The Regulation and Quality Improvement Authority

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An Independent Review of Arrangements for Management and Coordination of Unscheduled Care in the Belfast HSC Trust and Related Regional Considerations

July 2014

Assurance, Challenge and Improvement in Health and Social Care

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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 reviews are carried out by teams of independent assessors, most of whom are either experienced practitioners or experts by experience.

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

Executive Summary

The RQIA review of unscheduled care was established following concerns raised about the arrangements for the provision of services in the Belfast Health and Social Care Trust (Belfast Trust) and the declaration of a major incident at the Emergency Department of the Royal Victoria Hospital (RVH) on 8 January 2014. The review team has considered systems within the Belfast Trust, and related regional issues.

RQIA has concluded that, given the difficulties experienced in the emergency department on 8 January 2014, it was appropriate to declare a major incident to establish control arrangements and to bring in additional staff to alleviate the situation.

RQIA has considered information about the flows of patients to, within and between hospitals in the Belfast Trust. While some parts of the unscheduled care system are working effectively, patient flows for the specialties of acute internal medicine, respiratory medicine, and care of the elderly need to be improved.

Difficulties in patient movement related to these specialties are leading to delays in patients exiting the RVH emergency department for admission to beds in the hospital; patients being treated in wards in other specialty areas; and late evening transfers to other hospitals, particularly the Belfast City Hospital (BCH).

To improve flows for patients RQIA recommends that Belfast Trust:

- builds on an innovative initiative for frail elderly patients, to take forward plans to redesign care of the elderly services, with the focus at BCH
- considers redesign of respiratory medicine services to develop direct access to specialist assessment, and admission if required, at BCH
- considers developing a medical assessment facility for patients at the Mater Hospital, as an integrated function with the Acute Medical Unit there
- examines the design and operation of the Acute Medical Unit at RVH, by establishing an improvement project for patient flows through the service
- enhances daily flow coordination across hospitals within the trust

RQIA has concluded that Belfast Trust has governance systems in place to oversee the delivery of unscheduled care, including reporting of serious adverse incidents.

RQIA found good examples of redesign of unscheduled care services within the Belfast Trust, to improve services for patients. Through effective clinical and managerial leadership, new models are in place for emergency surgery; stroke services; neurology assessment of patients; and a programmed treatment unit for ambulatory care.

Providers of education and training reported favourably on many aspects of the training placements which are provided for students and trainees in hospitals across Northern Ireland. Difficulties in the delivery of unscheduled care can impact on training placements, in particular for junior doctors. A particular challenge for education and training bodies can occur if they are not adequately consulted when services changes are being planned. Changes in location or design of services can impact greatly on the training experience offered in placements.

Individual organisations have local escalation plans to respond to unscheduled care pressures. Arrangements to improve daily flows of patients to hospitals have been put in place through the Northern Ireland Ambulance Service (NIAS). For exceptional periods of demand across the whole system, there is a recognised need to ensure that there are plans for effective coordination of responses across organisations. For predictable periods of increased demand, early planning is essential, in particular for the post-Christmas and New Year holiday period.

During the review, RQIA found many examples of innovations which were being taken by health and social care organisations across Northern Ireland to improve unscheduled care for patients. Some of these were shared at a regional summit held during the review process.

RQIA was advised that many patients who require urgent specialist assessment, but who are not a clinical emergency, are arriving late in the afternoon at hospitals. This can lead to unavoidable admissions. Some patients had contacted services much earlier in the day and could potentially have returned home following assessment.

Most patients access hospital-based unscheduled care via emergency departments. There are gaps in available services to facilitate direct access to specialist assessment, which could reduce the need for ED attendance and hospital admission. The establishment of integrated care partnerships in Northern Ireland offers an excellent opportunity to re-examine unscheduled care pathways between primary and hospital-based care. The aim should be that patients have access to the right care, in the right place, by those with right skills, the first time.

In taking forward this review, RQIA has drawn on the experience of a major project to test approaches to coordination of flows at two hospitals in England. This learning is now being applied in Scotland and Wales. RQIA recommends that a regional collaborative is established to develop skills in the analysis and coordination of patient flows and to share learning across organisations to improve services for patients.

RQIA has made seventeen recommendations for improvement in arrangements for unscheduled care through the work of this review.

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1. Introduction

On the evening of Wednesday 8 January 2014, a major incident was declared at the Royal Victoria Hospital (RVH), due to the large number of patients within the Emergency Department (ED). The major incident was declared by the Belfast Health and Social Care Trust (Belfast Trust/BHSCT) after a period of sustained pressure in the ED.

At one point, 41 people were waiting on trolleys. Extra staff were drafted in to address the situation. Ambulances were diverted to other hospitals. A number of patients were placed in a theatre recovery area. The major incident was declared over, just before midnight, that evening.

On 28 January 2014, RQIA received a letter, signed by eight doctors working in the Acute Medical Unit (AMU) at the RVH, requesting that RQIA investigate an important aspect of the acute internal medicine service at RVH. The issues raised included the level of medical staffing within the AMU team, and the "system's inability to consistently code and track patients correctly as they are moved within and across hospitals within the BHSCT network".

On 30 January 2014, RQIA was asked by the Minister for Health, Social Services and Public Safety to carry out an "inspection of the Emergency Department and Acute Medical Unit of the Royal Victoria Hospital at the earliest opportunity". This inspection took place from 31 January to 3 February 2014.

The inspection found that there were very significant challenges being experienced by staff in ensuring the smooth flow of patients across the hospital. There were staff shortages in critical areas. Many patients were being cared for outside the locations that were designed to deliver the care and treatment they required. This was having a considerable impact on the experience of patients and was creating risks in ensuring patient safety.

RQIA inspectors concluded that there was need for immediate action to relieve the pressures on staff and to reduce risk in critical areas. The report of the inspection sets out the actions which were recommended.[1]

In addition to the inspection, the Minister commissioned RQIA to carry out a wider review of the arrangements for management and coordination of unscheduled care in the Belfast Trust. RQIA was also asked to consider related issues, concerning unscheduled care services across Northern Ireland.

This report has been prepared to describe the findings of the review and to set out recommendations for improvement.

[1] RQIA Final Report of the Inspection of Unscheduled Care in the Belfast Health and Social Care Trust 31 January to 3 February 2014

1.1 Terms of Reference

The terms of reference for this review were:

1. To assess the appropriateness of the actions taken by the Belfast Trust and wider HSC, in the immediate periods before and after the declaration of a major incident by the Belfast Trust, on 8 January 2014.

2. To assess the effectiveness of the systems in place in Emergency Care in the Belfast Trust to ensure that patients receive safe, effective and compassionate care including seamless transition, between the different care teams and locations giving due regard to the unsatisfactory experience perceived by some patients.

3. To consider the operation of the Belfast Trust Emergency Departments in the regional context, in order to assess current practice in unscheduled care services and to identify how existing best practice might be applied through learning across the region.

4. To review organisational governance in relation to oversight of unscheduled care within the Belfast Trust.

5. To assess the extent to which the Belfast Trust has addressed recommendations from relevant reports related to Emergency Care in the Belfast Trust.

6. To review the effectiveness of the arrangements in place for the regional coordination of unscheduled and emergency care, including primary care and ambulance services regionally and arrangements for regional escalation when required. This will include consideration of the effectiveness of planning for periods of increased demand.

7. To review the impact of the arrangements for unscheduled care on the education and training systems for medical and nursing staff within the Belfast Trust. To assess the impact of these arrangements on recruitment and retention of staff.

8. To identify learning points from the work of the review and make recommendations for improvement in the management of unscheduled and emergency care in Northern Ireland.

9. To examine any other relevant matters which emerge during the course of the review.

1.2 Membership of the Review Team

Dr David Stewart	Director of Reviews and Medical Director, RQIA (Chair)
Dr George Crooks	Chief Executive, NHS 24, Scotland
Dr Alistair Douglas	President, Society for Acute Medicine
Kathy Fodey	Director of Regulation and Nursing, RQIA
Paul Harriman	Assistant Director, Service Improvement, Sheffield Teaching Hospital
Dr Taj Hassan	Vice President, College of Emergency Medicine
Niall McSperrin	Lay Reviewer
Mary Monnington	Independent Nurse Advisor and Former Director of Nursing
Dr Elizabeth Myers	Nurse Consultant, Acute Medicine, NHS Tayside
Professor Bill Reid	Dean of Postgraduate Medicine, Scotland Deanery (South East Region)
Patricia Snell	Deputy Director Quality Improvement and Patient Safety, Guy's and St. Thomas' NHS Foundation Trust

Review Support Team

Patricia Corrigan	Project Administrator, RQIA
Hall Graham	Primary Care Lead, RQIA
Helen Hamilton	Project Manager, RQIA
Sinead McGuinness	Public Health Trainee, Public Health Agency

RQIA wishes to thank all those people who facilitated this review through participating in interviews, attending the summit events or providing relevant information.

We would particularly like to thank the affiliates in each organisation and the information teams in the Belfast Trust, the HSC Board and NIAS for providing information to underpin the review process.

1.3 Approach to the Review

The principal aim of this RQIA review is to identify recommendations for improvement in the management of unscheduled care. Although the primary focus has been on the systems and processes in the Belfast Trust, the review has also considered regional arrangements and initiatives.

The methods used included:

a) Consideration of recent evidence and reports on approaches to tackle challenges in unscheduled care systems,

b) Analysis of data on patient flows in the Belfast Trust, to identify possible areas for intervention to address system challenges,

c) Consideration of information provided by health and social care (HSC) organisations through completion of questionnaires,

d) Meeting with staff and managers from HSC and other organisations,

e) Visiting services and departments,

f) Holding two summit events:

- 19 May 2014, focusing on regional initiatives.[2]
- 20 May 2014, in relation to Belfast Trust services.

[2] Presentations available on the RQIA website http://www.rqia.org.uk/home/index.cfm

2. Background to the Review

The term unscheduled care is used to describe any unplanned health or social care.[3] Unplanned care is care which cannot reasonably be foreseen or planned in advance for a patient or client.

Recent pressures and challenges in the provision of unscheduled care have led to major reviews and initiatives across the United Kingdom. Professional bodies have provided guidance and advice on tackling issues. Innovative approaches are being tested to enhance the safety and experience for patients, by focusing on flows through care systems.

Against this background, there is a growing evidence base as to the effectiveness of possible approaches to improve unscheduled care, which inform the recommendations of this review.

2.1 Unscheduled Care Initiatives in England, Scotland and Wales

England

The Phase 1 report of the Urgent and Emergency Care Review in England[4] was published on 13 November 2013. This review, led by Professor Sir Bruce Keogh, sets out proposals for a fundamental shift in how and where services are delivered, to meet the urgent and emergency care needs of people across England.

The approach to the review included the development of an evidence base[5] to underpin the work of the review. The evidence base includes information about the challenges which are being faced in unscheduled care in England and possible approaches to address these challenges.

In June 2013 the Urgent and Emergency Care Steering Group for the review issued a set of emerging principles for an improved system in England for consultation.[6] Following the consultation the principles were amended, and these are set out in figure 1 overleaf.

[3] Keogh Evidence Report (Glossary of Terms Page 87) http://www.nhs.uk/NHSEngland/keogh-review/Documents/UECR.Ph1Report.Appendix%201.EvBase.FV.pdf
[4] Keogh Phase 1 Report http://www.nhs.uk/NHSEngland/keogh-review/Documents/UECR.Ph1Report.FV.pdf
[5] Reference to Keogh Report evidence base http://www.nhs.uk/NHSEngland/keogh-review/Documents/UECR.Ph1Report.Appendix%201.EvBase.FV.pdf
[6] http://www.england.nhs.uk/wp-content/uploads/2013/06/uec-emerg-princ.pdf

Figure 1: Principles for Urgent and Emergency Care in England

Outlines a system that:

- provides consistent high quality and safe care, across all seven days of the week;
- is simple and guides good, informed choices by patients, their carers and clinicians;
- provides access to the right care in the right place, by those with the right skills, the first time; and
- is efficient and effective in the delivery of care and services for patients.

Source: The Keogh Urgent and Emergency Care Review

Scotland

In February 2013, the Scottish Government launched a National Unscheduled Care Action Plan. Supported by funding of £50 million over three years, the action plan aims to address the challenges that NHS Boards in Scotland are facing in delivering emergency and urgent care, including reducing Accident and Emergency (A&E) waiting times. An update on the actions being taken was published in May 2014 by the Auditor General for Scotland.[7]

NHS Boards were required to submit local unscheduled care action plans to the Scottish Government in June 2013. Initiatives outlined in the plans to tackle delays and improve the flow across the system included:

- introducing acute assessment units, or where these are already in place, extending the opening hours
- reviewing referral processes for GP admissions to hospital
- changing hospital processes for discharging patients from wards and assessment units, for example planning early morning discharges instead of later in the day
- recruiting additional posts to cover seven days, for example increasing consultant and nursing staff at weekends in A&E
- increasing skill mix so there are more emergency care nurse practitioners and senior paramedics
- more frequent ward rounds and including a consultant on the team who undertakes the ward round so that decisions about discharging patients are taken earlier
- processes for redirecting or signposting patients away from A&E to more suitable services where relevant

[7] Accident and Emergency Performance Scotland: Audit Scotland (May 2014) http://www.audit-scotland.gov.uk/docs/health/2014/nr_140508_ae_update.pdf

The Auditor General's report noted wide variation across hospitals in Scotland in the percentage of emergency admissions that go through the A&E department. Overall, around 98 per cent of NHS Ayrshire and Arran's emergency admissions go through an A&E department; compared with 34 per cent in NHS Tayside.

The report noted that the way patients are admitted to hospital may affect performance against the four hour A&E standard in Scotland. Higher admission rates through A&E departments were linked to weaker performance against the standard.

NHS Board performance against the four hour standard was also found to be generally lower for those boards with higher than average bed occupancy.

In March 2014, the Scottish Government announced that funding was being made available to test two innovative models of healthcare to help improve the flow of patients through the NHS:[8]

- NHS Forth Valley will pilot a model pioneered by the Institute of Healthcare Optimisation (IHO), which has been found to significantly reduce waiting times in hospitals in the USA and Canada,
- NHS Lanarkshire will test a Flow Cost Quality model which has been pioneered in England and Wales.

The Scottish Government plans to share the learning from initiatives through a good practice website and national learning events.

A press release, issued on 25 May 2014[9], highlighted a number of the initiatives which had been implemented in the first year of the Unscheduled Care Action Plan including:

- creation of a dedicated unit to prevent frail elderly going into hospital in NHS Forth Valley
- introduction of a new discharge hub to reduce delays for patients waiting in hospital to go home in NHS Ayrshire and Arran
- recruitment of 24/7 flow coordinators to improve how patients move through the healthcare system in NHS Fife

[8] Improving flow of patients: The Scottish Government (14 March 2014) http://news.scotland.gov.uk/News/Improving-flow-of-patients-a62.aspx
[9] Investing in A&E. £30 million eases pressures. The Scottish Government (25 May 2014) http://news.scotland.gov.uk/News/Investing-in-A-E-cc6.aspx

Wales

In February 2013, teams from across healthcare in Wales attended a workshop to design a change strategy to support health boards and trusts deliver more effective and reliable unscheduled care.[10]

The resulting plan was to establish a two-year National Patient Flow Programme. The programme is supported by 1,000 Lives Improvement, a national improvement programme, supporting organisations and individuals, "to deliver the highest quality and safest healthcare for the people of Wales".

The goal of the new programme is to ensure better flow through the health and social care system in Wales, for urgent and emergency care patients, and to build organisational capacity. It builds on Improving Quality Together, a national quality improvement learning programme.

In October 2013, the programme adopted a Breakthrough Collaborative approach, modelled on the successful work of the Institute for Healthcare Improvement.[11] This approach has been used frequently in Wales in the 1,000 Lives and 1,000 Lives Plus campaigns.

The collaborative approach being taken forward in Wales aims to learn from, and build on the 'Flow Cost Quality' pilots tested in England as part of a Health Foundation initiative.[12]

The programme emphasises that organisations cannot tackle generic problems; they need to understand their specific issues. Tools are available to help diagnose local problems. Training and facilitation is being provided to build expertise in analysing, understanding and improving flows.

To enhance understanding of unscheduled care challenges, which were experienced during the period from October 2012 to April 2013, an analysis was carried out by Public Health Wales.

The study concluded that the increased pressures were most likely caused by worsening supply-side factors and problems across the health and social care system. This was compounded by the usual increase in winter demand, superimposed by the unusual acute events of sudden drops in temperature in October 2012 and March 2013, with a prolonged cold spell from October 2012 until April 2013.

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[10] 'The National Patient Flow Programme. Module One – Getting Started': 1,000livesplus.wales.nhs.uk http://1000lives.org.uk/

[11] http://www.ihi.org/Pages/default.aspx

[12] http://www.health.org.uk/areas-of-work/programmes/flow-cost-quality/

The situation was worsened by peaks in circulating respiratory viruses, during the same period, and the likelihood of rapidly increasing cold homes from fuel poverty.

The findings indicated that supply-side problems in Wales meant that the unscheduled care system was not resilient to expected and unusual surges in external demand, or demand shifted within it.[13]

2.2 Initiatives by Professional Bodies

Professional bodies in the United Kingdom have, individually and collectively, prepared reports and guidelines to help inform improvement in unscheduled care.

It is not possible to consider this body of guidance in detail for this review but some recent documents are highlighted below. Relevant guidance was considered during the preparation of the evidence base for the Keogh Review in England.

College of Emergency Medicine

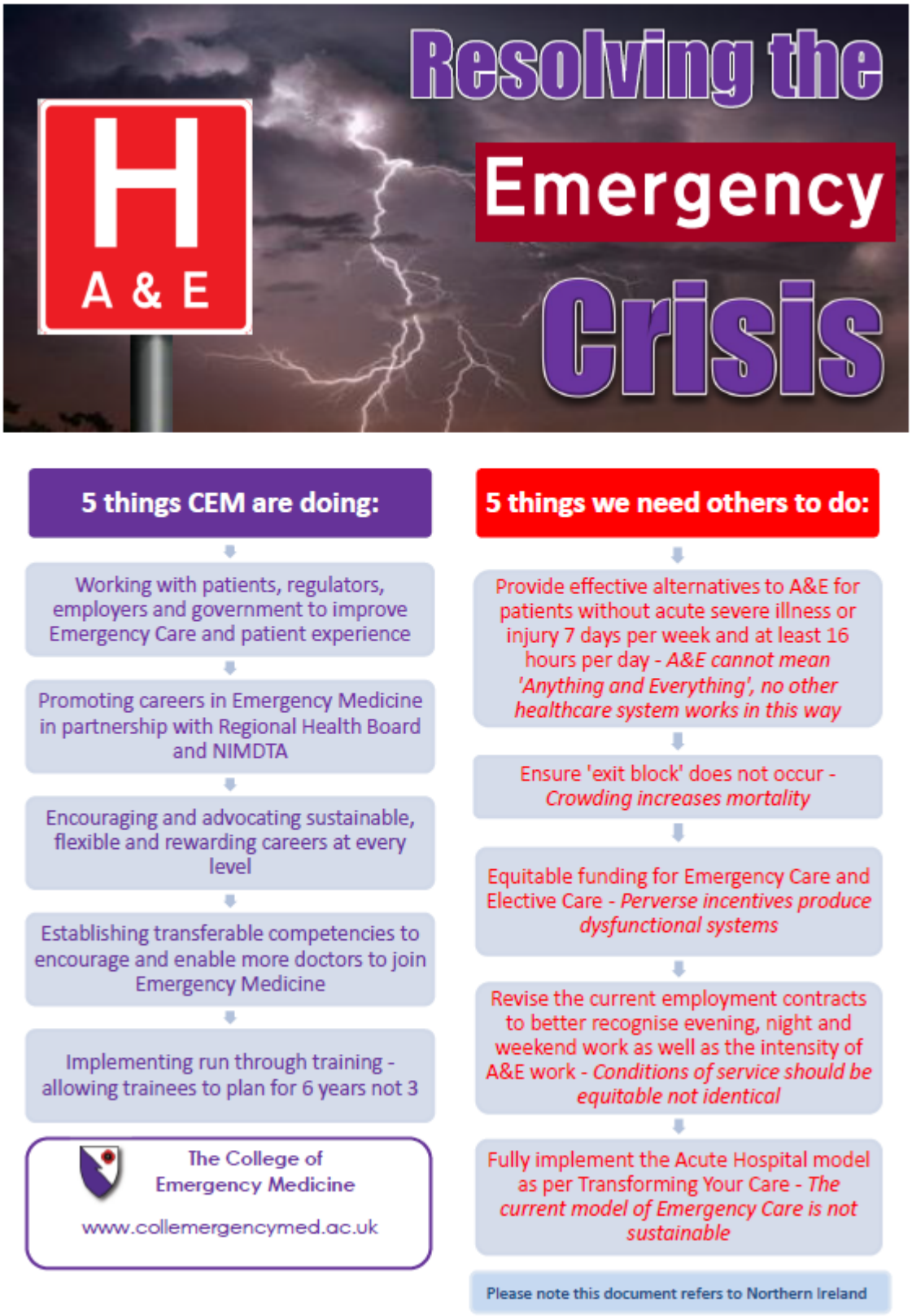
The College of Emergency Medicine was established to advance education and research in Emergency Medicine.[14] It works to ensure high quality care, by setting and monitoring standards of care, and providing expert guidance and advice on policy to relevant bodies on matters related to emergency medicine.

