place (Figure 4); and whether the reason for the interruption was explained to them (Figure 5).

The responses between the trust respondents and the PCC respondents were contrasting in this area. The PCC respondents reported there were more interruptions to their care than the trust respondents.

**Figure 3 - Percentage Responses of Interruptions During Treatment or Care**

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>84.7</td>
<td>15.3</td>
</tr>
<tr>
<td>PCC</td>
<td>45.5</td>
<td>54.5</td>
</tr>
</tbody>
</table>
Figure 4 - Percentage Responses for Frequency of Interruptions

If yes, were these interruptions?

<table>
<thead>
<tr>
<th></th>
<th>Rare</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>64</td>
<td>30</td>
</tr>
<tr>
<td>PCC</td>
<td>47</td>
<td>53</td>
</tr>
</tbody>
</table>

Figure 5 - Percentage Responses for Explanation of Interruptions

If yes, did staff explain the reason for these interruptions?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes/ Rarely</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>4.1</td>
<td>26.5</td>
<td>63.3</td>
</tr>
<tr>
<td>PCC</td>
<td>25.9</td>
<td>48.1</td>
<td>25.9</td>
</tr>
</tbody>
</table>
**Attitude**

All health and social care staff should show positive attitudes towards patients. This is recognised when personal approaches and responses show care and compassion. Indicators of this were considered to be how approachable staff were, their willingness to help patients and how they dealt with patients.

Patients were asked a series of questions regarding the attitude of staff working at nights. The results are outlined in Table 2.

The responses between the trust respondents and the PCC respondents were again different, with generally very positive responses from the trust respondents and less so from the PCC respondents.

**Table 2 - Percentage Responses in Relation to Staff Attitude**

<table>
<thead>
<tr>
<th>During your stay on the ward, did you feel staff working at nights were:</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
</tr>
<tr>
<td>Approachable?</td>
<td>96.6</td>
</tr>
<tr>
<td>Willing to help?</td>
<td>95.7</td>
</tr>
<tr>
<td>Willing to take time to listen to your questions or concerns?</td>
<td>93.8</td>
</tr>
<tr>
<td>Caring and compassionate towards you?</td>
<td>94.7</td>
</tr>
<tr>
<td>Aware of when you were upset / distressed?</td>
<td>91.2</td>
</tr>
<tr>
<td>Able to provide you with assistance when you needed it?</td>
<td>94</td>
</tr>
</tbody>
</table>
**Behaviour**

All health and social care staff should show professional and considerate behaviour towards patients. This is recognised when staff involve patients and clients in their care, respecting their wishes and showing professional and appropriate behaviour. Indicators of this were considered to be how staff interacted with patients and involved them in their care.

Patients were asked a series of questions regarding the behaviour of staff working at nights. The results are outlined in Table 3.

Responses were very positive from a high proportion of trust respondents and generally positive from the PCC respondents, but from a lower proportion.

**Table 3 - Percentage Responses in Relation to the Behaviour of Staff**

<table>
<thead>
<tr>
<th>During your stay on the ward, did you feel staff working at nights:</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always</td>
</tr>
<tr>
<td></td>
<td>Trust PCC</td>
</tr>
<tr>
<td>Demonstrated politeness and courtesy?</td>
<td>96 56</td>
</tr>
<tr>
<td>Behaved in a professional manner?</td>
<td>96.3 56.5</td>
</tr>
<tr>
<td>Made you feel safe and supported?</td>
<td>95.1 40.7</td>
</tr>
<tr>
<td>Called you by your preferred name?</td>
<td>97.2 77.2</td>
</tr>
<tr>
<td>Provided you with enough information in order to understand what you were agreeing/ consenting to?</td>
<td>95.9 58.2</td>
</tr>
<tr>
<td>Asked for your consent/ permission before carrying out any treatment/ care?</td>
<td>95.9 63.3</td>
</tr>
</tbody>
</table>
Communication

All health and social care staff should communicate in a way which is sensitive to the needs and preferences of patients. This is recognised through engagement in effective verbal and non-verbal communication leading to clear information being exchanged between staff and patients.

Patients were asked a series of questions regarding their communication with staff working at nights. The results are outlined in Table 4 and in Figure 6.

High satisfaction rates were reported from the trust respondents but less so for the PCC respondents.

Table 4 - Percentage Responses in Relation to Communication Between Patients and Staff

<table>
<thead>
<tr>
<th>During your stay on the ward, did you feel staff working at nights:</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always Trust</td>
</tr>
<tr>
<td>Spoke to you in a way which you could easily understand?</td>
<td>97.9</td>
</tr>
<tr>
<td>Checked if you understood what they were telling you?</td>
<td>92.2</td>
</tr>
<tr>
<td>Listened to you?</td>
<td>94.1</td>
</tr>
<tr>
<td>Explained what was happening in relation to your treatment and care?</td>
<td>93.1</td>
</tr>
<tr>
<td>Involved you in decisions which needed to be made?</td>
<td>91.8</td>
</tr>
</tbody>
</table>
Figure 6 - Percentage Responses for Staff Introductions

Privacy and Dignity

All health and social care staff should protect the privacy and dignity of patients at all times.

Patients were asked a series of questions about their feelings in relation to their privacy and dignity while on the ward and also about the general ward environment. The results are outlined in Table 5, Figure 7 and Figure 8.

While the overall opinions from the trust respondents and the PCC respondents were generally similar, there were differences in the percentage response rates of opinions between the two groups. Overall, both groups indicated they were satisfied with the actions staff took to maintain their privacy and dignity.

Table 5 - Percentage Responses in Relation to Patients' Privacy and Dignity

<table>
<thead>
<tr>
<th>During your stay on the ward, did you feel staff working at nights:</th>
<th>Always</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trust</td>
<td>PCC</td>
<td>Trust</td>
<td>PCC</td>
<td>Trust</td>
<td>PCC</td>
<td>Trust</td>
<td>PCC</td>
</tr>
<tr>
<td>Provided you with enough privacy when discussing treatment/ care and personal matters?</td>
<td>92.2</td>
<td>60.3</td>
<td>7.8</td>
<td>26.9</td>
<td>0</td>
<td>12.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintained your privacy and dignity when examining you or providing care/ treatment?</td>
<td>97.8</td>
<td>70.5</td>
<td>2.2</td>
<td>21.8</td>
<td>0</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Took steps to prevent you feeling embarrassment?</td>
<td>96.5</td>
<td>62.7</td>
<td>3.2</td>
<td>29.3</td>
<td>0.3</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When questioned about the amount of sleep they were able to get on the ward, contrasting opinions were received from the trust respondents and the PCC respondents. While 70% of trust respondents felt they did get enough sleep on the ward at night, only 30% of PCC respondents felt the same.

Of those patients who stated they did not get enough sleep on the ward, the most common contributing environmental factor was identified as noise. Temperature and brightness on the ward were named as lesser factors.

**Figure 7 - Percentage Responses in Relation to Patients' Sleep**

![Percentage Responses in Relation to Patients' Sleep](image)

<table>
<thead>
<tr>
<th></th>
<th>Trust</th>
<th>PCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>30.3</td>
<td>69.9</td>
</tr>
<tr>
<td>Yes</td>
<td>69.7</td>
<td>30.1</td>
</tr>
</tbody>
</table>

**Figure 8 - Percentage Responses in Relation to the Effects of Environmental Factors on Patients’ Sleep**

![Percentage Responses in Relation to the Effects of Environmental Factors on Patients’ Sleep](image)

<table>
<thead>
<tr>
<th></th>
<th>Trust</th>
<th>PCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>46.6</td>
<td>31.5</td>
</tr>
<tr>
<td>Brightness</td>
<td>41.1</td>
<td>37</td>
</tr>
<tr>
<td>Noise</td>
<td>76.7</td>
<td>88.9</td>
</tr>
</tbody>
</table>
Patient Comments

Patients were also given the opportunity to submit additional comments about their stay in hospital. Trust respondents submitted an additional 147 comments, while the PCC respondents submitted an additional 53 comments.

During the analysis, comments were categorised into three groups: those that were broadly positive; those that were broadly negative; and those that were neither positive nor negative. A breakdown of the number of comments is outlined in Figure 9.