The college has identified 10 priorities for emergency medicine to provide a long term future for ED services while tackling short term immediate pressures. Five are to be taken forward by the college, and five are for other parts of the system. The priorities identified for Northern Ireland are set out in Figure 2 overleaf.

[13] External Factors ('Drivers) Affecting Long-Term Trends and Recent 'Pressures' on Unscheduled Care Use and Performance in Wales: Public Health Wales (19 June 2013).

[14] Emergency Medicine is a 'field of practice based on the knowledge and skills required for the prevention, diagnosis and management of acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioural disorders. It further encompasses an understanding of the development of pre-hospital and in-hospital emergency medical systems and the skills necessary for this development' (International Federation for Emergency Medicine).

Figure 2: College of Emergency Medicine Priorities for Northern Ireland



Source: The College of Emergency Medicine

Royal College of Nursing

The Royal College of Nursing (RCN) has established an Emergency Care Association to represent the view of nurses working in emergency and urgent care settings. The association has taken forward a programme of actions to improve emergency care including:

- the development of a baseline emergency staffing tool, in partnership with the Faculty of Emergency Nursing
- holding emergency care summits across the United Kingdom to share new tools and experiences in emergency care

Royal College of Physicians

The Royal College of Physicians has published a series of acute care toolkits:

1. Handover May 2011
2. High-quality acute care October 2011
3. Acute medical care for frail older people March 2012
4. Delivering a 12-hour consultant presence on the acute medical unit (in association with the Society for Acute Medicine) October 2012
5. Teaching on the Acute Medical Unit November 2012
6. The Medical Patient at Risk May 2013
7. Acute Oncology on the Acute Medical Unit October 2013
8. The Medical Registrar on call October 2013.

Society for Acute Medicine

The Society for Acute Medicine is a national representative body for staff caring for medical patients in the acute hospital setting. Although the majority of members are doctors specialising or training in acute medicine[15], the society actively encourages participation from all professions involved in acute medical care.

The society, in partnership with the West Midland Quality Review Service, has published a set of quality standards for acute medical units.[16] The society has published four clinical quality indicators for acute medical units (Figure 3).

[15] Acute Internal Medicine 'is that part of general (internal) medicine concerned with the immediate and early specialist management of adult patients suffering from a wide range of medical conditions who present to, or from within hospitals requiring urgent or emergency care' Joint Royal Colleges of Physicians Training Board (JRCPTB).

[16] 'Quality Standards for Acute Medical Units (AMUs); Version 2 : West Midlands Quality Review Service and the Society for Acute Medicine: (June 2012)

Figure 3: Clinical Quality Indicators for Acute Medical Units (AMU's)

1. All patients admitted to the AMU should have an early warning score measured on arrival on the AMU.
2. All patients should be seen by a competent clinical decision maker within four Hours of arrival on the AMU who will perform a full assessment and instigate an appropriate management plan.
3. All patients should be reviewed by the admitting consultant physician or an appropriate specialty consultant physician within 14 hours of arrival on the AMU.
4. All acute medical units should collect the following data:
    - hospital mortality rates for all patients admitted via the AMU
    - proportion of admitted patients who are discharged directly from the AMU
    - proportion of patients discharged from the AMU who are readmitted to hospital within seven days of discharge

Source: The Society for Acute Medicine

British Geriatrics Society Silver Book

In June 2012, a group of professional and voluntary organisations, led by the British Geriatrics Society, published a set of quality standards for the emergency care of older people, known as the Silver Book.[17] The focus of this guide is on care for older people over the first 24 hours of an urgent care episode. The author of each chapter reflects the most relevant lead body for that aspect of care. The Silver Book sets out 32 recommendations to improve care.

The authors emphasise that there is a pressing need to change how we care for older people with urgent care needs, to improve quality, outcomes and efficiency.

2.3 Understanding and Improving Flow

Taking a whole system approach and improving flow are frequently cited as key requirements in the design of approaches to tackling challenges in unscheduled care.

Evidence of the effectiveness of specific methods to take forward system wide approach to improving flow is emerging.

In April 2013, the Health Foundation published a report on the learning from two trusts in England who had taken part in its Flow Cost Quality improvement programme: [18]

[17] "Quality Care for Older People with Urgent and Emergency Care Needs, Silver Book.' British Geriatrics Society ; June 2012

[18] 'Improving patient flow; How two trusts focused on flow to improve the quality of care and use available capacity effectively.' The Health Foundation (2013)

Each trust focused improvement work on specific flows within unscheduled care where there were particular challenges in that trust:

- South Warwickshire NHS Foundation Trust looked at the emergency flow for all adult patients
- Sheffield Teaching Hospitals NHS Foundation Trust focused on flows of patients in care of the elderly services.

Both trusts reported: “early indications of apparent reductions in mortality, maintained performance during difficult financial times and, in some instances, removal of considerable capacity while improving quality of care and reducing length of stay”.

Case studies from each hospital have been published to provide greater detail about the work done and the impact that the programme has had.[19] [20]

In November 2013, the Health Foundation published an evidence scan of approaches to improving patient flow across organisations and pathways. This concluded that methods to improve patient flow can enhance throughput and continuity, and reduce waiting time and length of stay. “The size of the impact depends on the exact methodology used, but benefits have been found in both hospitals and care in the community across a wide range of pathways and specialisms”. [21]

The evidence scan sets out key lessons for healthcare teams wanting to analyse and alter patient flow (Figure 4).

[19] ‘Unblocking a hospital in gridlock (South Warwickshire NHS Foundation Trust); The Health Foundation (2013)
[20] ‘Improving the flow of older people (Sheffield Teaching Hospitals NHS Foundation Trust); The Health Foundation (2013)
[21] ‘Improving patient flow across organisations and pathways. Evidence scan No.19’ The Health Foundation (November 2013)

Figure 4: Lessons Learned from the Improving Flow Evidence Scan

Healthcare teams wanting to analyse and alter patient flow should note the following key learning points:

- Analysing patient flow and putting in place steps to address bottlenecks can have a measureable impact on throughput and length of stay.
- It is possible to transfer improvement techniques to a healthcare context, but it is essential to recognise contextual factors and adapt the methods.
- It is important to undertake detailed 'diagnostic' work to understand patient flow, rather than moving straight into redesigning services. Real-time demand and capacity management may be important.
- Flow issues may best be addressed by exploring pressures across an entire hospital or a wider system comprising primary care, ambulance, hospital, social care and community services, rather than in specific departments.
- It can take time for new processes and systems to embed. Adequate time, resources and management support are needed to facilitate change.
- The most successful redesign initiatives include extensive staff engagement and training. If people are being asked to change the way they work, it is important that they understand why and what the benefits will be for themselves and patients.
- There is no 'one size fits all' approach. Many different methods have been used with the potential to improve healthcare.

Source: The Health Foundation

3. Unscheduled Care in the Belfast Trust

3.1 Context

Unscheduled care was established as a key part of the Belfast Trust strategic direction, as identified in New Directions (2007-8 to 2012-13).[22] The strategy set out the focus of the three acute hospitals as:

- the Royal Victoria Hospital (RVH) as the centre for major trauma services, including a heart centre, with an increased focus on emergency services
- Belfast City Hospital (BCH) as the centre for cancer, renal and a range of general acute hospital services, with an increased focus on elective services and chronic conditions management
- the Mater Hospital (MIH) as the centre for ophthalmology services and general acute hospital services

By 2013, the majority of the planned service reorganisations had taken place (Figure 5 below).[23]

Figure 5: Acute Hospital Service Reorganisation within Belfast Trust

ENT: The inpatient and daycase service was focused at the Royal Hospitals, with outpatient services across the trust.

Vascular Surgery: The inpatient and daycase service was based at the Royal Hospitals, linked to the trauma centre, with outpatient services across the trust.

Gynaecology: BCH provides all elective and emergency inpatient services. As an interim measure, until additional Day Procedure Unit capacity is available at BCH, daycase services are undertaken at the Mater Hospital.

Urology: BCH provides for inpatients and day case elective and emergency services (services have been retained at the Mater Hospital).

Stoke Services: Acute inpatient stroke services have been centralised at RVH; Community rehabilitation and voluntary sector services have been integrated as a single system.

General Surgery: An Emergency Surgical Unit (EmSU) has been established at RVH with elective services at BCH, RVH and Mater.

Source: Belfast Health and Social Care Trust

[22] New Directions: A conversation on the future delivery of health and social care services in Belfast http://www.belfasttrust.hscni.net/pdf/New_Directions_Final(1).pdf
[23] Improvement Plan for Unscheduled Care within the Belfast Trust: Belfast Trust (April 2014); http://www.belfasttrust.hscni.net/pdf/Improvement_Plan_for_Unscheduled_Care_Apr14_Final.pdf

In November 2011, the Emergency Department (ED) in the Belfast City Hospital (BCH) was closed on a temporary basis, for medical staffing reasons. This led to significant challenges for the trust in maintaining access to unscheduled care services on three acute hospital sites, primarily through two adult EDs.[24]

In particular, the change required the transfer of patients who were acutely unwell between hospital sites, leading to delays in the provision of care.

In response to the challenges in unscheduled care, the Belfast Trust:

- Established an expanded AMU at RVH with an increase from 28 to 60 beds,
- Developed a Direct Medical Admissions Unit (DMAU) at BCH to which general practitioners (GPs) could refer patients for direct admission, rather than going through ED. This unit built up to approximately 4,000 attendances per year.

Changes to the services were put in place in December 2013 to reduce the number of transfers of acutely ill patients from RVH ED to BCH, and to consolidate the presence of senior doctors in acute internal medicine on the RVH site. Direct access to BCH for medical patients was retained for patients referred by GPs. These patients are placed under the supervision of consultants in general medicine and gastroenterology.

[24] 'Improvement Plan for Unscheduled Care within the Belfast Trust': Belfast Trust (April 2014); http://www.belfasttrust.hscni.net/pdf/Improvement_Plan_for_Unscheduled_Care_Apr14_Final.pdf

3.2 Declaration of Major Incident on 8 January 2014

On 8 January 2014, Belfast Trust declared a major incident at 21:26. At the time when the incident was declared, there were 98 patients in the RVH ED, of whom 41 were waiting on trolleys, with no beds allocated.

The incident was called due to:

- the number of CAT 2 patients[25] in the Emergency Department
- the length of time that these patients were waiting for clinical assessment (3 hours)
- the lack of additional staffing in hospitals needed to enhance capacity

An incident control team (ICT) was established to coordinate the response to the escalating pressures in the ED. Actions taken included: opening temporary additional bed capacity at RVH; bringing in additional staff; transferring patients to the Belfast City and Musgrave hospitals; diversion of ambulances to the Ulster Hospital; and setting up an incident control room.

The incident was quickly brought under control and it was declared over at 23:42. Belfast Trust has carried out a review of the trust-specific aspects of the incident to identify learning from this experience. The trust report is set out in Appendix B.

The trust's recommendations are detailed at Figure 6 overleaf.

RQIA has considered regional aspects related to the declaration of the incident. An analysis of the period before and after declaration of the major incident, from 24 December 2013 to 15 January 2014, is set out in Appendix C.

Throughout Northern Ireland there were fluctuating numbers of emergency department attendances and admissions to hospitals over the Christmas and New Year period. Emergency department attendances, hospital admissions and discharges were low on several days between Tuesday 24 December and Sunday 5 January, particularly on the public holidays and at weekends. Numbers were highest on the days following public holidays and weekends. In the week commencing Monday 6 January there was a more sustained increase in emergency department attendances and hospital admissions. Many of the admissions in this week were elective, of which there had been relatively few in the Christmas and New Year period.

[25] Manchester Triage System- CAT 2 Patients- Very Urgent- should be clinically assessed within 10 minutes following triage

Figure 6: Key Learning and Recommendations from Belfast Trust Review of Major Incident

Recommendation 1

- Decision makers should have access to real time data on patient flows and capacity to inform decision making and appropriate escalation.
- The Trust's escalation plan needs to be revised and updated to aid earlier decision making and reflect the actions required of all clinical and social care teams. It needs to be owned by these teams.

Recommendation 2

- The BHSCT should finalise and implement an Enhanced Capacity Plan taking account of the points made above. This plan should include arrangements for cross site transfers.

Recommendation 3

- The BHSCT should consider a separate communication cascade for the call out of key staff who can provide an appropriate response to the management of pressures and activation of an Enhanced Capacity Plan.

Recommendation 4

- The BHSCT should have a pre-identified on site co-ordinating centre to support the co-ordination of an Enhanced Capacity Plan.

Source: Belfast Health and Social Care Trust

In the Belfast Trust, factors which contributed to the pressures in the week of the major incident included: high levels of elective admissions to RVH on the Monday 6 and Tuesday 7 January, compared to over the Christmas and New Year period; on 8 January, a high number of patients were admitted from the RVH Emergency Department; and a higher acuity of patients in RVH Emergency Department than on previous days.

Other trusts appear to have been under similar pressure in the period from 24 December to 15 January. Some hospitals responded to manage pressures on their unscheduled care systems through internal diverts to other hospitals within the same trust.

The declaration of a major incident rapidly activated a set of processes to alleviate a very difficult situation in the RVH ED. The immediate issues improved quickly through the measures that were put in place. Important learning points have been identified from consideration of the circumstances, both at trust and regional level.

Figure 7: Regional Recommendations Following Review of Time Period before and after Major Incident

Recommendation 1:
All HSC organisations should review their escalation arrangements for responding to periods of exceptional pressure for unscheduled care. Plans should set out arrangements for: creating additional capacity; bringing in additional staff; and contacting senior decision makers. The arrangements for coordination of responses within and across HSC organisations to exceptional periods of demand should also be reviewed.

Recommendation 2:
Regional and trust plans for coordination and responding to predictable periods of increased demand should be reviewed. In particular, early planning should be instituted for the post-Christmas and New Year period, to better manage system flows, including improved scheduling of elective activity.

Source: Report prepared for the RQIA Review Team (Appendix C attached)

Prior to the incident being declared, there is clear evidence of recognition by the Belfast Trust that the emergency care services were facing significant challenges.

At the request of the trust, the College of Emergency Medicine carried out a visit to review services in March 2013. The report of that review was provided to the trust in August 2013 and made 10 recommendations for improvement (Appendix A).

The trust had commenced action in relation to the recommendations. However, some planned improvements, such as the appointment of additional staff were still in progress at the time when the incident was declared.

Following the declaration of the incident, pressures continued to occur. At the request of the Minister, services were subject to an RQIA inspection from 31 January 2014 to 3 February 2014. The report of that inspection set out the difficulties that were being faced by services, at that time.[26] There were major problems in ensuring the effective flow of medical patients through the hospital, with wide impacts on the delivery of services.

The evidence that services were under sustained pressure before and after the declaration of the incident reinforces the need to understand the underlying causes of these challenges, as well as learning from the particular circumstances relating to the declaration and management of the major incident itself.

[26] RQIA Final Report of the Inspection of Unscheduled Care in the Belfast Health and Social Care Trust 31 January to 3 February 2014
http://www.rqia.org.uk/cms_resources/RVH%20Inspection%20Report%20for%20Publication%20on%20Website%208%20Apr%2014.pdf

3.3 Identifying Key Areas of Focus

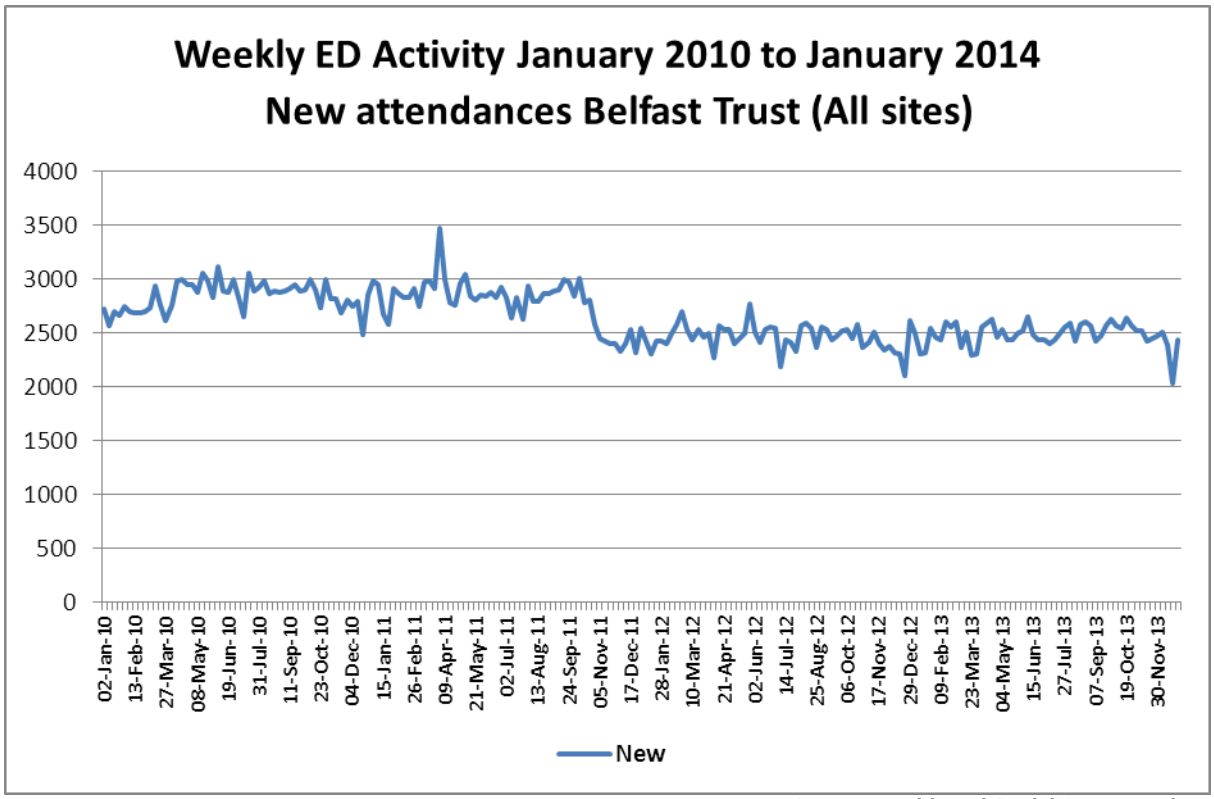
To identify key areas of focus for the review, a high level analysis of flows was carried out of unscheduled care patients through the acute hospitals in the Belfast Trust.

Emergency Departments

Figure 8 illustrates the total number of new patients who attended the emergency departments of the trust from 2010 to 2013. It can be seen that, up to November, 2011, when the BCH ED closed, there was a stable pattern.

The total number of patients then fell by approximately 500. Since that date, the total numbers of patients attending Mater and RVH has remained relatively constant.

Figure 8: Emergency Department Activity

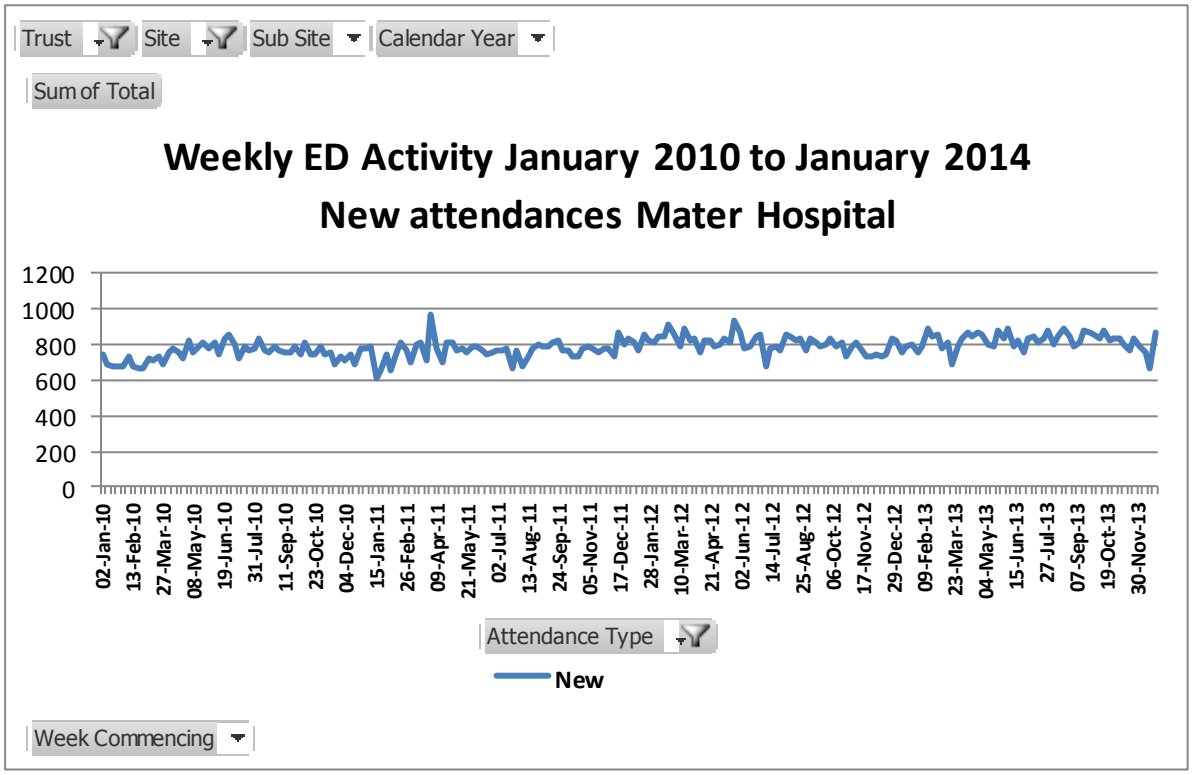


Data Source: Health and Social Care Board

Figures 9 to 11 show the patterns for the individual hospitals over that period. Although the RVH experienced a significant rise in the number of patients attending when the BCH ED closed, not all patients went there. Some went to other departments, in particular the Ulster Hospital, but there was also an overall fall in patients attending EDs.