Based on the results, it is clear there were opposing opinions between trust respondents and the PCC respondents in relation to their experiences in hospitals at nights. Approximately 65% of trust respondents submitted broadly positive comments in relation to their experiences. In comparison, only 30% of PCC respondents submitted broadly positive comments in relation to their experiences.

It is not possible to determine from the information collected, the make-up of the two groups of respondents or the time since their experience of hospital and why the responses were so different.

**Figure 9 - Percentage of Patient Comments by Group**

<table>
<thead>
<tr>
<th></th>
<th>Broadly negative</th>
<th>Neither positive nor negative</th>
<th>Broadly positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>22.4</td>
<td>13.3</td>
<td>65.3</td>
</tr>
<tr>
<td>PCC</td>
<td>69.8</td>
<td>13.2</td>
<td>16.9</td>
</tr>
</tbody>
</table>
After reviewing the comments from both groups, both positive and negative themes were identified. The positive themes were:

- recognition of excellent care from staff, even when they were under pressure from their workload
- examples of staff who were friendly and understanding
- recognition of staff's engagement with the relatives of the patient
- cleanliness of particular wards

The negative themes were:

- perceptions that wards were short staffed, thus creating pressures, in particular for nurses, and also staff were considered to be doing their best in the circumstances
- factors leading to disrupted sleep including staff talking, phones ringing and heavy footsteps
- admission to a mixed gender ward due to bed pressures
- delays in processes such as medication rounds at night

**Summary of Survey Results**

Since the number of responses from individual hospitals was not large, the results were amalgamated rather than being presented individually for each hospital. As previously highlighted, there are marked differences between the results obtained from the trust respondents and those obtained from the PCC respondents. The responses were presented for each group.

Although the responses of the two groups are different, in general the overall responses were positive. However, negative experiences were reported from both survey groups.

Two areas emerged from the survey, which were noted by both groups. These were:

- Some patients perceived there was not enough nursing staff present on wards at nights and weekends, although they usually considered staff on duty sought to provide good care.
- The wards at night time could often be noisy, which disturbed patients from sleeping.
3.2 Availability of Services for Patients and Families

All trusts advised RQIA that patients can have access to patient education and health education materials during the out-of-hours period. They also stated that staff knew how to access these materials if requested.

Patient representatives cannot be accessed at any hospital during the out-of-hours period.

The South Eastern Trust advised that a procedure was in place to allow access to advocacy services out-of-hours. Other trusts advised that advocacy services were not available out-of-hours.

All trusts reported that it was possible to access interpreting services out-of-hours. Staff at focus groups advised they had made use of these services.

All trusts, except the South Eastern Trust reported that, where appropriate, it was possible for family members to stay with patients during the out-of-hours period.

Trusts were asked what arrangements were in place to support patients with a mental health problem or a learning disability, and their family, following admission to a medical or surgical ward during the out-of-hours period. Trusts advised that:

- In the Northern Trust there are no arrangements at present, but plans are in place to launch a resource pack.
- In the Belfast Trust, staff can be made available, if required. Patient representatives can be accessed on the next working day.
- In the South Eastern Trust Mental Health and Learning Disability (MHLD) Services provide out-of-hours assessments and provide advice and guidance to support staff in patient care.
- A working group has been established in the Southern Trust to implement GAIN guidelines for MHLD patient experience.
- In the Western Trust a single room is provided. Staff have attended learning disability awareness sessions. A community psychiatric nurse is on-call up to 1am at Altnagelvin and up to 10pm at the South West Acute Hospital.
Section 4 - Conclusions and Recommendations

4.1 Conclusions

The delivery of safe care for patients at nights and weekends is a key area of focus for all hospitals. A growing body of evidence has highlighted increased risks during these periods. Negative impacts of factors on patient’s sleep, including noise at night, are increasingly recognised. New models of care are being established to improve access, quality and safety of services outside the normal working week.

Against this background, the theme of hospitals at nights and weekends was selected by RQIA as the topic for this review, to be completed during the 2012-2015 Review Programme. The aim of the review was to examine the arrangements in place to ensure the safe delivery of care, during nights and weekends, in acute hospitals across Northern Ireland. The review also considered the experience of patients at nights and weekends.

Leadership and Organisational Structure

RQIA concluded that all trusts have clear accountability arrangements in place for the delivery of services at nights and weekends. Each organisation demonstrated commitment to ensuring the safety of patients and improving the availability of out-of-hours services.

In each hospital at night, a senior nurse has a lead role in the on-site management of the hospital. RQIA observed excellent practice in the delivery of this role by very experienced practitioners. There is a need to ensure that development opportunities exist for nurses who may take on these critical and challenging roles in the future.

Escalation arrangements are in place to call senior managers, if issues arise at night. RQIA recommends that all trusts have a documented escalation protocol setting out these arrangements, if this is not already in place.

RQIA found that issues relating specifically to nights and weekends do appear on risk registers. Trusts do not have separate out-of-hours risk registers. It is recommended that all trusts review risks relating to this period and consider if it would be useful to establish a separate risk register for services at nights and weekends.

RQIA found there are variations in practice between trusts in the monitoring of safety and quality indicators, including mortality patterns, relating to care at nights and weekends. It is recommended that all trusts review these arrangements. All trusts should consider building on the current regional approach to monitor hospital mortality rates, to include an analysis of patterns following admission at nights and weekends.
In general, there are not arrangements for trust directors to carry out regular management visits within hospitals at nights and weekends. Some organisations are considering the introduction of such visits. It is recommended that all trusts review their arrangements for carrying out senior management visits, to include hospitals at nights and weekends.

Trusts advised that pressures to accommodate emergency admissions can lead to staffing and operational issues for hospitals at night. These include the need to transfer patients between wards to enable new patients to be admitted to specific specialty areas. All trusts seek to minimise in-hospital transfers late at night.

Difficulties were described by trusts, and staff at focus groups, in arranging transfer of patients at nights and weekends. These included arranging suitable transport and staff to accompany patients for transfer.

It is recommended that all hospitals have written policies for in-hospital, and between hospital, transfer arrangements at nights and weekends.

RQIA was advised of significant strategic developments in trusts which have impacted positively on the delivery of care at weekends. Examples of activity, at Levels 1 to 3, of the classification set out by NHS Improvement include

Level 1 - Services limited to one department or service which is beginning to deliver some services beyond the 8am-6pm, Monday to Friday, period.

- a weekend discharge coordinator service has been introduced at Antrim Area Hospital
- extended provision of community psychiatric nurses at Altnagelvin and South West Acute hospitals

Level 2 - Services that are delivered seven days per week, but not always offering the full range of services that are delivered on week days.

- surgeon of the week models are now in place at several hospitals
- weekend specialty-specific consultant reviews and ward rounds are carried out at several hospitals including Antrim Area and Royal Victoria
- the Ulster Hospital has introduced a programme of extended services at the weekend including physiotherapy, social work cover and planned CT sessions on Sundays
- provision of remote access to laboratory and radiology systems for on-call consultants at many hospitals
- introduction of an emergency nursing team at Altnagelvin Hospital, which can be deployed to wards where there is a need for short term cover at night, for example due to staff sickness or patient transfers

---

36 NHS Improvement 2012: 'Equality for all: Delivering safe care – seven days a week'
Level 3 - A whole service approach to seven day service delivery that requires several elements to work together in order to facilitate clinical decision or treatment, often covering more than one work force group.

- Hospital at Night teams have been introduced in most hospitals
- Daisy Hill Hospital has developed a programme of measures to enhance patient safety and access to services at nights and weekends including:
  - introduction of weekend hospital handovers
  - development of an electronic patient database which facilitates clinical processes and hospital handovers
  - introduction of a robot system to facilitate the provision of advice from off-site intensive care consultants at Craigavon Area Hospital
  - enabling on-call consultants to link to the Hospital at Night meeting by teleconference
  - creation of a top 10 list of the most common conditions on the acute medical take, setting out the key actions to be taken by junior medical staff

RQIA recommends that each trust builds on the significant work which has been carried out to date and establishes a development plan for each hospital to enhance the delivery of services for the out-of-hours period. The guidance and examples provided by NHS Improvement\(^\text{37}\) may prove useful in this regard.

**Services Available at Nights and Weekends**

RQIA asked trusts to provide details of the availability of a range of services at nights and weekends. Issues relating to service provision were discussed at meetings with trusts and focus groups with staff.

RQIA has concluded that all trusts have considered issues relating to out-of-hours service provision and have implemented measures to enhance services.