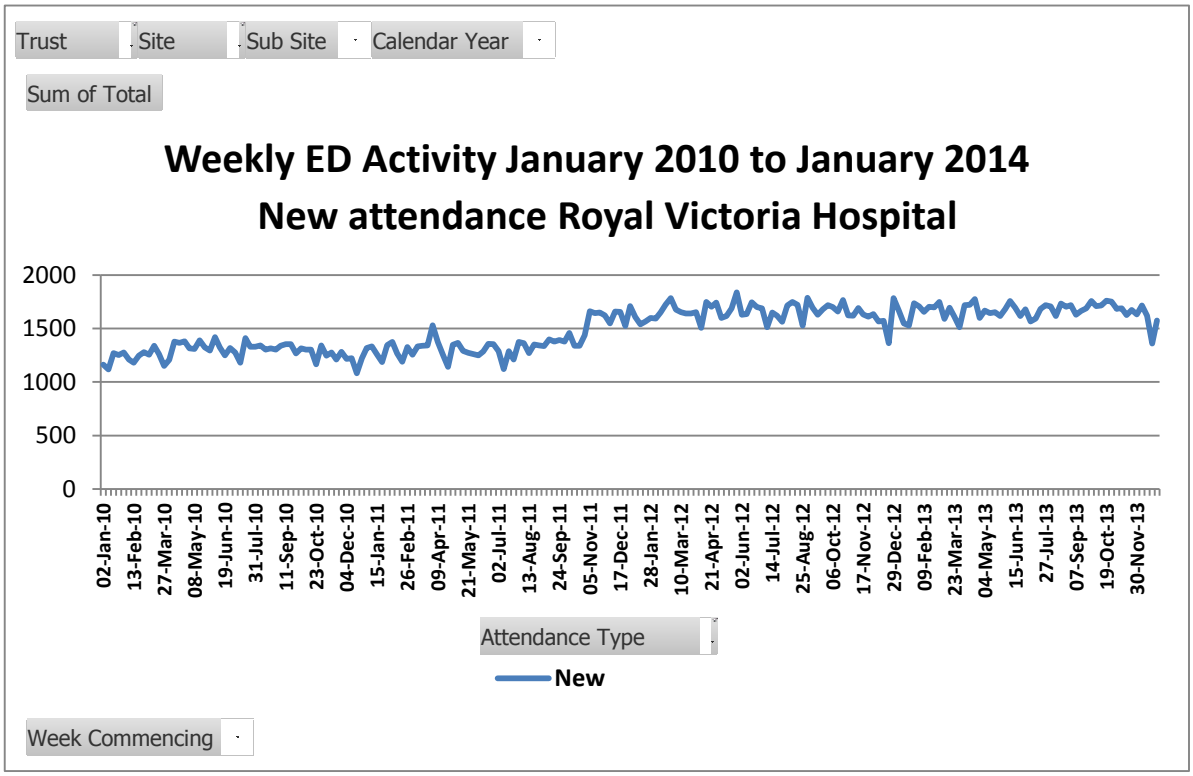
The patterns indicate that the challenges being faced by the RVH ED are not related to an overall increase in numbers of patients attending EDs in the trust.

Figure 9: Emergency Department Activity (Mater Hospital)



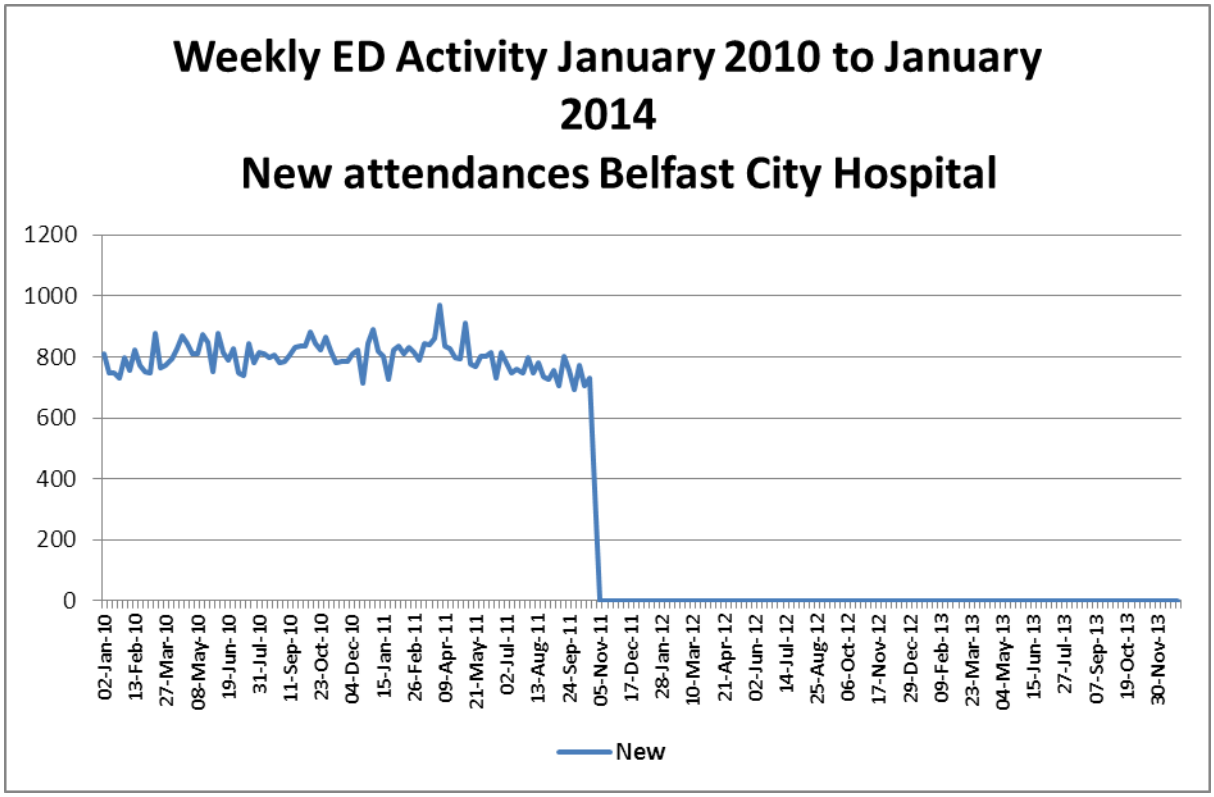
Data Source: Health and Social Care Board

Figure 10: Emergency Department Activity (Royal Victoria Hospital)



Data Source: Health and Social Care Board

Figure 11: Emergency Department Activity (Belfast City Hospital)



Data Source: Health and Social Care Board

Unscheduled Care Admissions

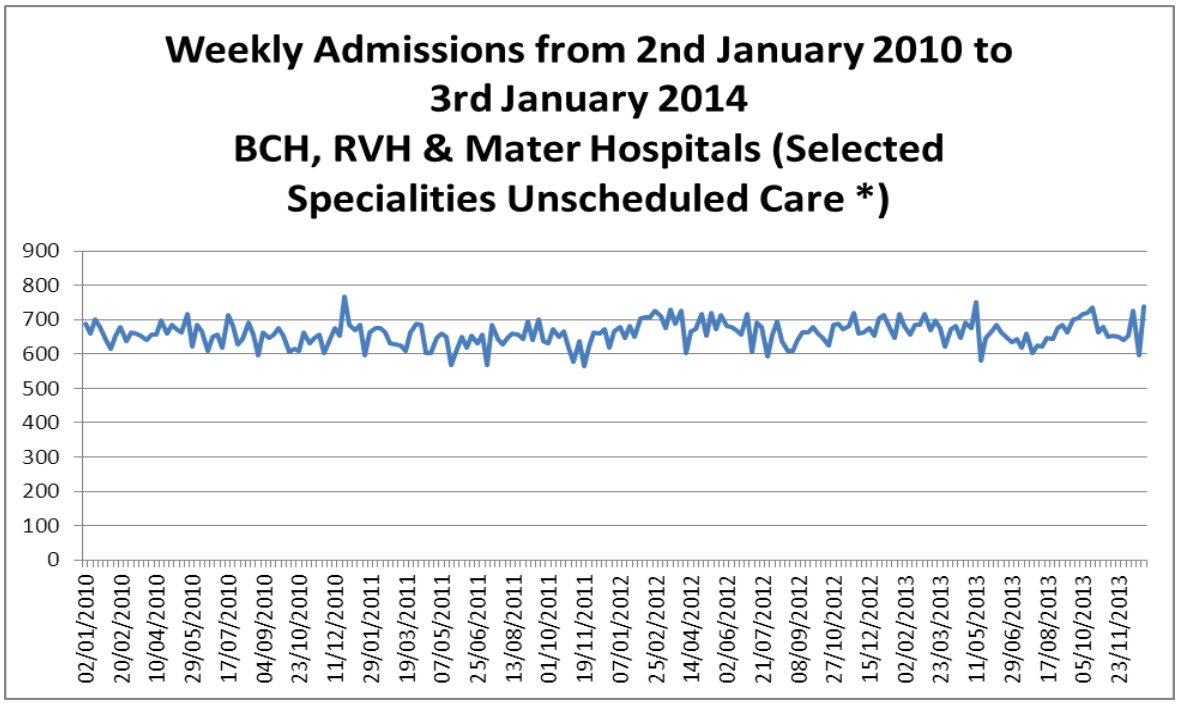
Figure 12 illustrates the total number of unscheduled care patients admitted to the RVH, BCH and MIH hospitals for a range of specialties providing unscheduled care, for the period 2010 to 2013.

The overall pattern indicates that the total number of patients being admitted has remained relatively stable over this period with annual reductions at Christmas and occasional short periods of increase.

The patterns indicate that the challenges are not linked to an overall increase in the number of patients being admitted for unscheduled care to hospitals in the trust.

Figures 13 to 15 illustrate the patterns for individual hospitals. These figures reveal that within the overall stable pattern, there were significant changes in the patterns for individual hospitals.

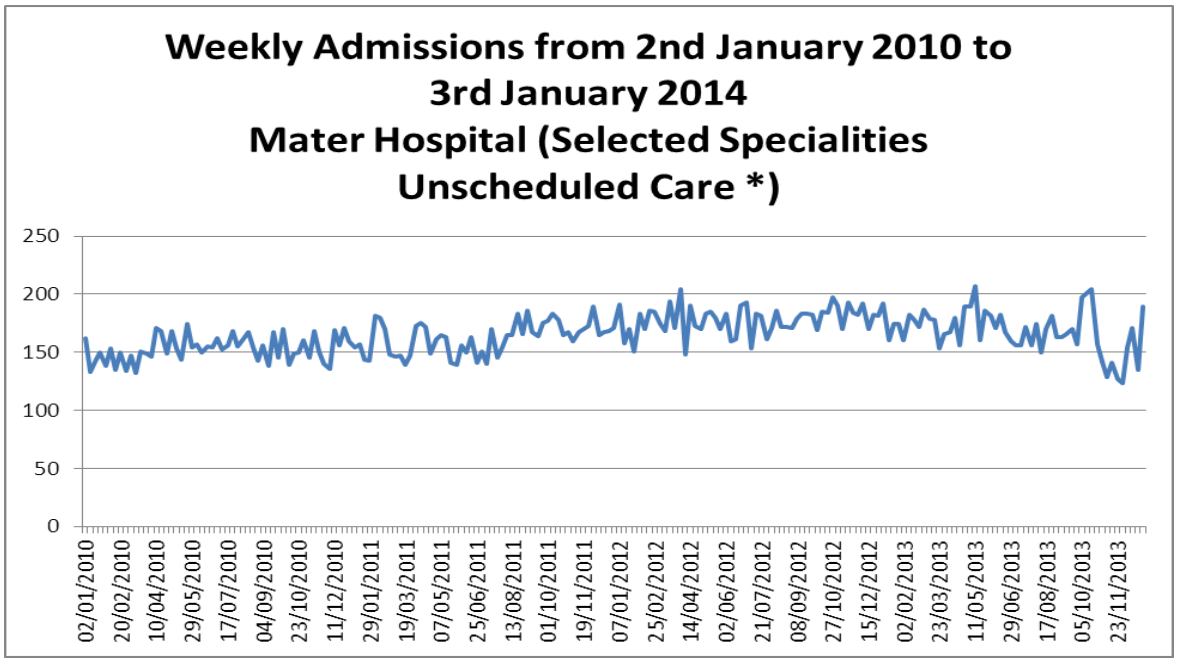
Figure 12: Weekly Admission Activity



Data Source: Health and Social Care Board: *Specialities above includes: (Cardiology; Endocrinology; Gastroenterology; General Surgery; Geriatric Medicine; Thoracic Medicine; Trauma and Orthopaedics; Urology; General Medicine)

The Mater Hospital continued to admit a similar number of unscheduled care patients during this period 2010 up to the latter half of 2013. At that time, emergency surgery was transferred to the RVH.

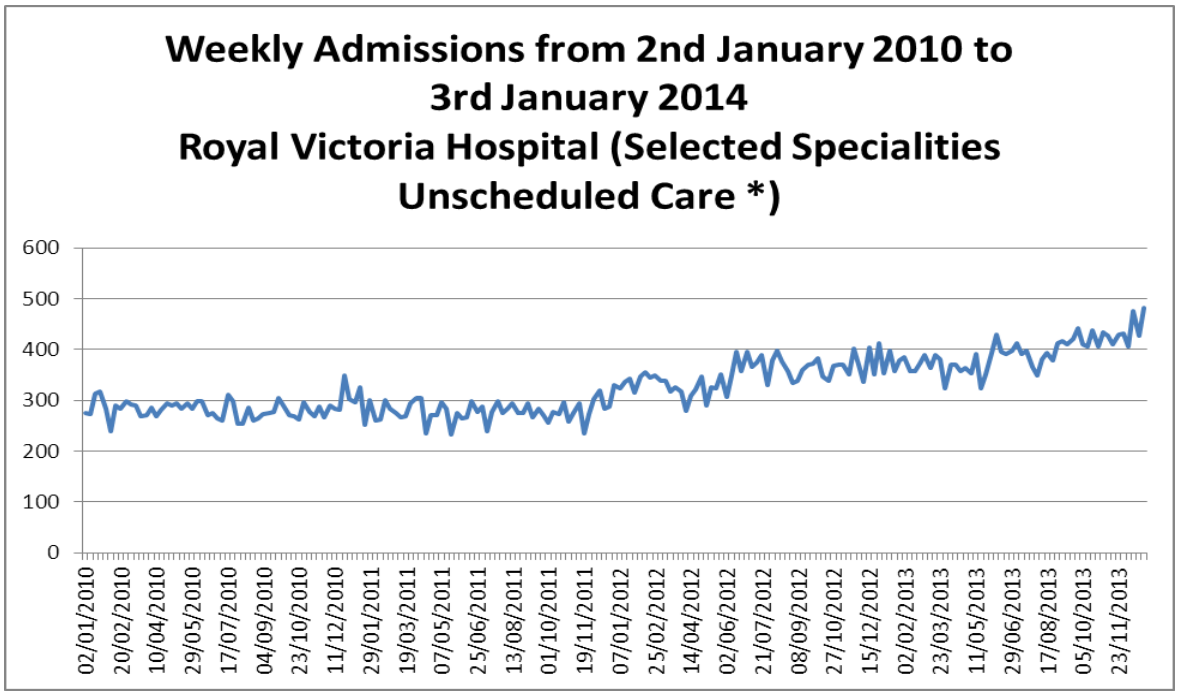
Figure 13: Weekly Admission Activity (Mater Hospital)



Data Source: Health and Social Care Board: *Specialities above includes: (Cardiology; Endocrinology; Gastroenterology; General Surgery; Geriatric Medicine; Thoracic Medicine; Trauma and Orthopaedics; Urology; General Medicine)

Over the period January 2010 – 2014 RVH has had a rising trend in the number of unscheduled care patients being admitted. While the numbers did rise when the BCH ED closed, the upward trend has been continuous since.

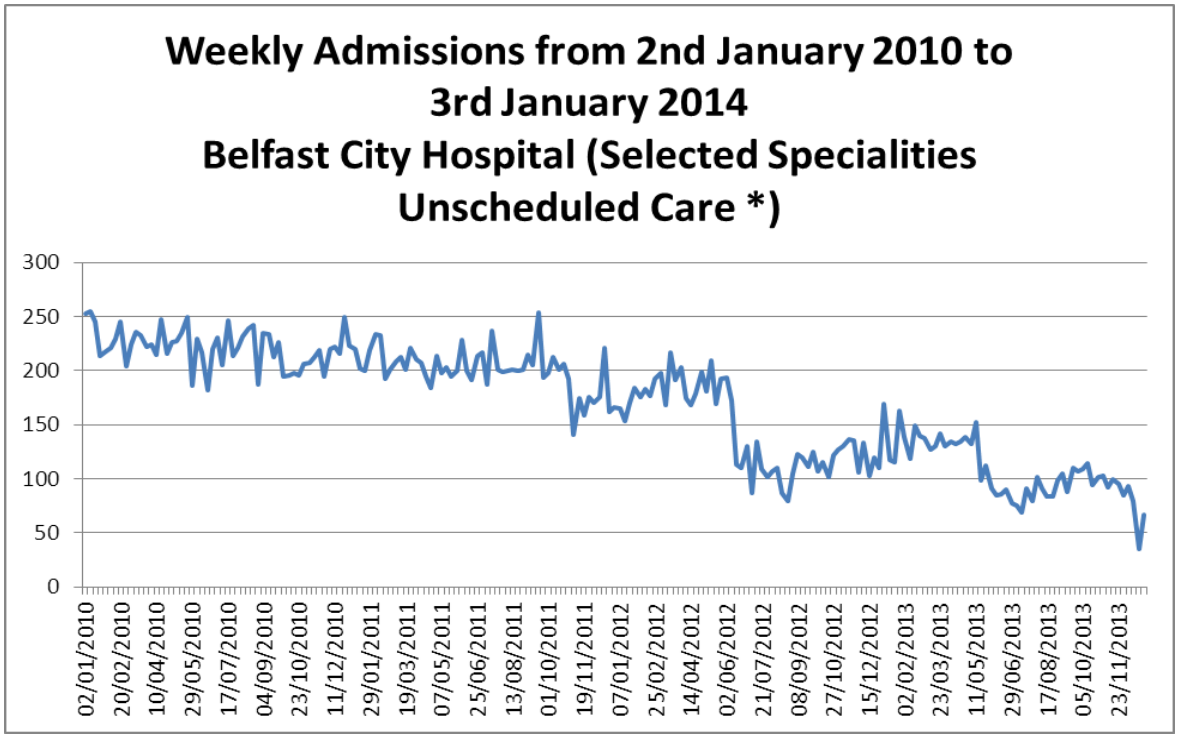
Figure 14: Weekly Admission Activity (Royal Victoria Hospital)



Data Source: Health and Social Care Board: *Specialities above includes: (Cardiology; Endocrinology; Gastroenterology; General Surgery; Geriatric Medicine; Thoracic Medicine; Trauma and Orthopaedics; Urology; General Medicine)

BCH has had a marked decline in the number of unscheduled care admissions. The most signicant drop occurred, not at the time of the closure of it's ED in November 2011, but in June 2012. At that time, the medical admission system was changed, with the introduction of an expanded medical admission unit at RVH. The falling trend continued to the end of 2013, when very few unscheduled care patients were being directly admitted to BCH for this range of specialties. It should be noted that these figures do not include patients transferred from other hospitals within the Belfast Trust.

Figure 15: Weekly Admission Activity (Belfast City Hospital)



Data Source: Health and Social Care Board: *Specialities above includes: (Cardiology; Endocrinology; Gastroenterology; General Surgery; Geriatric Medicine; Thoracic Medicine; Trauma & Orthopaedics; Urology; General Medicine)

Consideration of Individual Specialties For Particular Focus

Members of the RQIA review team met with clinical and managerial staff in the Belfast Trust to consider which specialties required the most focus to improve patient flows within the hospitals. The information considered included:

- perspectives from clinical teams and bed managers as to areas where they experienced greatest difficulties in moving patients to the next step in care pathways
- high level data on flows and also data relating to individual specialties
- consideration of the findings of the RQIA inspection in 31January to 3 Feburary 2014

In general, the flows of patients in the following areas of unscheduled care were considered to be working well, although some areas for potential improvement were identified:

- **Emergency surgery**: following the redesign of services in 2013, difficulties were experienced when beds in the surgical assessment area and emergency surgey wards were used for medical patients. There were delays being experienced, at times, in patients being moved from the Mater ED to the RVH Emergency Surgical Unit.

- **Fractures service** at RVH: although there was some evidence of a recent increasing trend in the number of patients being admitted which required further investigation.
- **Cardiology:** where each of the three acute hospitals admit patients. There was a recognised need to enhance the assessment arrangements for patients arriving at Belfast EDs.
- **General Medicine** at Mater Hospital: although there was evidence of a rising trend in the proportion of the general medical take being managed at the hospital which does not have a specific medical assessment area.
- Particular medical specialties at both RVH and BCH including: **Hepatology, Endocrinology, Haematology and Renal Medicine: e**ach of these specialties has a signicant regional element to their work.