During focus groups, staff from different hospitals provided different perspectives about availability, reflecting their local provision. In general, provision of radiology, laboratory services and theatre access were considered good. There was access to medical records, although staff working in hospitals which have access to electronic patient records emphasised the benefits of these systems. There can be delays if records need to be accessed from other hospitals. Cleaning services was an area that would need to be reviewed by the trusts.

The need for improved access to specific investigations and procedures was highlighted by clinicians in particular hospitals. These included ultrasound scans, endoscopy, phlebotomy and cover for the management of bleeding oesophageal varices.

---

\(^{37}\) NHS Improvement - [www.improvement.nhs.uk](http://www.improvement.nhs.uk)
Staff emphasised the importance of good access to pharmacy, physiotherapy and social work services. On-site access to these services is being enhanced at some hospitals at weekends. RQIA recommends that weekend availability is reviewed for these services where this has not been recently carried out.

All trusts have on-site arrangements to respond to cardiac emergencies. There are differences in access to cardiac investigations between hospitals. The Western Trust advised there is not continuous access to a cardiac catheterisation laboratory for patients within 90 minutes of request. This is available for other trusts. RQIA recommends that access to cardiac investigations and services is examined across all hospitals to ensure patients have equal access to the same range of services.

There are differences in provision of pain management and critical care outreach services between hospitals. Northern Trust is the only trust to provide access to on-call occupational therapy. There is no access to speech and language therapy outside normal working hours, although trusts advised there are nurses who have been trained to carry out swallow assessments.

Portering services were emphasised by many staff to be an important component of effective services in hospitals at nights and weekends. Staff at several hospitals perceived there were not enough porters on duty and this could lead to delays, for example in taking samples to laboratories. RQIA recommends that all hospitals review the availability of portering services at nights and weekends.

**Hospital at Night Teams**

RQIA concluded the introduction of Hospital at Night teams to hospitals across Northern Ireland has been a significant success. Many staff at focus groups, from different disciplines, welcomed this initiative. Teams are considered to have enhanced patient safety and improved coordination of care. During visits to hospitals, RQIA observed these teams in action, and there was clear evidence of their commitment to delivering effective services. Collaboration across teams to share good practice was demonstrated through the work of the Regional Forum for Hospital at Night Coordinators.

RQIA found the titles for team members with similar roles can differ between hospitals. It is recommended that titles are standardised across Northern Ireland to avoid confusion for staff who rotate between hospitals.

RQIA was informed that early warning score charts are now widely used in hospitals. In focus groups, junior medical staff advised that there are some differences in the charts used and also in the escalation action to be taken in respect of scores recorded on charts. RQIA has been advised that work is taking place to standardise the charts used across trusts, in the near future. RQIA would welcome regional standardisation in this regard.
RQIA found there are differences in the operation and functions of teams, such as, their bleep filtering policies and which clinical procedures they carry out. Teams also differ in the documentation which they use. It is recommended the functions of Hospital at Night teams are reviewed to standardise practice across Northern Ireland in relation to functions carried out and associated documentation.

RQIA found significant variation in the linkages between general surgical services and Hospital at Night teams. Staff in trusts where strong links have been established highlighted the benefits of this integrated model of working. It is recommended that all trusts collaborate to move towards standardisation of linkages of Hospital at Night teams with surgical services.

Handovers

RQIA observed a range of evening handovers in each hospital. Handovers between patient flow coordinators and critical care outreach teams were focused and structured. An extensive amount of information was shared efficiently and effectively.

In general, nursing handovers were effective and led by nurses, competent in the role. The nurses present, content and length of the handovers did vary significantly. At times other pressures in the ward impacted on the quality of the handovers. It is recommended that a regional project is established to review nursing handovers and share best practice in this area.

Handovers to Hospital at Night teams were observed to operate to a broadly similar model and there were many examples of good practice. There were differences in practice including: the leadership of handovers; use of standard agendas; documentation used; bleep and telephone answering policies; and the use of structured tools for communication of key information. There were also differences in the arrangements in place to support the handovers including: the availability of a suitably sized and equipped room; access to phones and computers; and access to electronic records.