The specialties and services that were experiencing the greatest difficulties in patient flow were:

- The **Emergency Department** at RVH, where the main difficulties related to moving patients to beds in the rest of the hospital after ED assessment and a decision to admit had been taken. This was frequently related to patients waiting to be admitted to the Acute Medical Unit.
- The **Acute Medical Unit** at RVH,which was nearly always full, and where the consultants were also responsible for patients who were outliers in other parts of the hospital.
- **Respiratory Medicine**, where services are provided at Mater, RVH and BCH Hospitals, and where there is a recognised peak in admissions in winter. At RVH there were periods when there were extensive numbers of patients as outliers from the respiratory ward.
- **Care of the Elderly,** where there are beds at Mater and BCH but not at RVH, since the creation of the dedicated stroke unit. To help improve flows, a geriatric service is provided to the Acute Medical Unit. There were difficulties being experienced in transferring patients from the RVH and the Mater to BCH at times, due to limited beds being available when required.

Difficulties were also experienced at times in relation to the bed profile of Gastroenterology where there are no dedicated beds on the RVH site with beds at the BCH site. This necessitates the specialty borrowing beds from other specialty areas, in particular, hepatology and acute internal medicine.

The review team therefore decided to consider the issues in relation to ED, with the main focus on the three services: Acute Internal Medicine, Respiratory Medicine and Care of the Elderly. If flows can be significantly improved in these areas, it is anticipated that this will reduce the wider pressures by:

- achieving a considerable reduction in the time patients wait in ED to be admitted to a bed, allowing flows through ED to be improved

- reducing the number of patients who are outliers in other wards from respiratory and acute internal medicine, with benefits both for those patients and for the flow of patients in those other specialty areas

3.4 Emergency Departments

The two emergency departments in the Belfast Trust each face specific challenges. Difficulties at the RVH ED were the subject of a visit by the College of Emergency Medicine in 2013, which resulted in a set of 10 recommendations set out in Appendix A. The report of the RQIA inspection in early 2014 was published in April 2014 and made further recommendations for improvement in the service.[27]

The RQIA review team visited the Mater Hospital on 18 April 2014. Specific local challenges were brought to the team's attention in relation to its ED including:

- There will be a period later in 2014 when there will only be one substantive consultant in emergency medicine (out of an establishment of five) working in the unit following the retirement of a consultant.
- Delays are occurring in transfer of surgical patients from the ED to the Emergency Surgery Unit at RVH, in line with the agreed protocol. These delays were considered to be mainly due to a lack of bed availability at the RVH to receive the patients, rather than a lack of available transport.
- Although diverts were put in place at times between RVH and Mater EDs in either direction to relieve pressures, there was a perceived lack of overall coordination of flows across the trust hospitals at time of pressure. This was considered to have occurred on the night when the major incident was declared, with patients being diverted towards the Ulster Hospital, when Mater staff believed they could have offered assistance.

Activity Patterns

Information about activity patterns for the Belfast Trust EDs was considered, to identify if there were particular patterns, which were contributing to the challenges being faced.

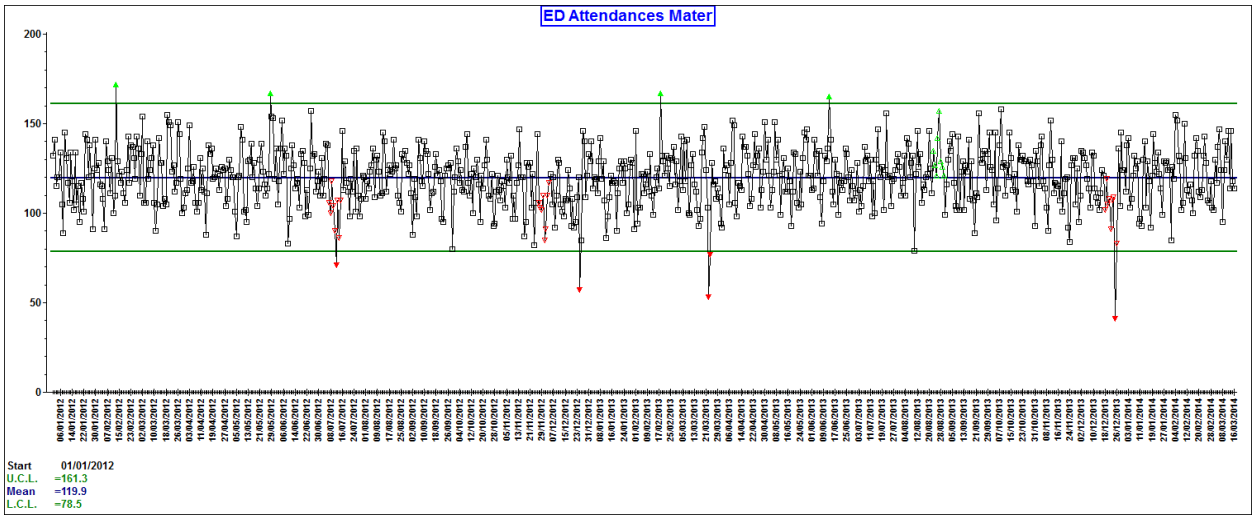
Figures 16 and 17 illustrate daily attendances over the past two years, to the Mater and the Royal Victoria hospitals, using statistical process control charts. These are used to help understand variation in systems and to identify when special causes occur, which need to be examined.

Both EDs display what it is termed being in statistical control. There are certain specific days when demand is different, such as low counts at Christmas.

[27] RQIA Final Report of the Inspection of Unscheduled Care in the Belfast Health and Social Care Trust
http://www.rqia.org.uk/cms_resources/RVH%20Inspection%20Report%20for%20Publication%20on%20Website%208%20Apr%2014.pdf

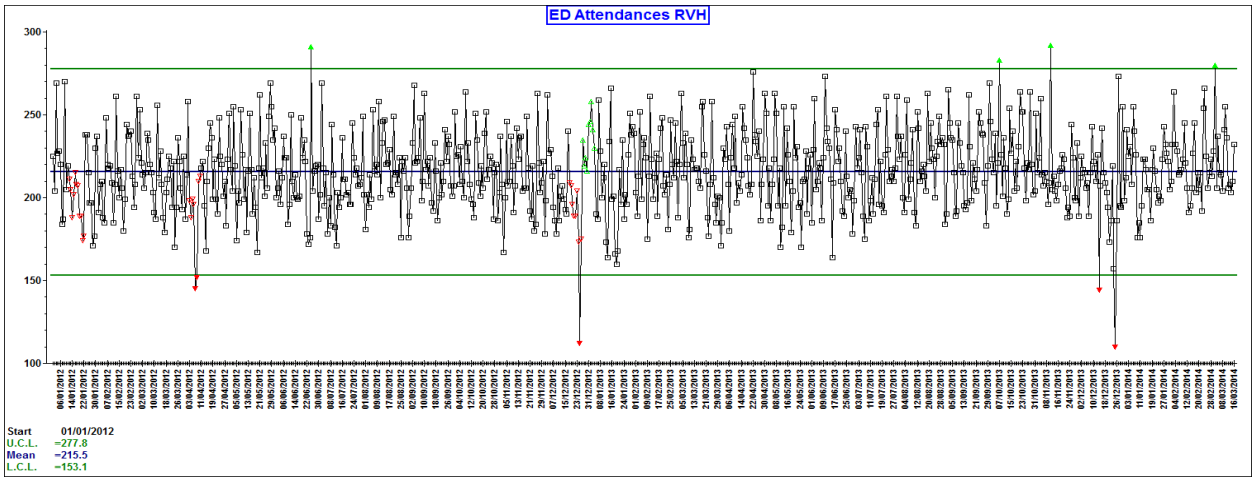
These graphs indicate that there is no overall increase in demand over this period and the variation is predictable. The capacity of a stable system should be able to be designed reliably to manage the variation in demand.

Figure 16: Daily ED Attendances at MIH January 2012 to March 2014



Data Source: Belfast Health and Social Care Trust

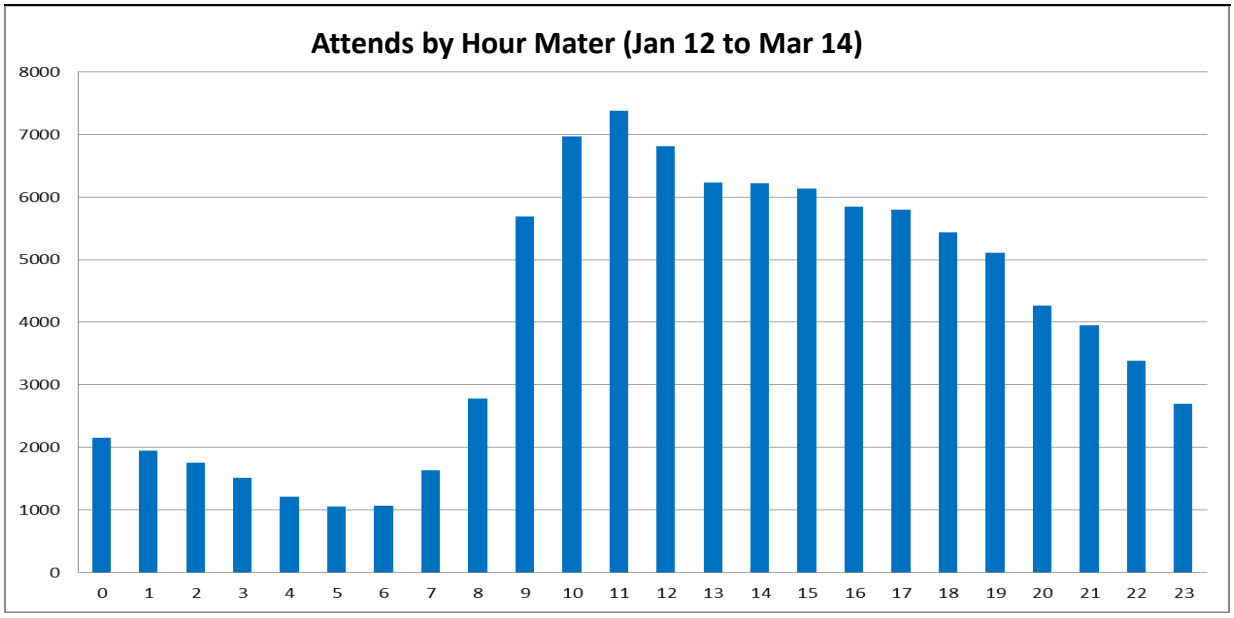
Figure 17: Daily ED Attendances at RVH January 2012 to March 2014



Data Source: Belfast Health and Social Care Trust

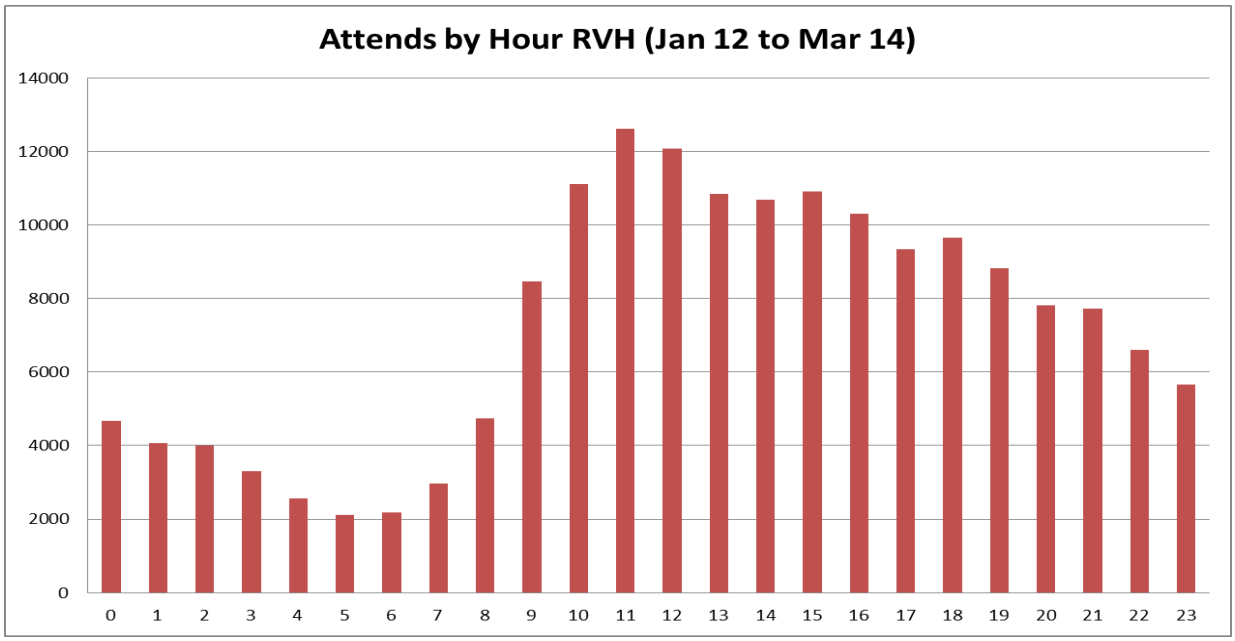
Figures 18 and 19 show the patterns in arrival at each ED by time of the day. The peak hours for arrival at both EDs are in the late morning, with numbers of arrivals then falling over the rest of the day.

Figure 18: Trends in Arrival Times by Hour MIH ED



Data Source: Belfast Health and Social Care Trust

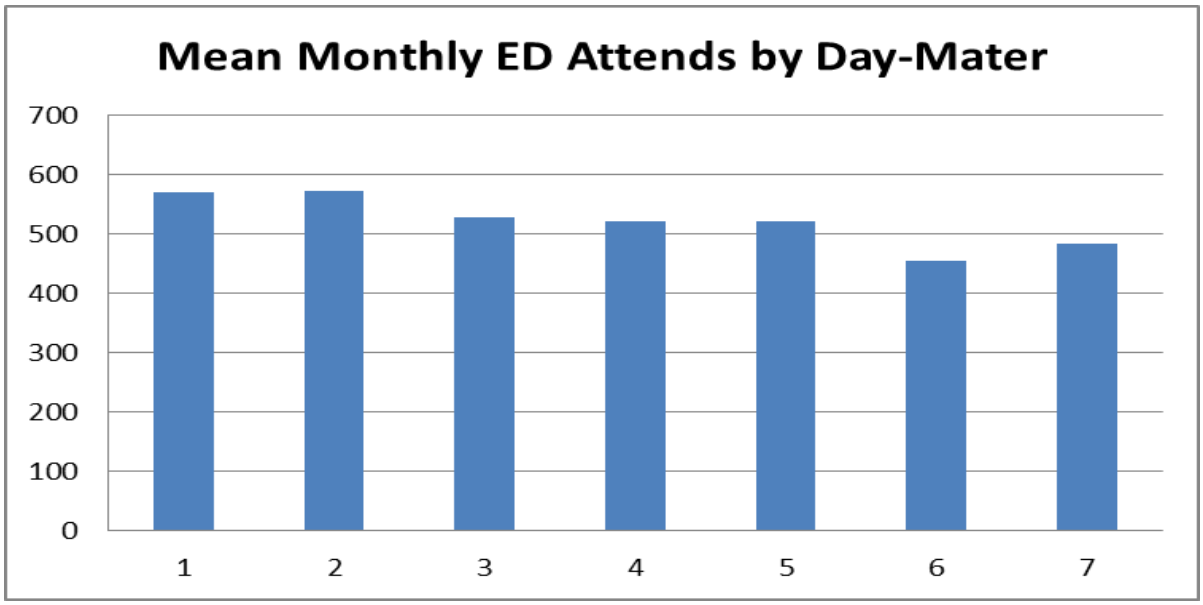
Figure 19: Trends in Arrival Times by Hour RVH ED



Data Source: Belfast Health and Social Care Trust

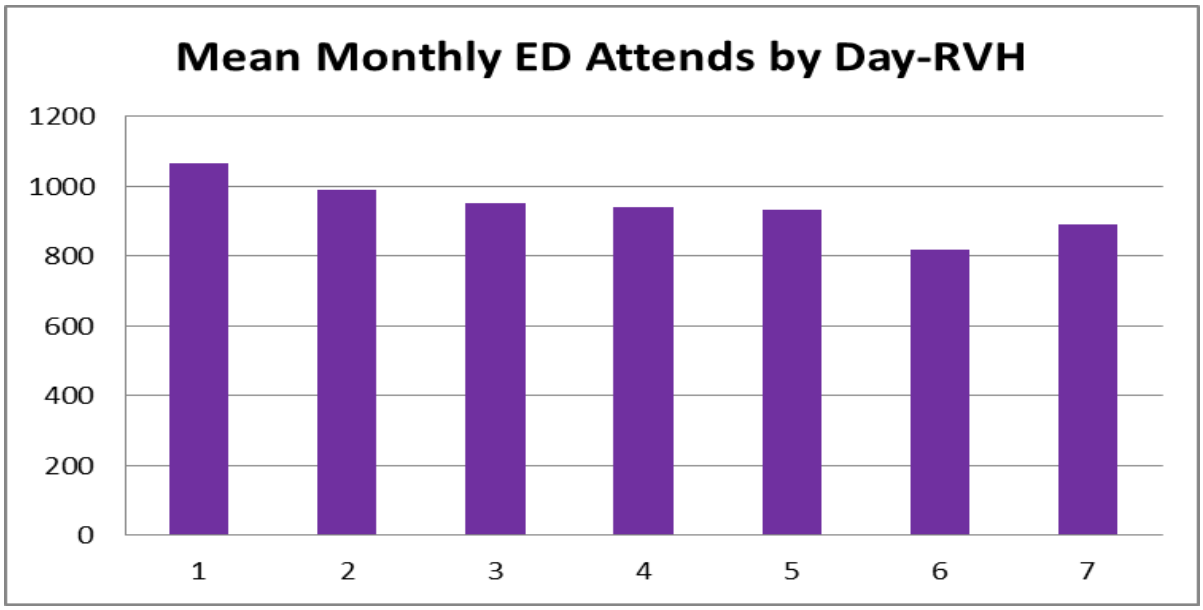
Figures 20 and 21 show trends by day of the week for both EDs. The busiest days on average are Monday and Tuesday at both hospitals, although there is no major difference across the week.

Figure 20: Patterns in ED attendances by Day of the Week MIH



Data Source: Belfast Health and Social Care Trust

Figure 21: Patterns in ED attendances by Day of the Week RVH



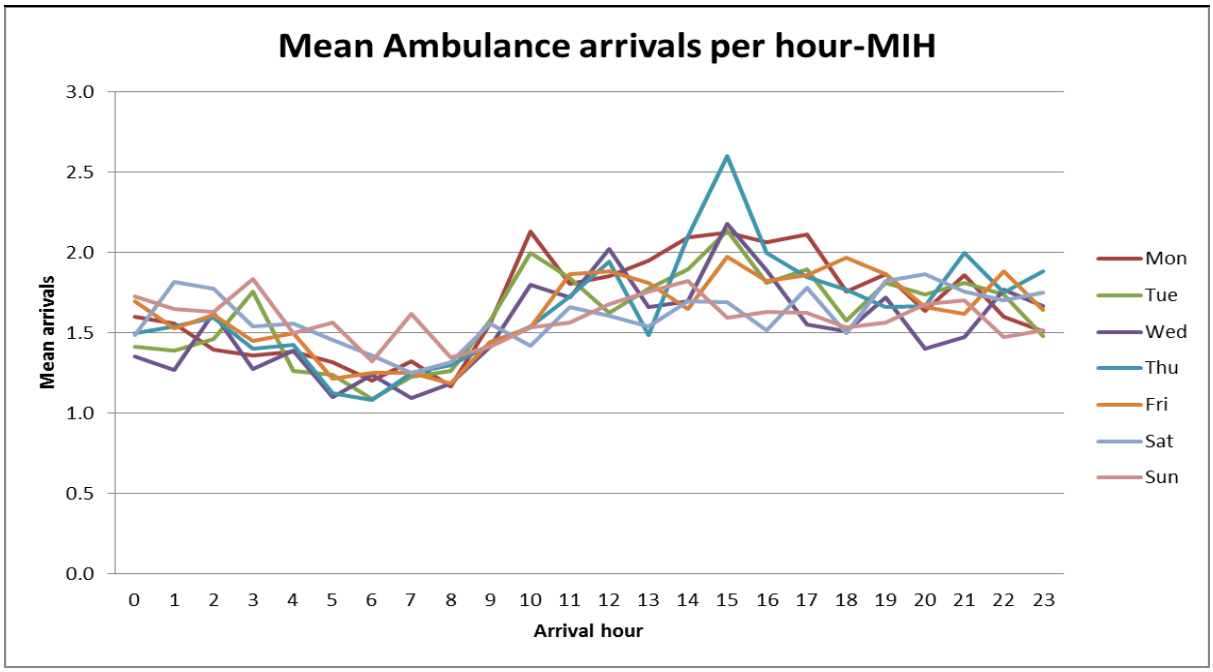
Data Source: Belfast Health and Social Care Trust

Ambulance Arrivals

Figures 22 and 23 illustrate patterns in the times of ambulance arrivals at the Mater and RVH EDs. These graphs show that the patterns are somewhat different from those for total arrivals.

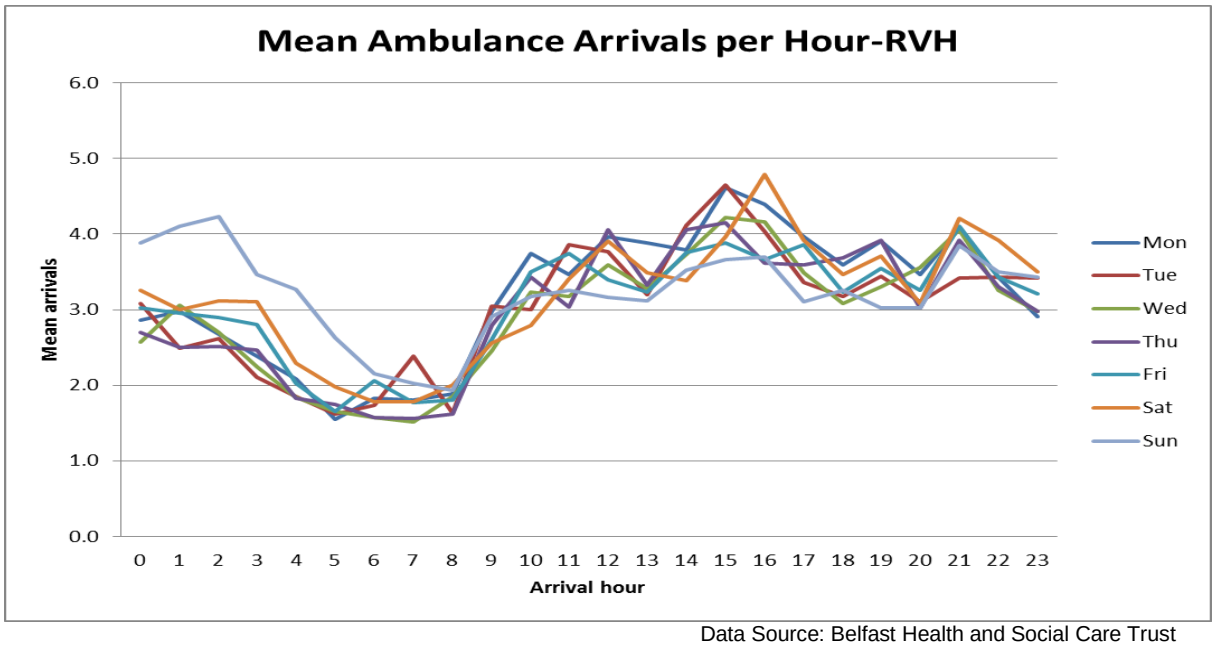
The peak periods for ambulance arrivals tend to be in the afternoon from 15:00 to 17:00, although there is some variation between days of the week.

Figure 22: Mean Ambulance Arrivals per hour (MIH)



Data Source: Belfast Health and Social Care Trust

Figure 23: Mean Ambulance Arrivals per Hour (RVH)



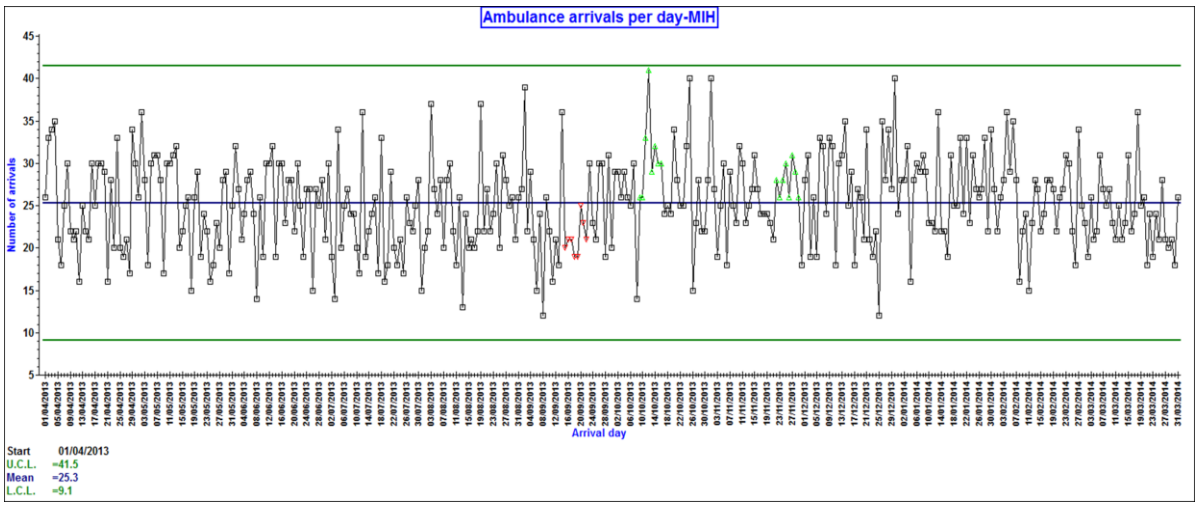
Data Source: Belfast Health and Social Care Trust

Figures 24 and 25 show trends in daily ambulance arrivals at the Mater and RVH EDs over the past year.

At the Mater Hospital, the graph indicates that there has been some increase in the period since September 2013. The mean arrivals per day is 25.

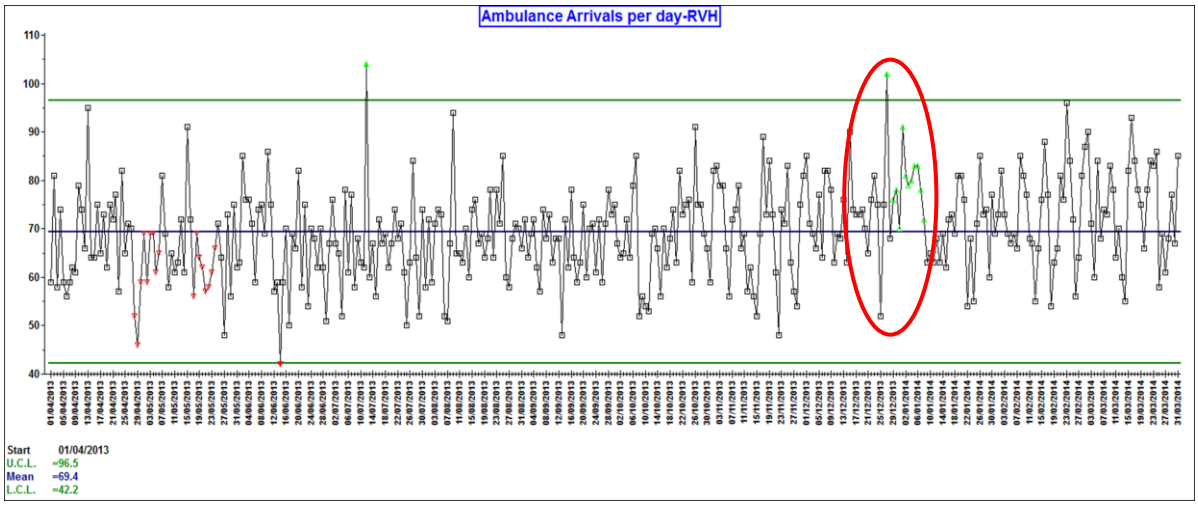
At the RVH ED there was a special cause run of higher than normal arrivals in the period immediately before the major incident was declared on 8 January 2014. The mean ambulance arrivals per day is 69.

Figure 24: Ambulance arrivals per day MIH (April 2013 to March 2014)



Data Source: Belfast Health and Social Care Trust

Figure 25: Ambulance arrivals per day RVH (April 2013 to March 2014)



Data Source: Belfast Health and Social Care Trust

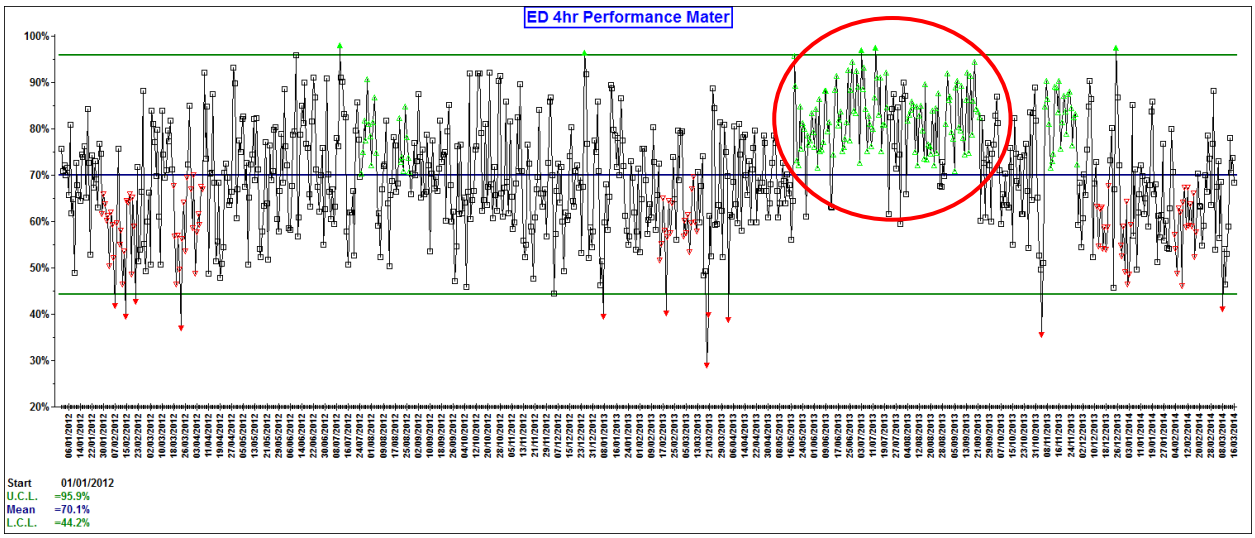
Waiting times in Emergency Departments

Figures 26 and 27 show daily performance against the regional 4 hour standard for Mater and RVH EDs for the past two years.

Both hospitals show unstable patterns of performance, with the Mater having higher mean daily performance of around 70%.

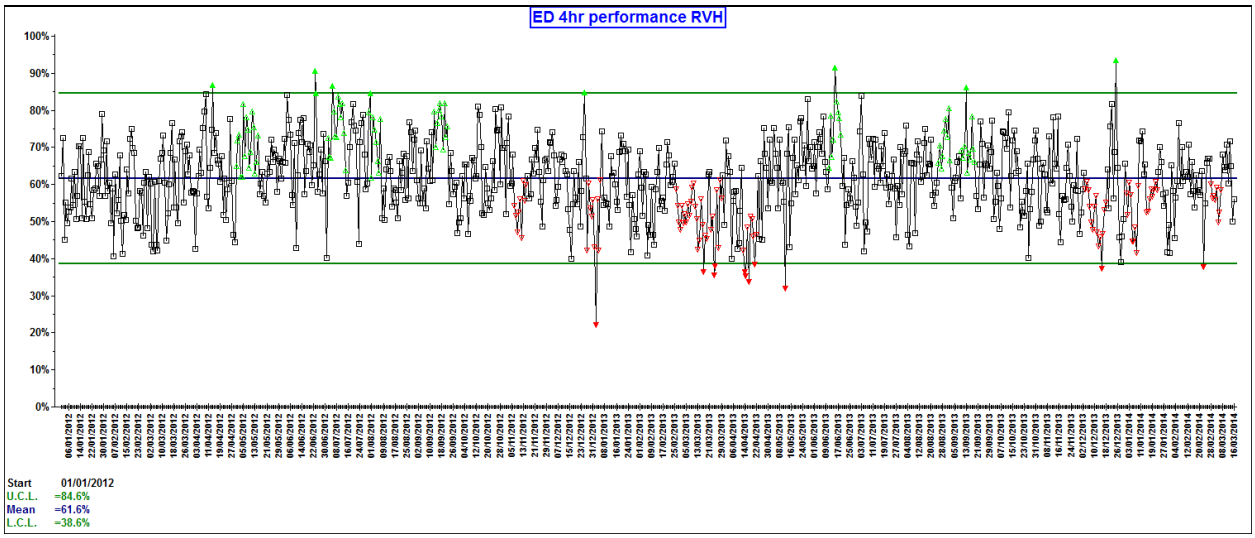
The Mater had a period of improved performance from May to September 2013, highlighted below.

Figure 26: Daily % performance against 4 hour standard MIH ED



Data Source: Belfast Health and Social Care Trust

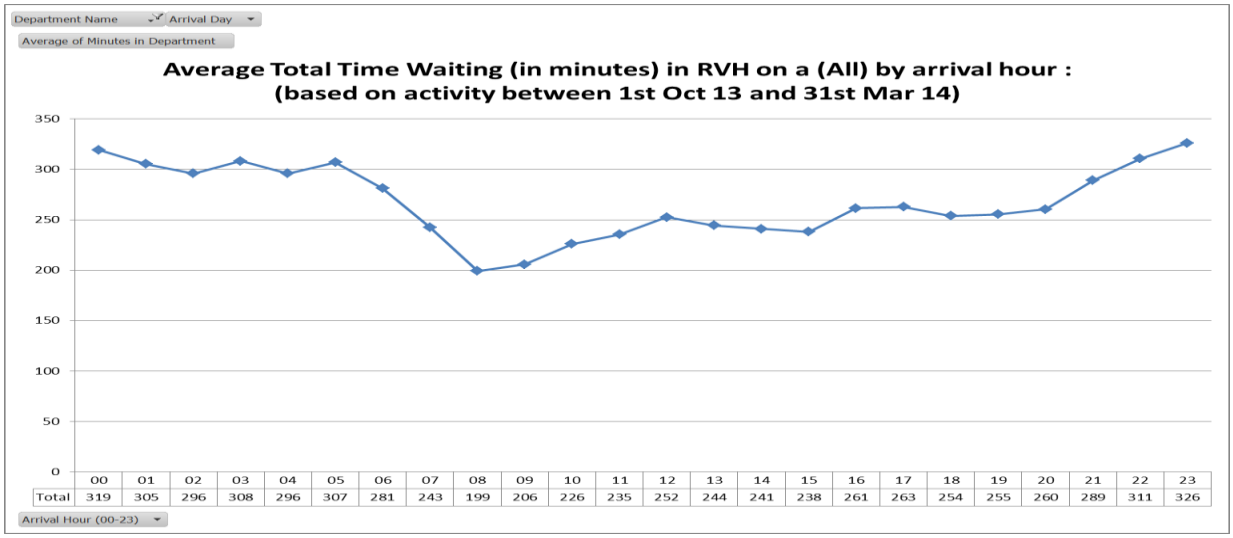
Figure 27: Daily % performance against the 4 hour standard RVH ED



Data Source: Belfast Health and Social Care Trust

Figure 28 shows the average total waiting times (in minutes) for patients who arrive at the RVH ED, by the hour when they arrived. This shows that the average waiting time increases throughout the day from 08:00. Patients arriving after midnight tend to stay longer on average.

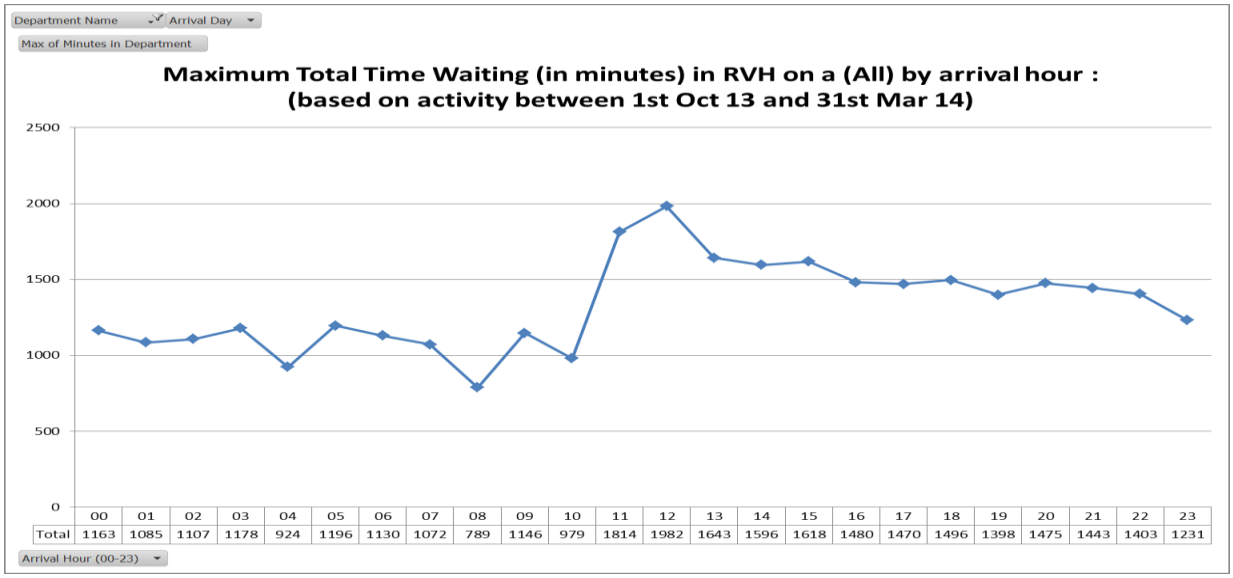
Figure 28: Average Total Waiting Times



Data Source: Belfast Health and Social Care Trust

Figure 29 shows the maximum waiting times by hour of arrival at RVH ED. The maximum waits experienced (at 31 hours) were for patients who arrived between 11:00 and 12:59.

Figure 29: Maximum Waiting Times



Data Source: Belfast Health and Social Care Trust

Summary

In summary, information about flows in the RVH and Mater EDs indicate that the total numbers of patients attending the hospitals have been broadly stable for the past two years. There is some evidence that the numbers of patients taken by ambulance to the Mater Hospital have been rising, and there was a period of higher than usual ambulance arrivals at RVH in the period before the major incident was declared.

Overall daily arrivals peak in late morning whereas ambulance arrivals peak in mid to late afternoon. Peak days for attendances tend to be Monday and Tuesday.

While the overall pattern is broadly stable, there is no stability in the daily performance of the EDs against the regional four hour standard for EDs. The Mater Hospital had a period of several months of improved performance in 2013.

The longest waiting times at RVH ED are being experienced by patients arriving around lunchtime.

These patterns are consistent with a hypothesis that a major cause of the challenges in RVH ED relate to difficulty in moving patients requiring admission, out of the department, to other parts of the hospital. This challenge is otherwise known as exit block.

3.5 Acute Internal Medicine

The Acute Medical Unit (AMU) at the RVH is a 60 bed unit. The unit was doubled in size in June 2012, when there was a change to a specialty take model. From that time, the unit acted as the main admission route to beds in medical specialties located in both the RVH and BCH, for those patients attending the RVH ED. A facility was also provided for general practitioners to refer patients directly to medicine in the BCH.

Patients in the AMU are under the care of a team of acute medical specialists and consultant geriatricians .

At the Mater Hospital there is a 23 bed AMU which is under the care of the team of general physicians at the hospital.

Neither AMU has a dedicated assessment area for patients.

Challenges at the RVH Acute Medical Unit

There have been significant challenges in the provision of the AMU service at the RVH. These were highlighted during the inspection carried out by RQIA from 31 January 2014 to 3 February 2014.[28] The team providing the service, while recognising that there had been some improvement since the time of that inspection, advised the review team that there continued to be difficulties in maintaining the flow of patients through the unit.

The challenges included:

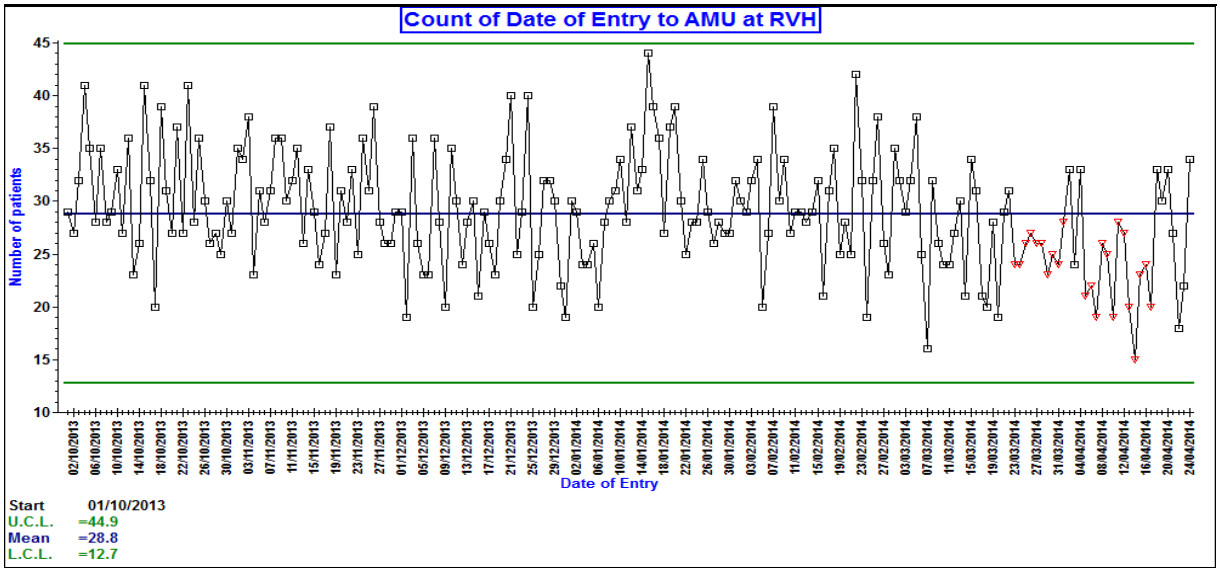
- Large numbers of patients at times, under the care of the acute physicians who are located in other wards in the hospital. This results in consultants spending time away from the unit, and in delays for patients moving through the unit.
- Delays in arranging transfers of patients to other specialties both within the RVH and to the BCH.
- Lack of a dedicated assessment area.
- Patients arriving late in the day in the unit, or in other wards, under the care of the acute physicians.