It is recommended that trusts collaborate to agree a standardised approach to Hospital at Night handovers and an agreed set of required facilities to facilitate effective delivery of handovers. It is also recommended that junior doctors approaching registrar level are provided with training to prepare them to take on the role of leading a Hospital at Night handover. In addition, all junior staff should be given training in the principles that support safe and effective handover.

A common theme raised at staff focus groups was the arrangements for the morning handover, back to day staff, are not as structured as the evening handovers. It is recommended that all trusts examine arrangements for Hospital at Night teams to hand back to day staff and institute improved practice where this is required.
RQIA observed a weekend handover at Daisy Hill Hospital and was advised of a similar system at Downe Hospital. Trusts and staff at focus groups advised that there are varying arrangements in place to prepare for weekend cover in other hospitals. It is recommended that all trusts review their arrangements to ensure there is a planned approach, each weekend, to deliver the care needs identified for individual patients by their clinical teams.

**Nurse Staffing**

RQIA found that there are some differences in the planned nurse staffing levels of hospitals at nights and weekends. All trusts are contributing to a regional benchmarking exercise on nurse staffing which is being carried out by the Public Health Agency. This work aims to identify the requirements for nurse staffing levels to more accurately reflect the changes in patient dependency.

There are differences in the patterns of work of nurses in different hospitals as to whether they work only out-of-hours or alternate between days and nights. Electronic rostering is being introduced in some hospitals to facilitate scheduling of periods of duty.

RQIA found that all hospitals operate nurse banks to contact staff to cover vacant shifts. Agencies are contacted if no trust nurses are available. Nurse bank offices do not operate at nights or weekends. Therefore, if cover is required for a shift due to staff sickness, the senior nurses on duty will seek to arrange this, which is time consuming. It is recommended that trusts explore the costs and benefits of opening nurse bank offices for a period at weekends. It is also recommended that trusts consider the establishment of a regional nurse bank for weekends which could help to identify cover for specialist posts.

RQIA observed the operation of an emergency team system at Altnagelvin Hospital. Two members of nursing staff were available to be deployed by the senior nurse on duty to those areas of the hospital which required cover for short periods, or potentially for a whole night. This reduced the requirement to move nurses between wards at short notice and mitigated the response to vacancies, shortages and local pressures. It is recommended that other hospitals consider the potential benefits of adopting an emergency nursing team model for nights and weekends.

**Medical Staffing**

RQIA found that hospitals were experiencing vacancies in medical staffing at different levels, in different specialties. These were being filled by employing internal or external locums and agency staff. Some hospitals had documented procedures for the induction of locum staff to cover nights and weekends. It is recommended that all hospitals have these in place.

During focus groups, junior doctors welcomed increased on-site input of consultants at weekends. They considered there was a need to review rostering of junior
doctors to ensure that busy periods are appropriately covered. It is recommended that all hospitals carry out an assessment of workflow patterns of Hospital at Night teams to identify if changes to handover times or shift patterns would enhance cover for busy periods.

**Communication Arrangements**

RQIA found there are documented arrangements for handover to Hospital at Night teams for acute medicine and surgery in all trusts. Trusts have a range of policies which relate to nights and weekends.

There are differences in how night and weekend staff receive information and updates. All trusts make increasing use of intranet sites and email facilities. Staff meetings are held out-of-hours at some hospitals, while in others, staff can attend daytime meetings. There are also differences in arrangements for managers, with responsibilities for services at nights and weekends, to meet to share information and discuss issues.

It is recommended that trusts review their arrangements to ensure there are effective systems for communication between managers with responsibilities for services, and with staff who work to provide services at nights and weekends.

RQIA was advised that the Southern Trust has formal arrangements for contact to be made between junior and senior doctors after evening handovers at its hospitals. It is recommended that other hospitals establish similar arrangements.

RQIA was informed that there can be difficulties in ensuring access to relevant information for temporary staff. It is recommended that all trusts review their arrangements to ensure that temporary staff are provided with the relevant passwords and knowledge to access information on clinical information systems relevant to their roles. Also, that they are provided with access control codes and cards, as required, to fulfil their roles safely and effectively.

**Safety**

RQIA found that trusts have different arrangements for the preparation and testing of major incident plans, with regards to hospitals at nights and weekends.