[28] RQIA Final Report of the Inspection of Unscheduled Care in the Belfast Health and Social Care Trust 31 January to 3 February 2014
http://www.rqia.org.uk/cms_resources/RVH%20Inspection%20Report%20for%20Publication%20on%20Website%208%20Apr%2014.pdf

Flow patterns

Figure 30 plots daily admissions to AMU from January 2013 to April 2014. With an average daily intake, these figures would indicate that the unit would need to plan to receive around 40 patients per day. However, the numbers appear to have reduced during March 2014.

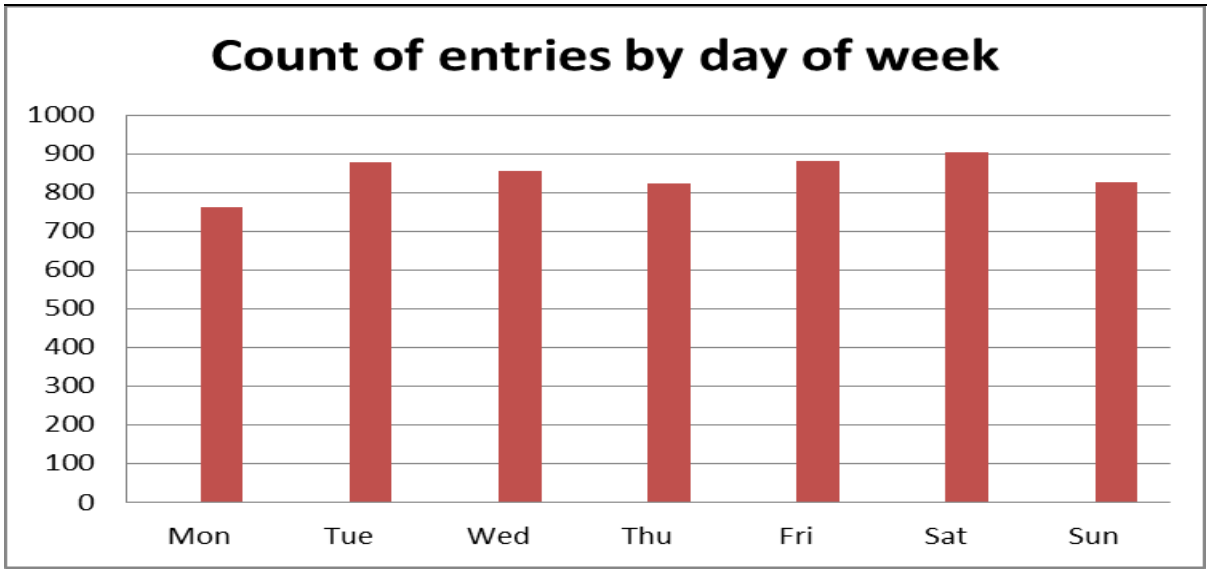
Figure 30: Daily admissions to RVH AMU



Data Source: Belfast Health and Social Care Trust

The patterns of admission by day of the week are shown in Figure 31. There is a broadly consistent pattern.

Figure 31: Admissions to AMU by day of the week



Data Source: Belfast Health and Social Care Trust

Time spent on the AMU

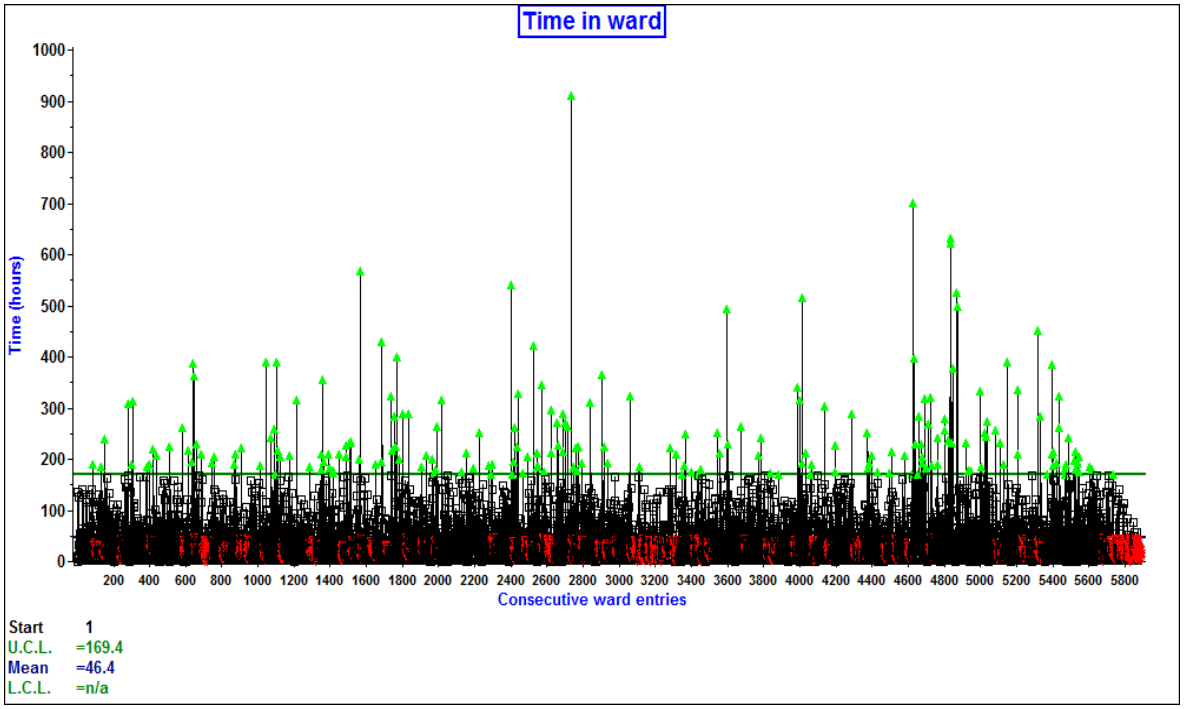
Although AMUs operate in different ways in different hospitals, a common pattern is that the usual time spent by a patient on an AMU is up to two sleeps. After that, the patient would either be discharged, or transferred to a specialty ward under the care of the appropriate consultant specialist. This is the planned model of operation for the RVH unit.

Figure 32 shows the length of time spent (in hours) for patients admitted to RVH AMU for some 5,900 consecutive patients from 1 October 2013 to 24 April 2014.

The graph indicates that the system is not in statistical control.[29] Although the mean length of stay is 46.4 hours, many patients are staying longer than the planned two sleeps.

It is not unusual for patients to stay up to 170 hours, and there are numerous patients with excessively long stays. Further detailed analysis of these special cause patients may yield valuable information to understand the blocks to outflow from the unit that are clearly occurring in the system.

Figure 32: Length of time spent on RVH AMU for consecutive patients



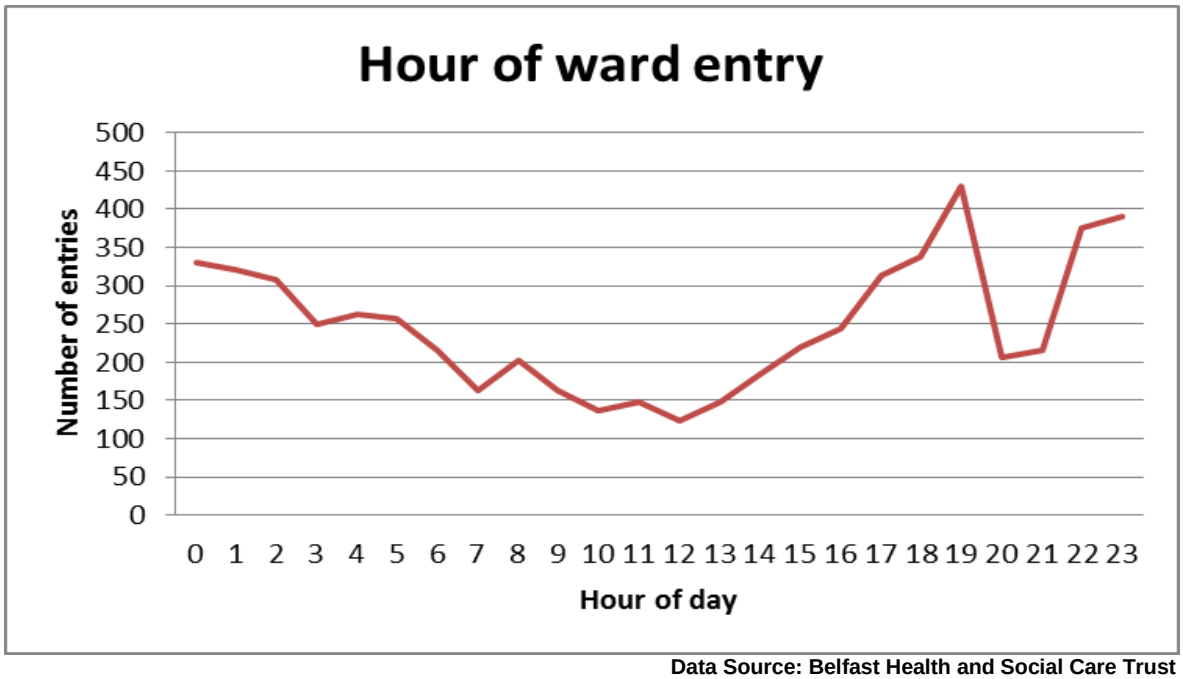
Data Source: Belfast Health and Social Care Trust

[29] Statistical Control is a term used in Statistical Process Control (SPC) methodology to describe variation in systems. In SPC graphs called control charts are used to help differentiate between variation which is part of the normal process (common cause) and variations due to exceptional circumstances (special cause). A process which is not in statistical control is not stable and is subject to excessive cause variation.

Entry and Exit Times

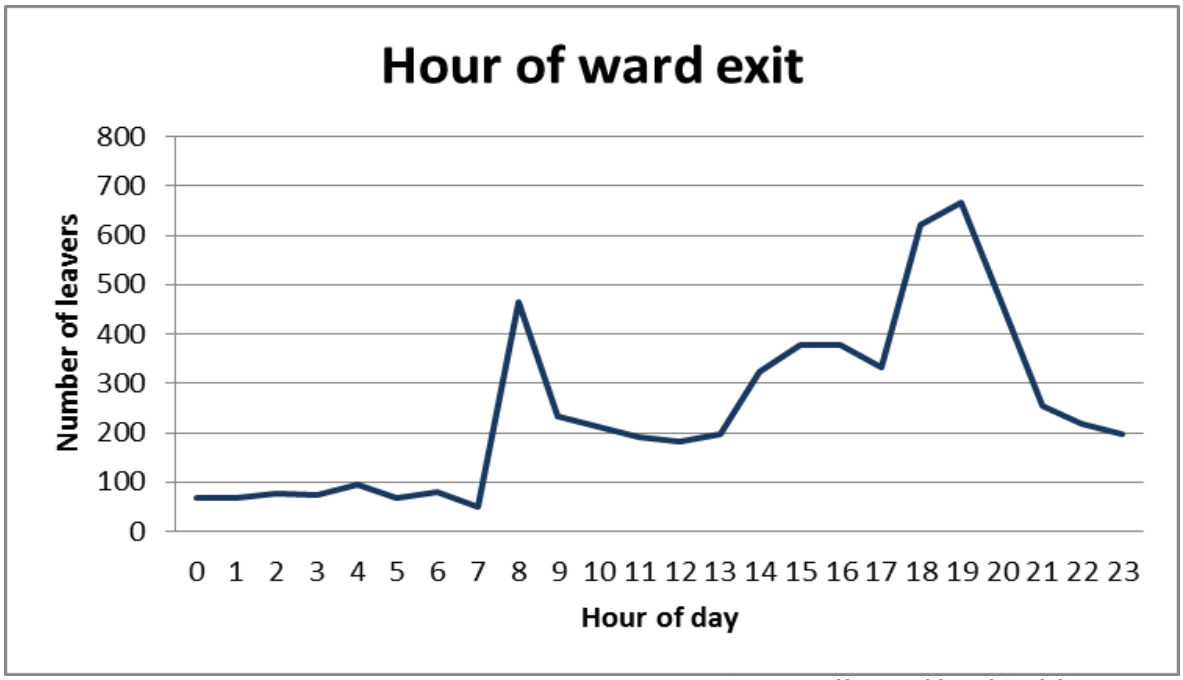
Figures 33 and 34 illustrate the entry and exit times of patients from the AMU. These graphs indicate that the peak times for entry to the unit are in the evening. There is a peak of exits (either by discharge or transfer) in the early evening. Potentially patients will need to wait in ED until these discharges occur.

Figure 33: Hour of ward entry for patients to RVH AMU



Data Source: Belfast Health and Social Care Trust

Figure 34: Hour of ward exit for patients from RVH AMU

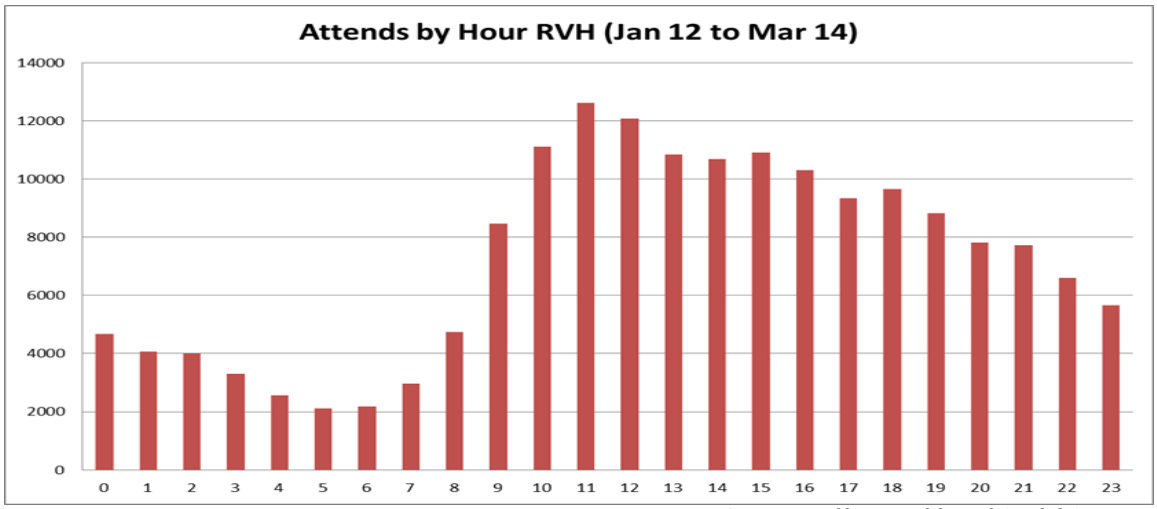


Data Source: Belfast Health and Social Care Trust

Links between pressures in RVH AMU and pressures in RVH ED

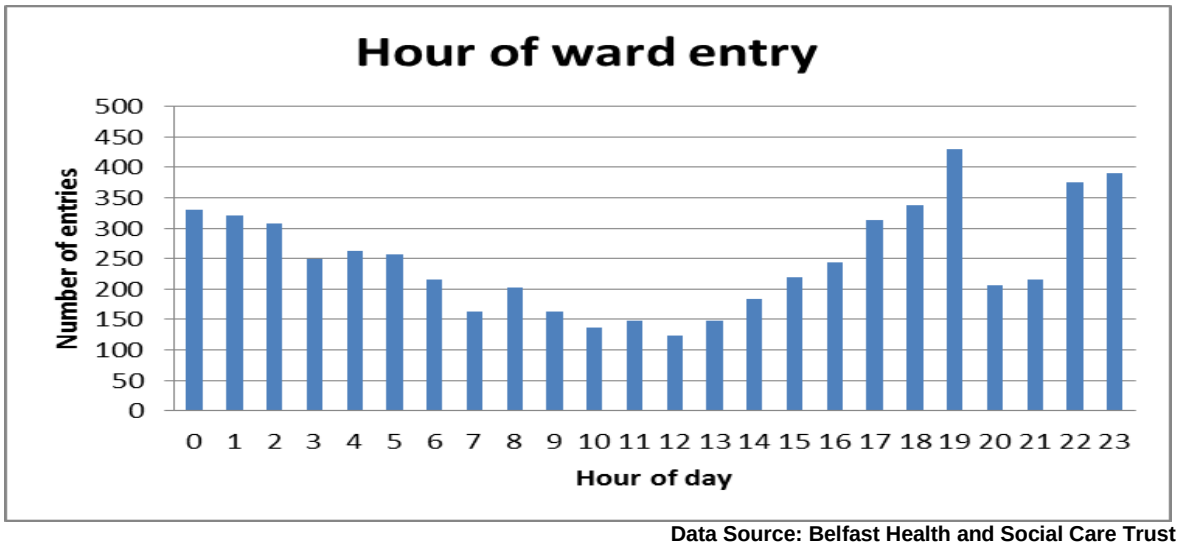
Figures 35 and 36 illustrate the entry times to RVH ED and its AMU. These graphs suggest that there may be a time phase delay between arriving in the ED and arriving in AMU. The peak to peak period is eight hours. It should be noted that the ED graph relates to all arrivals, and not just those who go on to be admitted to the RVH therefore the true picture may be different.

Figure 35: Arrival times at RVH ED



Data Source: Belfast Health and Social Care Trust

Figure 36: Entry times to RVH AMU



Data Source: Belfast Health and Social Care Trust

Transfer of patients from AMU to BCH

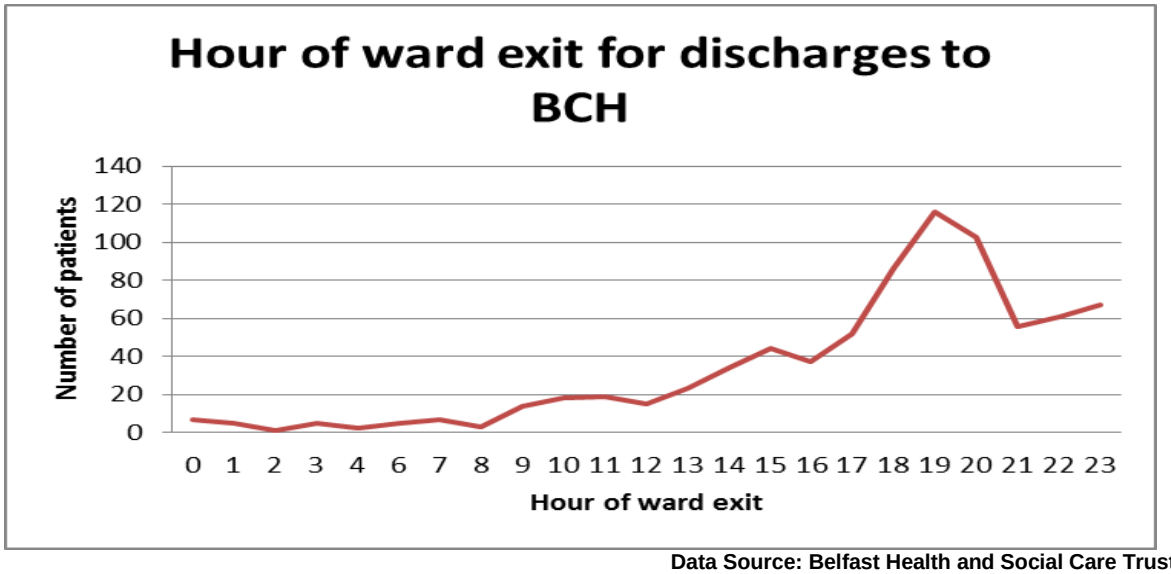
As highlighted in Section 3.3, there has been a significant fall in the number of medical patients being directly admitted to the BCH. Medical patients arriving at

the RVH ED will now, in general, be admitted first to RVH AMU prior to being transferred to a specialty area in BCH.

Figure 37 illustrates the time when discharge from AMU took place for patients moving from RVH AMU to BCH. This data is for the period from 1 October 2013 to 24 April 2014.

The diagram illustrates that the peak time for transfers to take place is after 18:00. Fifty percent of all transfers took place between 18:00 and 22:00 during this period.

Figure 37: Time of transfer from RVH AMU to BCH Specialty Ward



Data Source: Belfast Health and Social Care Trust

Discussions with AMU Staff and Ward Visits

Members of the RQIA review team met with medical and nursing staff in the AMU and visited the unit. The review team considers that the unit is not currently working effectively as an AMU for several reasons:

- There is not a dedicated area for assessment of patients. This results in a culture of admission, rather than a proactive approach to assessment and rapid discharge, where appropriate.
- AMU consultant staff spend significant periods of time out of the unit looking after patients as outliers in other parts of the hospital. This impacts greatly on timely, safe assessment of new patients. Furthermore, unnecessary movement of patients for non-clinical reasons to outlying wards is known to increase both length of stay and potential of harm for patients.
- Patients are being admitted in the evening who could potentially have been admitted earlier in the day. This can lead to additional nights of stay, as decisions on investigations or specialty transfer will not be taken until the following morning.

- There are very limited numbers of specialty beds available on the RVH site to which patients can be appropriately transferred. When specialty beds are available on the BCH site, transfers can be delayed and most frequently occur in the evening.
- Many patients are spending longer than the planned period in the unit, and some are having exceptionally long stays of several weeks.
- Some patients are being transferred to specialties who could potentially be discharged directly if they stayed under the care of the acute physicians for a short additional period.
- Other patients are delayed in the AMU while waiting for a specialty team to come to assess them for transfer, or for a bed to become available in the specialty ward.

The review team considers that the current mode of operation of the AMU more closely resembles a traditional general medical ward, rather than an effective AMU.

It is suggested that a redesign of the unit should be considered, with the creation of an assessment area, a smaller bed-based area and an associated short-stay unit with clearer discharge pathways identified. GP admissions could be referred directly to the AMU, if medically stable, bypassing the ED to ensure appropriate, timely assessment, and reduce unnecessary duplication of work and transfer between specialties.

The review team considers that a specific improvement project should be established for the AMU, focusing on improving the flows to and through the unit. The appropriate size of the unit to reflect its core functions should be re-examined. Members of the review team consider that it may be too large. A smaller unit with clearer and faster routes of exit to other medical specialties could be more efficient.

Pilot Assessment Area in ED

To test possible approaches to improving flows to and from the AMU, the Belfast Trust carried out a two-week pilot, which involved a dedicated acute medical assessment function being located in an area of ED.

This pilot was occurring at the time of the RQIA review team visits. An AMU consultant and a doctor in training assessed patients in the ED area, to determine if they needed admission, or could be discharged after investigation.

At the time of reporting, the results have still to be evaluated. The early views, of both ED staff and the AMU team, carrying out the pilot approach, were that it did help to improve patient flow. Several patients were able to be discharged directly or transferred after assessment each day.

If the AMU is redesigned as suggested above, the assessment function could be accommodated there.

Acute Medical Unit at the Mater Hospital

Members of the RQIA review team visited the AMU at the Mater Hospital and discussed the arrangements in place with staff.

The unit had recently transferred to a ward that was vacated following the transfer of emergency surgery to the RVH site.

The unit is spacious and three additional beds were in operation as part of a winter pressure initiative. An area was being developed to accommodate the needs of other staff including social work and allied health professionals in support of the unit.

In discussion with staff, the unit was described as generally working well. However, it did not have a dedicated assessment area. It was considered that there was potential for such a resource, to facilitate assessment before a determination to admit was made.

Summary

In summary, the review team found that patient flows to and from the AMU at RVH, were not working effectively. Many patients were being admitted to other wards, reducing the effectiveness and efficiency of the unit.

Many transfers out of the unit happen in the evening, which is the likely cause of the peak time for admissions to the AMU. This pattern is likely to be contributing to pressures in RVH ED.

The review team recommends that an improvement project is established to improve flows to and from the unit. A redesign of the unit to create an assessment area, a short-stay area and a reduced number of inpatient beds could enhance the effectiveness of the unit. Any such redesign should take into account the needs for patient privacy and dignity. Clinicians in the unit should not be responsible for outliers from the unit, as this is impacting on its effective operation, and is likely to be contributing to overall patient flow problems across the hospital.

The AMU at the Mater Hospital appears to be working well, but could benefit from an acute assessment area. This would facilitate earlier assessment of patients, directly referred by GPs, so that they could potentially be discharged rather than being admitted.

3.6 Respiratory Medicine

Respiratory medicine is provided on three acute sites within the Belfast Trust. Regional respiratory services, including services for patients with cystic fibrosis, are provided on the BCH site. Respiratory patients are also admitted to the RVH, and to the Mater Hospital, generally, initially to the AMUs.

Strategic Context

In 2006, the strategic direction for the development of respiratory services in Northern Ireland was set out in A Healthier Future.[30]

In November 2009, a Regional Service Framework for Respiratory Health and Wellbeing was launched by the Minister for Health, Social Services and Public Safety.[31] It set out 55 standards for the prevention, diagnosis, treatment, care, rehabilitation and palliative care of individuals and communities at a greater risk of developing respiratory disease. The framework has facilitated the development of services in the community to prevent patients being admitted to hospital. In relation to hospital care, several standards emphasise the importance of being admitted under the care of a respiratory team in hospital.

In March 2014, RQIA published a report of an independent review of the implementation of the Respiratory Service Framework.[32] RQIA found that the framework had facilitated service improvements in treatment and care.

Selected Standards: DHSSPS Service Framework for Respiratory Care

Standard 13: All patients with an acute exacerbation of COPD should be managed to an optimal standard in an appropriate setting.

Standard 14: All patients with COPD with acute and/or chronic type 2 respiratory failure should have timely access to ventilatory support, if required, in a unit supervised by a respiratory physician or intensive care physician.

Standard 15: All patients admitted to hospital with acute exacerbations of COPD, should be assessed and, if appropriate, managed at home.

Standard 39: All patients with symptomatic bronchiectasis should be accurately assessed and managed by the specialist respiratory team.

[30] A Healthier Future: A Twenty Year Vision for Health and Wellbeing in Northern Ireland 2005 – 2025 http://www.dhsspsni.gov.uk/healthyfuture-main.pdf
[31] Service Framework For Respiratory Health And Wellbeing http://www.dhsspsni.gov.uk/rsf_-_version_2.pdf
[32] http://www.dhsspsni.gov.uk/rsf_-_version_2.pdf

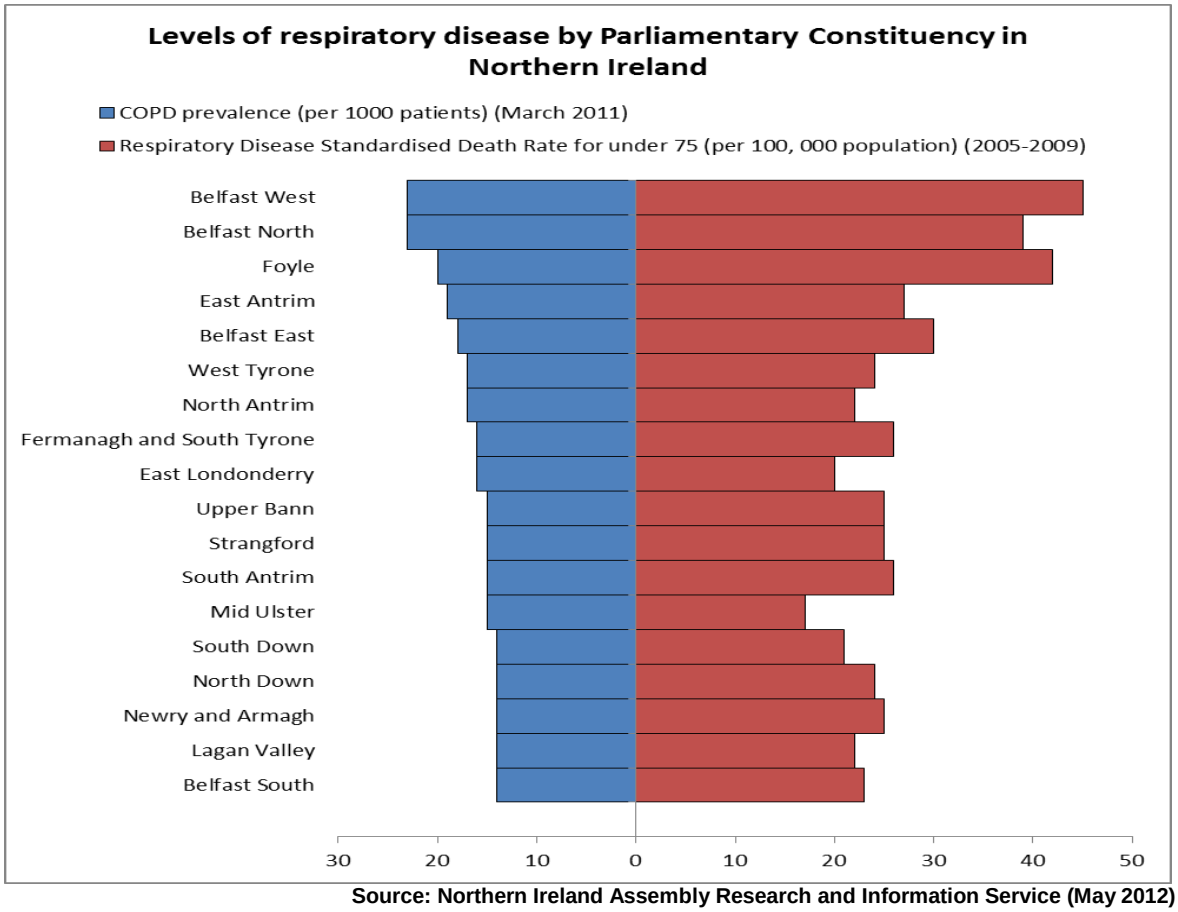
Challenges for Service Provision in the Belfast Trust

Levels of respiratory disease

The hospitals in the Belfast Trust serve local urban populations, which include areas with high levels of social deprivation. Chronic respiratory diseases, including chronic obstructive pulmonary disease (COPD) and bronchiectasis, are strongly associated with areas of deprivation.

Figure 38 illustrates levels of respiratory disease by parliamentary constituency in Northern Ireland. The constituencies, Belfast North and Belfast West, have the highest levels of COPD, followed by Foyle. Belfast West has the highest standardised death rate for respiratory disease in individuals aged less than 75 years, followed by Foyle and Belfast North.[33]

Figure 38: Levels of Respiratory Disease by Parliamentary Constituency in Northern Ireland



Source: Northern Ireland Assembly Research and Information Service (May 2012)

[33] 'Health inequalities in Northern Ireland by Constituency': Dr Raymond Russell; Northern Ireland Assembly; Research and Information Service Briefing Paper; 135/12; 9 May 2012

Seasonal variation in respiratory admissions

Many admissions of patients with respiratory disease are linked to exacerbations of chronic illness, particularly during the winter months. The seasonal trends in admissions for patients with respiratory disease are generally considered to make a very significant contribution to causing winter pressures for services.

Figure 39 shows daily emergency admissions to all hospital specialties across Northern Ireland, in 2012-2013, for patients with a primary diagnosis of respiratory disease. There were clear peaks in the winter months.

Belfast hospitals are likely to see significant increases in admissions during the winter periods, linked to the underlying prevalence of respiratory conditions in their local populations.

Figure 39: Admissions for Emergency Care in Northern Ireland: Patients who have a respiratory condition as a primary diagnosis

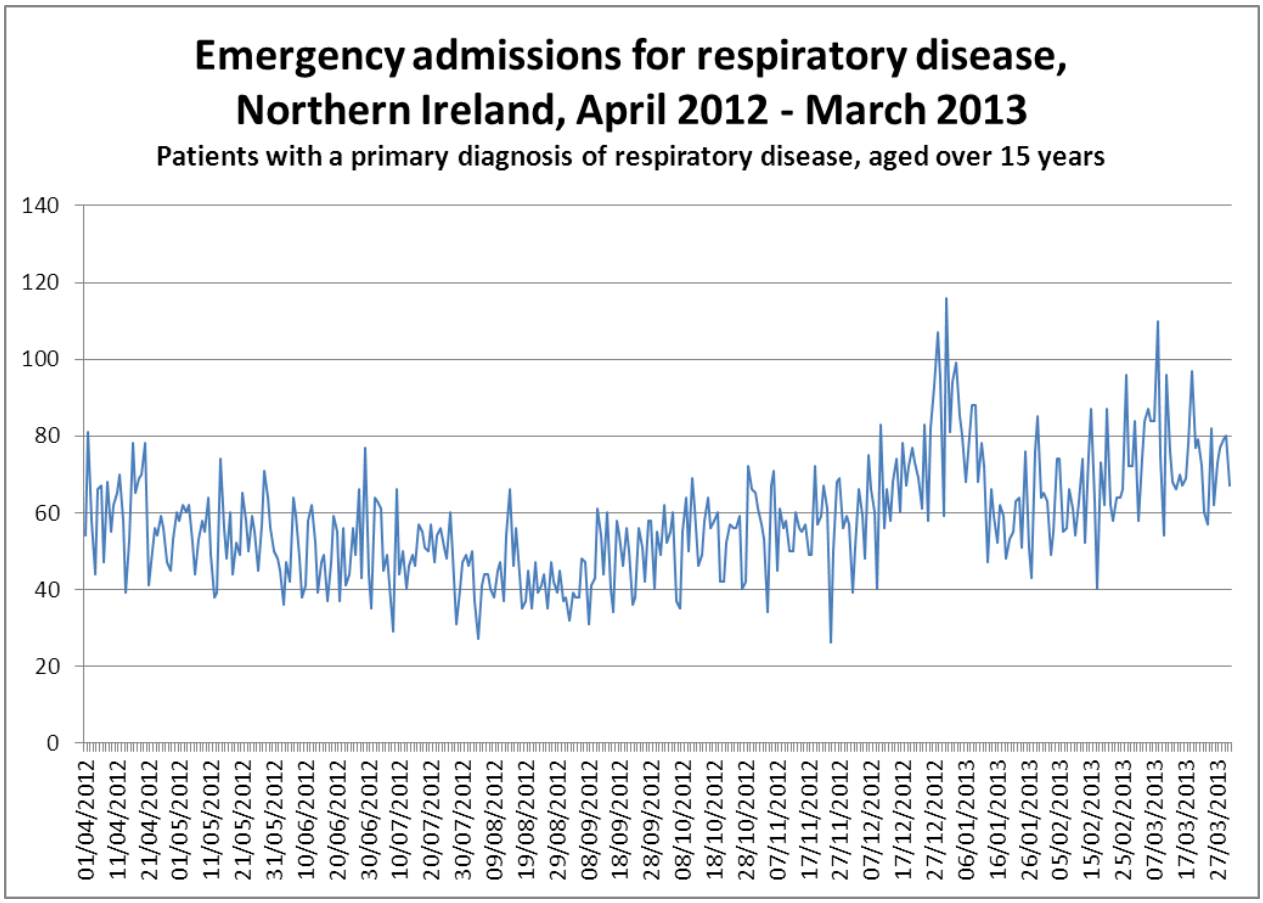
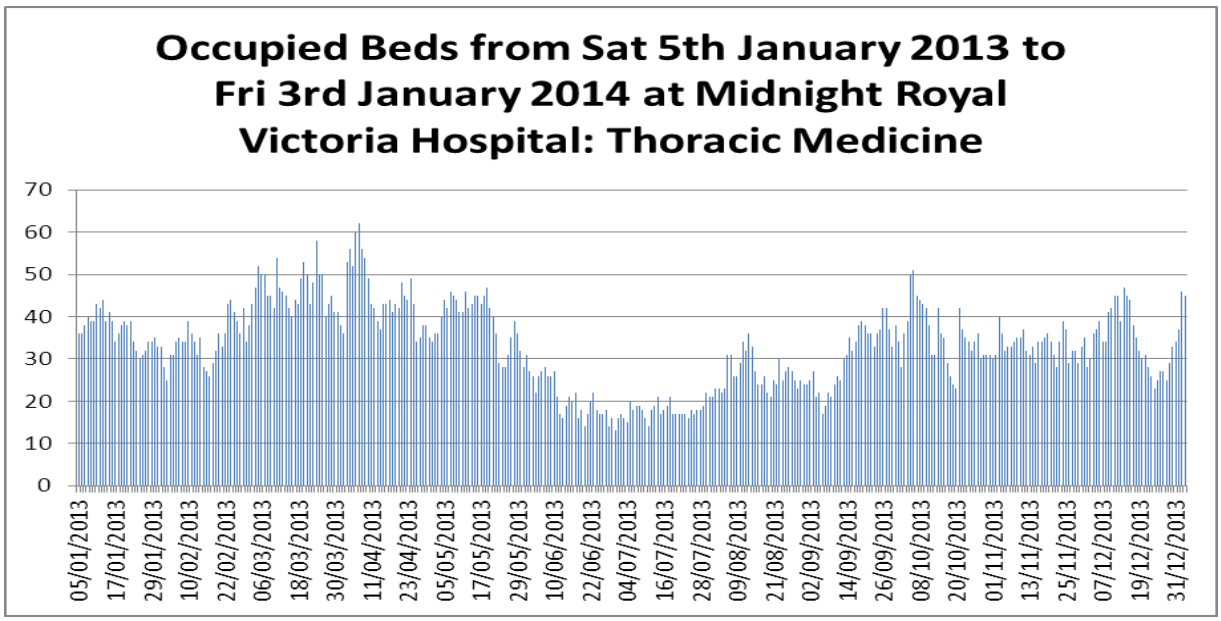


Figure 40 illustrates the wide variation in bed occupancy for respiratory medicine in RVH during 2013. The occupancy levels indicate that for long periods, particularly during the winter and spring, there were more patients under the care of respiratory medicine consultants than could be catered for within the allocated bed provision of 18 beds. These occupancy levels exclude patients with

respiratory conditions who were under the care of consultants in acute internal medicine or other specialties.

This finding is in keeping with the information provided to the RQIA review team and the experience observed during RQIA's inspection early in 2014.

Figure 40: Beds occupied by patients in Respiratory Medicine



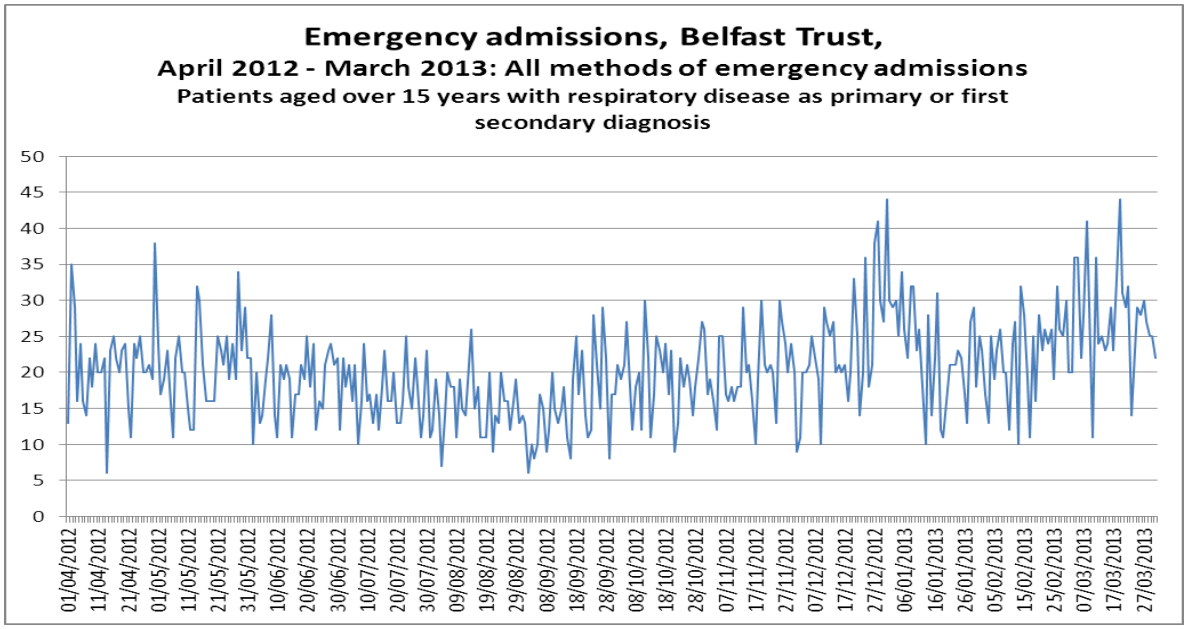
Data Source: Health & Social Care Board

Admission Routes to Respiratory Medicine for Unscheduled Care

The review team was advised that the main route of admission to the specialty of thoracic (respiratory) medicine, for unscheduled care patients in RVH and BCH is via the ED and AMU at RVH. Some patients are directly admitted to the BCH and others directly from RVH ED to respiratory medicine.

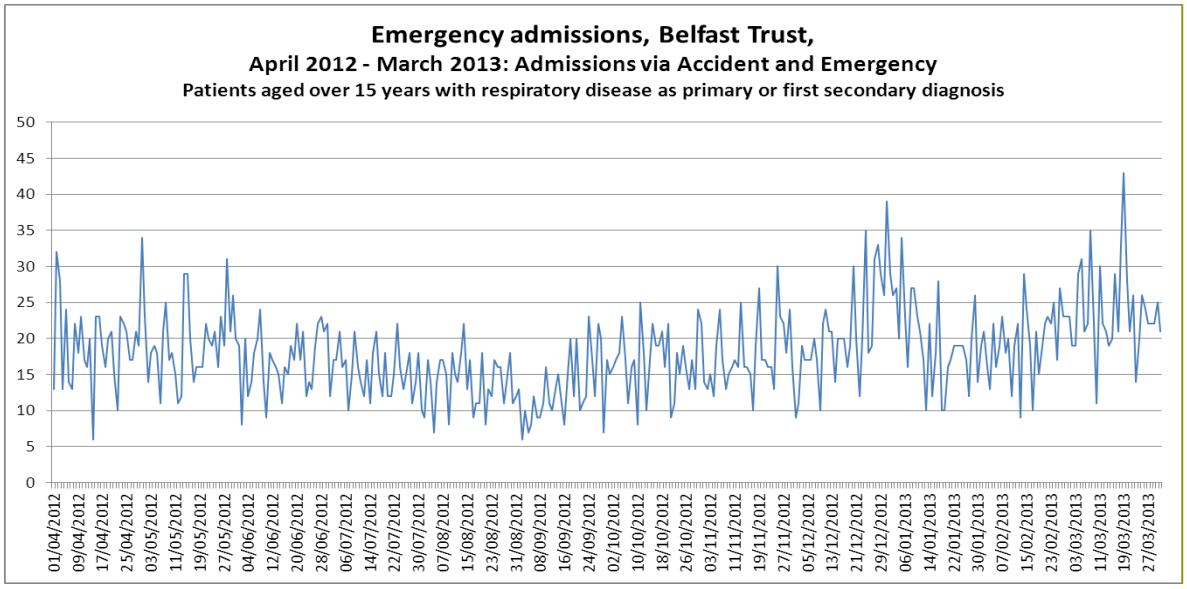
Figures 41 and 42 show the emergency admissions to the Belfast Trust for patients with respiratory disease in the period April 2012 to March 2013. Figure 41 shows admissions via all routes, and Figure 42 shows admissions via ED only. It can be seen that almost all respiratory admissions in this period of time were admitted via an ED.