There are also differences in fire safety procedures. Fire safety officers are on duty at some hospitals out-of-hours. Fire drills are not carried out at nights and weekends in three trusts. They are carried out annually at night in the Northern Trust and every six months at weekends in the Southern Trust.

It is recommended that standards are agreed regionally for the frequency and timing of testing of major incident plans, and fire drills in hospitals, at nights and weekends.
Some staff raised concerns about their personal safety when working at night. It is recommended that all hospitals carry out risk assessments in relation to staff safety at night where this has not been previously carried out.

Patient Experience

With the assistance of the trusts and the PCC, RQIA carried out a survey to obtain the experiences of patients in hospitals at nights to inform this review. There were differences between the results from the two sample groups. In general, patients were positive about the care they received and their privacy was maintained.

Patients perceived that staff were under particular pressure at night. A number of patients described individual concerns such as admission to mixed gender wards.

Thirty per cent of trust respondents, and 70% of PCC respondents, stated they did not get enough sleep at night. The main factor contributing to this was noise, although ward temperature and brightness were also highlighted. The impact of noise is similar to other surveys carried out in hospitals in Great Britain and USA.

It is recommended that trusts include a focus on night and weekends into their programmes of work on patient experience, to identify local issues and monitor trends over time.

It is also recommended that trusts collaborate to develop a programme of actions to reduce noise at night in hospitals.

Summary

RQIA has concluded there are many examples of good practice in relation to the provision of care at nights and weekends in hospitals across Northern Ireland. The introduction of multidisciplinary Hospital at Night teams has enhanced the coordination and delivery of care. Local initiatives have provided additional services and senior clinician presence at weekends. The use of technology, including electronic records and robots in pharmacy and intensive care, has facilitated care delivery in some hospitals.

RQIA found differences in operational arrangements across hospitals. Standardisation of procedures across sites has been recommended in several areas.

Surveys of patient experience revealed that, while patients were generally positive about many aspects of their care, a recurrent theme was the difficulty in sleeping in hospitals due to the impact of noise.

The benefits of taking a planned approach to delivery of care at nights and weekends have been clearly evident during this review. In conclusion, the review team considers the underlying concepts of the Hospital at Night model should also be considered for their application to care in hospitals during the day.
RQIA thanks services users, the management and staff from the Health and Social Care Board, the Public Health Agency, the health and social care trusts, and the Patient and Client Council for their cooperation and invaluable contribution to this review.
4.2 Recommendations

1. Trusts should ensure there are career pathways for nurses to prepare to take on the key roles of senior nurse leads in hospitals at nights and weekends.

2. Trusts should establish a documented escalation protocol, to facilitate staff contacting senior managers about issues arising out-of-hours, if this is not already in place.

3. Trusts should review risks relating to out-of-hours and consider establishing a separate risk register for this period.

4. Trusts should review their arrangements for monitoring safety and quality indicators, including mortality patterns, relating to care at nights and weekends.

5. Trusts should review their arrangements for carrying out senior management visits to include hospitals at nights and weekends.

6. Trusts should have written policies for transfer of patients between wards, and between hospitals at nights and weekends, where these are not already in place.

7. Trusts should establish a development plan for each hospital to enhance the delivery of services for the out-of-hours period.

8. Trusts should review the arrangements for weekend access to pharmacy, physiotherapy and social work services, where this has not been recently carried out.

9. Access to cardiac investigations and services should be examined across all hospitals in Northern Ireland to ensure that patients have appropriate access to the same range of services.

10. Trusts should review the level of portering and cleaning services in hospitals to ensure there are not undue delays in these functions at nights and weekends.

11. The job titles of key roles in hospitals at nights and weekends should be standardised across hospitals to avoid confusion for staff who move between hospitals.

12. The functions of Hospital at Night teams should be reviewed across Northern Ireland to develop standardised practice, documentation and minimum skill sets for job roles.

13. Trusts should collaborate to move towards standardised practice across sites in the linkages of Hospital at Night teams with surgical services.
14. A regional project should be established to review nursing handovers and share best practice in this area.

15. There should be an agreed standardised approach to Hospital at Night handovers across hospitals and an agreed set of required facilities to facilitate effective handover.

16. All staff involved in Hospital at Night, including junior doctors, should be provided with guidance and training in the principles of best practice handover.

17. Trusts should examine their arrangements for Hospital at Night teams to hand back to day staff and institute improved practice where this is required.

18. Trusts should review their arrangements at weekends to ensure there is a planned approach to deliver the care needs for individual patients identified by their clinical teams.

19. Trusts should explore the costs and benefits of opening nurse bank offices for a period at weekends. The potential for establishing a regional nurse bank for weekends should also be explored.

20. Trusts should consider the establishment of an emergency nursing team model at nights and weekends to facilitate the response to short-term requirements for additional cover.

21. All trusts should have documented procedures for the induction of locum medical staff who are employed to cover nights and weekends.

22. All hospitals should carry out an assessment of workflow patterns of Hospital at Night teams to identify if changes to handover times or shift patterns would enhance cover for busy periods.

23. Trusts should review their arrangements to ensure there are effective systems for communication between managers with responsibilities for services at nights and weekends and with staff working at these times.

24. Trusts should consider putting in place formal arrangements for contact between junior doctors and on-call consultants after evening handovers.

25. Trusts should ensure that temporary staff are provided with the relevant passwords and knowledge of systems to enable them to access information on clinical information systems relevant to their roles.

26. Standards should be regionally agreed for the frequency and timing of testing of major incident plans and fire drills in hospitals, at nights and weekends.
27. Trusts should carry out risk assessments in relation to staff safety in hospitals at night, where these have not previously been carried out.

28. Trusts should include the experience of patients in hospitals at nights and weekends as part of their planned programmes of work on patient experience.

29. Trusts should consider a collaborative approach to developing a programme of actions to reduce noise in hospitals at night.
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast Trust</td>
<td>Belfast Health and Social Care Trust</td>
</tr>
<tr>
<td>CPAP</td>
<td>Continuous positive airway pressure</td>
</tr>
<tr>
<td>CT1</td>
<td>Core Medical Training Year 1</td>
</tr>
<tr>
<td>CT2</td>
<td>Core Medical Training Year 2</td>
</tr>
<tr>
<td>DVT</td>
<td>Deep vein thrombosis</td>
</tr>
<tr>
<td>DHSSPS</td>
<td>Department of Health, Social Services and Public Safety</td>
</tr>
<tr>
<td>EPMS</td>
<td>Electronic patient management system</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear, nose and throat</td>
</tr>
<tr>
<td>EWTD</td>
<td>European Working Time Directive</td>
</tr>
<tr>
<td>F1</td>
<td>Foundation Training Year 1</td>
</tr>
<tr>
<td>F2</td>
<td>Foundation Training Year 2</td>
</tr>
<tr>
<td>GP</td>
<td>General practitioner</td>
</tr>
<tr>
<td>HCAHPS</td>
<td>Hospital Consumer Assessment of Healthcare Providers and Systems</td>
</tr>
<tr>
<td>HDU/ICU</td>
<td>High dependency unit/ intensive care unit</td>
</tr>
<tr>
<td>HSC</td>
<td>Health and social care</td>
</tr>
<tr>
<td>MHLD</td>
<td>Mental health and learning disability</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
</tr>
<tr>
<td>NIPPV</td>
<td>Non-invasive positive pressure ventilation</td>
</tr>
<tr>
<td>Northern Trust</td>
<td>Northern Health and Social Care Trust</td>
</tr>
<tr>
<td>PCC</td>
<td>Patient Client Council</td>
</tr>
<tr>
<td>RCP</td>
<td>Royal College of Physicians</td>
</tr>
<tr>
<td>RQIA</td>
<td>The Regulation and Quality Improvement Authority</td>
</tr>
<tr>
<td>SBAR</td>
<td>Situation, background, assessment, recommendation</td>
</tr>
<tr>
<td>SAM</td>
<td>Society for Acute Medicine</td>
</tr>
<tr>
<td>South Eastern Trust</td>
<td>South Eastern Health and Social Care Trust</td>
</tr>
<tr>
<td>Southern Trust</td>
<td>Southern Health and Social Care Trust</td>
</tr>
<tr>
<td>SWAN</td>
<td>Safety on Weekends and Nights</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>Western Trust</td>
<td>Western Health and Social Care Trust</td>
</tr>
</tbody>
</table>