Figure 41: Emergency Admissions to the Belfast Health and Social Care Trust for Patients with Respiratory Disease: Via All Routes



Data Source: Health & Social Care Board

Figure 42: Emergency Admissions to the Belfast Health and Social Care Trust For Patients with Respiratory Disease: Via ED Only



Data Source: Health & Social Care Board

The current model for admission is leading to delays for patients in gaining access to a respiratory specialty team for assessment. From discussion with staff, some patients are having multiple assessments by junior doctors in different parts of the system before they are placed appropriately under the care of a respiratory specialist, in line with the regional standards.

The review team considers that there is potential to improve the care pathways for patients by redesigning the system to facilitate more rapid access to respiratory specialists for hospital assessment, prior to a decision to admit.

Designing systems with strong links between community respiratory teams and hospital based assessment and admission services could reduce unnecessary attendance at ED. This would allow more rapid access to specialist services.

System Models Elsewhere in the United Kingdom

Different models of access to respiratory medicine services have been established in other cities in the United Kingdom to reflect hospital configurations and local system pressures.

For example, in Nottingham, a Respiratory Assessment Unit has been established at the City Hospital campus. The City Hospital does not have an ED on site. A press release from the Nottingham University Hospitals NHS Trust indicated that the new direct to specialty ward had enabled the increased number of patients seen during the winter to be directed though the unit.[34]

Respiratory Services in Glenfield Hospital, Leicester[35]

In Leicester, a major respiratory service is provided at Glenfield Hospital. This hospital is a cardio-respiratory hospital and does not have an emergency department, general medicine or geriatric medicine on site. Patients are admitted through a cardio-respiratory Clinical Decisions Unit (CDU). The CDU is staffed by respiratory physicians with support from cardiology. The respiratory service has 115 base ward beds (4 wards); 14 short stay beds and is responsible for the 25 bed CDU. The respiratory service at Glenfield Hospital:

- Sees over 15,000 patients per year, of which approximately two thirds bypass ED and assess the unit directly through a Bed Bureau; 999 ambulance; self-referral; or by inter-hospital transfer,
- Has an average daily take of 48 patients,
- Has a same day discharge rate of 30-35%
- Has agreed protocols in place for bringing selected ambulance patients to the CDU for assessment, as part of the escalation arrangements for the City of Leicester, to relieve pressure on ED.

[34] 'New ward helped ease demand on hospital services'; Nottingham University Hospitals NHS Trust; 4 March 2013

[35] University Hospitals of Leicester NHS Trust (Dr Jonathan Bennett, Consultant Respiratory Physician, Glenfield Hospital, personal communication)

The review team recommends that the Belfast Trust explores the experience of models elsewhere in the United Kingdom to help design local access arrangements, specific to the particular needs of the population served by the hospitals in Belfast. Development of a direct access route to an assessment service at the BCH could reduce pressures on ED while providing a more responsive service for patients.

Summary

Hospitals in the Belfast Trust provide both regional and local services for patients with respiratory diseases. There are high rates of chronic respiratory illness in the local populations served by the hospitals. During the winter period, many patients are likely to suffer from exacerbations of these illnesses, and may need assessment and admission to hospital.

The current arrangements mean that many local patients are admitted to respiratory services at RVH and BCH, having attended ED at RVH and then being admitted to AMU. This can lead to multiple medical assessment, and delay while waiting for transfer to an appropriate bed in RVH or to BCH. The bed capacity for respiratory medicine in RVH is frequently not sufficient during the winter period, leading to large numbers of respiratory patients becoming outliers.

There are models of service provision in other cities, which facilitate direct access to respiratory medicine services without going through ED.

The review team recommends that the Belfast Trust reviews current arrangements for assessment and/ or admission of respiratory patients, in the light of experience of other cities who provide direct admission, without going through ED. The potential for developing direct access to admission could help achieve the standards set out in the Regional Service Framework for Respiratory Health and Wellbeing.

3.7 Care of the Elderly

Care of the Elderly services have been reconfigured within the Belfast Trust in recent years. The main acute bed base for the specialty of geriatric medicine is at the BCH. There are also beds available at the Mater Hospital. Rehabilitation services are provided at Musgrave Park Hospital (MPH).

Stroke services were centralised at the RVH in April 2013, with services moving from the BCH. The RVH stroke unit is a dedicated unit, separate from the geriatric medicine service, in line with guidance for stroke services.

There are no dedicated geriatric medicine beds on the RVH site. Consultant geriatricians provide a service to the AMU and take responsibility for patients who are triaged to the Care of the Elderly Team. They may be discharged directly from AMU or transferred, when there are Care of the Elderly beds available, to either BCH or to MPH.

Strategic Context

On 26 September 2013, the Minister for Health Social Services and Public Safety launched a new Service Framework for Older People for Northern Ireland. The framework is designed to improve the health and wellbeing of older people by promoting social inclusion, reducing inequalities in health and social wellbeing, and improving the quality of care. The framework is set within the context of Transforming Your Care, the regional strategy for future service delivery in Northern Ireland.[36]

The Service Framework for Older People[37] includes a number of standards of direct relevance to the future provision of hospital services for older people. These standards emphasise the importance of older people having access to specialist assessment services.

Selected Standards: DHSSPS Service Framework for Older People

Standard 29: All older people presenting to intermediate, or secondary care because of a fall or with an injury resulting from a fall (i.e. fracture) will be offered a multi-factorial, evidence based falls and bone health assessment and intervention.

Standard 30: All older people admitted to an inpatient fracture service should have routine access to acute orthogeriatric medical support from the time of admission.

Standard 32: All older people who have a major health crisis should be screened for delirium using a validated assessment tool such as the Confusional Assessment Scale shortened version (CAM).

[36] http://www.dhsspsni.gov.uk/transforming-your-care-review-of-hsc-ni-final-report.pdf
[37] http://www.dhsspsni.gov.uk/service_framework_for_older_people-2.pdf

Standard 35: All older people who present to primary or secondary care with a sudden unexplained deterioration in their mobility should receive a Comprehensive Geriatric Assessment and access to re-enablement services as appropriate.

Standard 39: Older people should be offered a period of enablement to regain their optimum level of independence and confidence before any assessment is made for longer term support.

Standard 41: Older people with complex needs should be screened and appropriately managed by specialist staff during episodes of general hospital care.

Standard 42: Older people with complex needs including people with Dementia, or mental health needs, should be offered comprehensive, specialist assessments and a period of rehabilitation before consideration is given to the need for long term care.

Challenges for Service Provision in the Belfast Trust

The current service design in the Belfast Trust creates particular difficulties for the delivery of hospital services for older people. Challenges include:

- Older people who need urgent assessment, rather than emergency care, can wait for several hours, after services have been contacted, before they are brought by ambulance to hospital. By this time, it may be too late in the day to assess the patient before admission, and so admission overnight is unavoidable.
- Many older people are admitted via the RVH ED and may wait for a period of several hours before they are transferred to a bed, usually in AMU. If beds in AMU are not available, the patient may be admitted as an outlier to another ward area.
- Following assessment in AMU, the patient may be referred to the care of a geriatrician, but can wait for a period of days, before transfer to a specialist geriatric bed in either BCH or MPH.
- Transfers between hospitals frequently occur in the evening period.

For frail older people, this model, which can result in multiple assessments and transfers, may lead to deterioration for patients who have delirium or dementia.

During this review, many people advised the review team that ED is not the appropriate environment to assess and care for older people with urgent, rather than emergency conditions. Older patients with emergency conditions such as stroke or myocardial infarction will be transferred under priority protocols to the services they require.

Development of Alternative Models of Care Delivery

In seeking to improve services for older people in the Belfast Trust, a team of clinicians and managers established a new service at the BCH called **OPTIMAL 7** (**O**lder **P**eople's **T**imely **I**nterventional, **M**anagement and **A**dmission Service on **L**evel **7** South).

This service was established in March 2014, and was visited by members of the RQIA review team in April 2014. The team was advised that the numbers of referrals were gradually rising, and that initial feedback from patients and general practitioners had been positive.

General Practitioners can contact OPTIMAL 7 directly and discuss referral of suitable patients for assessment and possible admission.

In the light of the experience gained through OPTIMAL 7, the Belfast Trust has been exploring the possibility of developing a comprehensive assessment and admission service for frail older people, with urgent rather than emergency care needs, at the BCH.

The emerging proposals for this new service were presented at the summit event, which was held by RQIA, in partnership with the Belfast Trust, on 20 May 2014.[38] The Belfast Trust delivered a presentation which set the context for the proposals within the evidence base for the delivery of assessment services for older people.

The proposals for the new service include:

- To provide assessment for patients referred directly, on a daily basis, for at least as many patients as currently access geriatric services via the ED/AMU route.
- Facilitation of assessment of both direct referrals from GPs and urgent, rather than emergency, patients for whom a request for an ambulance had been made.
- An ambulance protocol, to identify those patients who could go directly to the new service rather than to ED.
- Relocation of some care of the older people services within the BCH, to enable the assessment area and Acute Frailty Unit to be located on Level 1 of the hospital. Some additional ward beds would be made available for those patients who require admission after assessment.
- Facilitation of admission of a targeted frail elderly group of patients directly to Care of the Elderly wards.
- Empowering other teams to manage patients with other frailty syndromes in AMU.

[38] Presentation available on the RQIA website http://www.rqia.org.uk/home/index.cfm

- To have clear links between the service and community services for older people to provide smooth care pathways for patients.
- Next day rapid access assessment services would be developed to avoid admission for older people.

Summary

In summary, the review team found that the current arrangements for admission of older people with medical conditions in the Belfast Trust are leading to patients being admitted through the RVH ED, who could potentially be directly brought for assessment and admission, if required, to beds in the BCH. Patients are being transferred between hospitals, often late in the evening.

In March 2014, Belfast Trust established a new model of service at the BCH called OPTIMAL 7. This allows GPs to directly refer frail elderly patients for assessment and, if required, direct admission. Initial feedback has been positive.

Building on this experience, plans are now being developed to establish a larger new assessment and admission service at the BCH, with additional capacity to reduce the need for older patients to be admitted via RVH ED, with subsequent transfer to BCH.

The RQIA review team considers that the proposed approach has the potential to improve services greatly for older people, while reducing pressures on ED. A staged process to service improvement could enable the service to be established in time to help address pressures in the 2014-15 winter period. The ongoing development of the service delivery models can then be taken forward to meet the standards set out in the Service Framework for Older People.

3.8 Governance Issues

RQIA met with managers and staff to discuss organisational governance in relation to the oversight of unscheduled care within the Belfast Trust. Meetings were also held with DHSSPS and the Health and Social Care Board in this regard.

Culture

When the Belfast Trust was established in 2007, it brought together six legacy trusts with different systems and cultures. Over the past seven years the trust has been working to establish a shared organisational culture and trust wide assurance frameworks. It is recognised by the trust that, given the size and complexity of the organisation, this remains an ongoing process.

In relation to unscheduled care, RQIA found that there are differences between staff in individual hospitals, and between teams within hospitals, in how the challenges they face are being perceived.

In discussions with staff, several teams perceived that there was a lack of awareness among managers of their particular local difficulties. In the Mater and BCH, for example, views were expressed that the main focus of the trust had been on the unscheduled care challenges at the RVH, and less on the issues for the Mater and Belfast City hospitals.

Within the RVH, there was wide recognition that staff, within ED and AMU, were under significant pressure, but there were differences in views as to the extent to which other teams could act to help relieve this. Relationships between the clinical teams in ED and AMU were described by both as good, with mutual understanding of the need for them to work effectively together.

Several staff expressed the view that there was a lack of devolved decision making to front line staff. This reduced their ability to take local actions to improve flows in unscheduled care. Examples provided included the lack of ability to appoint a patient tracker for the ED at the Mater Hospital, which had been found to be helpful in the RVH ED, or an additional porter to reduce delays in moving patients to wards.

The trust has been working to develop a reporting culture for SAIs and has taken significant steps to develop arrangements for teams to discuss learning from events. For example, all deaths are now discussed at mortality and morbidity review meetings, which have been set up for all clinical teams.

Leadership

RQIA found good examples of managerial and clinical leadership, in relation to unscheduled care.

In both EDs, there was evidence of strong clinical leadership with very positive team cultures as staff worked to address local challenges.

There have been recent changes in the clinical leadership in AMU at RVH and new systems were still being embedded at the time of the review visits.

Processes to fundamentally change the emergency surgical systems across the trust; to bring together stroke services into a single stroke unit; and to establish a neurology assessment service to ED had been achieved with effective engagement of clinical teams. The emerging proposals to develop new arrangements to improve services for frail elderly patients were clearly being taken forward, with strong clinical engagement.

A particular challenge for the trust is to balance managerial and clinical leadership for specialties and services across the trust, with leadership for individual hospital sites. The review team was advised by some staff at the Mater and BCH that they perceived that the particular issues for those sites were not high priorities on the overall trust agenda.

Governance Systems and Processes

The Belfast Trust has established integrated governance arrangements with structures, policies and procedures in place. These include:

A trust assurance committee with specific subcommittees and steering groups, for example:

- a safety and quality steering group
- a standards and guidelines committee
- a quality, engagement and user experience group
- a clinical ethics committee

Issues and incidents relating to unscheduled care have been brought to relevant committees.

Reporting arrangements for incidents are through an online DATIX system. There have been changes to the arrangements for investigating serious adverse incidents (SAIs), with increased early use of significant event analysis which the trust advised has been very useful.

Some staff in RVH ED advised the review team that, while they are aware of the incident reporting processes, they do not always have the time to complete the incident reporting on the computer. Staff who had completed incident forms advised that there was a lack of feedback to them on what had happened in response to their report.

Later this year, the trust will be participating in a regional audit in relation to SAI processes, including family engagement. All trusts are to complete the audit by 30 September 2014. After this date, RQIA will be conducting a quality assurance of the process undertaken.

Summary

In summary, the review team found that there were differences in perception among the staff they met as to the causes of, and the responses required to, the challenges being faced by trust services in relation to unscheduled care.

Staff in the Mater and Belfast City Hospitals considered that more focus could be given as to the situation in those hospitals that could contribute to solutions for the particular challenges at RVH. There were views expressed that more devolved decision making on use of resources could allow small local initiatives to be taken to enhance patient flows.

Governance systems have been put in place, including those in relation to serious adverse incident reporting. An enhanced system has been developed by the trust in relation to analysis of all deaths. Some staff advised that they find it difficult to find time to record incidents, and others that they would welcome more feedback on what happened following the report of an incident.

Emergency surgery and stroke services are good examples of major change within the trust in unscheduled care, with effective clinical engagement.

3.9 Coordination and Escalation Arrangements

During the review visits, issues were raised with the review team relating to the effectiveness of the coordination arrangements for unscheduled care across the hospital sites within the trust.

For example, staff in AMU at the Mater Hospital advised that they were unclear as to how older patients were prioritised for admission to available beds in Care of the Elderly wards at BCH. BCH ward staff confirmed that this was also an issue for them as well. They can have several requests from different sources in BCH, RVH or the Mater, for admission or transfer of patients, when a bed becomes available, and are unclear as to which patient should have priority.

Staff in the Mater ED advised the review team that, at times, they have had difficulty arranging transfer of surgical patients to the RVH, in line with the agreed protocol due to lack of beds available in the surgical unit.

The review team considers that the trust should review the flow coordination arrangements across hospitals in the trust: to ensure that there are effective systems for daily coordination of flows; to reduce patient transfers between specialties and sites; and for cross-site responses, when there are pressures in unscheduled care.

As highlighted above (page 17) analyses of the period around the declaration of a major incident have identified some issues in relation to escalation arrangements to manage pressures in unscheduled care. (Appendices B and C)

3.10 Education and Training

The terms of reference for this review include the requirement:

- To review the impact of the arrangements for unscheduled care on the education and training systems for medical and nursing staff within the Belfast Trust. To assess the impact of these arrangements on recruitment and retention of staff.

Members of the review team met with representatives of Queens University Belfast (QUB); the University of Ulster (UU); the Northern Ireland Medical and Dental Training Agency (NIMDTA); course supervisors, trainers and trainees in the Royal Victoria Hospital.

There is a recognised tripartite system of provision of assurance of the quality of education and training in health care, through:

- professional regulation arrangements
- education provider systems
- service provider systems

Through these mechanisms, students and trainees can raise concerns relating to quality issues in the provision of care in units in which they are placed. From discussions with course supervisors and trainees, trainees are aware of how to raise concerns.

Undergraduate Students

At undergraduate level, QUB has systems in place to oversee the quality of placements for medical and nursing students. There are arrangements to capture and escalate any concerns raised by students.

For both medical and nursing students, the university representatives considered that their students, in general, obtain good placements across Northern Ireland, including experience in units providing unscheduled care.

Nursing students have a named mentor and they also have a tutor. There is a link lecturer for all clinical areas in which they are placed.

RQIA was advised that there have been no issues brought to the attention of the nursing link lecturers in relation to students' experience in ED or AMU at the Royal Victoria Hospital. Students have advised that they feel well supported and get good experience. They recognised that the units are busy, but appreciate seeing the wide range of patients with different conditions in these environments. Link lecturers perceived that the nursing staff in the units were very busy, but worked to

protect the educational experience of the students. The support provided to mentors from trust practice education teams was a particular area of good practice.

Medical students are asked for feedback about their placements and, where concerns are raised, they are brought to the attention of the relevant service provider. Students rotate between specialties. There can be differences in the teaching experience, depending on the particular situation at the time when a student is attached to a unit, for example if the unit is busy or quiet.

Postgraduate Nursing Students

The UU provides courses for postgraduate nurses that are relevant to unscheduled care. These include a minor injuries module, designed to enhance the knowledge and skills of participants, to enable them to work more autonomously. Courses are run in response to the numbers of places commissioned by the health and social care trusts.

Lecturers advised the RQIA review team that during classes, at times, they do hear issues about flow in EDs across Northern Ireland.

Postgraduate nursing students can generally attend classes held at the university. However some students have advised that due to work pressures they cannot take the supernumerary practice time which is a requirement of their courses.

Some trusts have taken initiatives to ensure that other staff recognise when a student is on a period of supernumerary practice. At the Mater Hospital, nurses, on their training days, are provided with a different uniform, so that it can be easily identified that they are not part of the service delivery team that day.

A particular challenge, which has been brought to the attention of the universities, is that at times there is a lack of opportunities for students to use new skills, they have acquired through the courses. This can lead to a sense of frustration that the nurse will become deskilled quite quickly.

In some cases, the issue relates to opportunities for job progression. However, local clinical policies may also prevent the use of trained skills, such as interpretation of x-rays.

The review team was advised that a further challenge was that there is a range of similar names for practitioners, who require different levels of training in emergency care. This can lead to confusion amongst other hospital staff. It is important that organisations commissioning courses are aware of the specific nature of the training that is required. The universities consider that development of consistent terminology across organisations would be helpful in this regard.

Postgraduate Doctors in Training

Postgraduate training of doctors in Northern Ireland is recognised to be of a high standard, as evidenced by General Medical Council (GMC) surveys. NIMDTA has established a programme of visits to training programmes and locations, to ensure that they are meeting recognised standards.

During discussions with trainers and trainees and NIMDTA training coordinators, several challenges were raised about delivering postgraduate training for doctors in unscheduled care environments in the Belfast Trust:

1. Training experience can differ between different wards and clinical teams. It can depend on the commitment of the individual clinicians to ensuring effective training. Where good team structures are in place, the experience of trainees is better, and subsequent patient care is improved. There was evidence of excellent medical team working in parts of the system, but not in others.

2. Training can be impacted greatly by the level of activity in units. If systems are well organised a busy environment can be an excellent training environment. Trainees who spoke to the review team in the RVH ED reported favorably on their training experience.

   However, units that are not directly admitting acute patients may not provide the experience trainees require. The review team was advised that trainees had expressed concerns that the changes to the admission arrangements for medical patients to the BCH, resulted in a more limited experience.

3. The arrangements for admitting medical patients can result in patients undergoing several assessments by different trainees of similar grades. Trainees consider that this duplication increases the pressures on their time and can cause delays for patients.

4. Trainees also raised concerns about the tracking of patients who are admitted as outliers in the RVH, and for patients transferred from RVH to BCH.

5. In some units, the review team was informed that the most junior F1 doctors did not have time to go on ward rounds, and their work was, in effect to complete the tasks set out in a job book.

The challenges raised, in part, reflect the need to maintain the balance between service and training needs. However, it was clear from the experiences shared by specific teams, including ED and orthogeriatrics, that it is possible to deliver an effective training experience in a very busy, unscheduled care environment.

Coordination Arrangements for Changes in Service

Education providers advised the review team that service changes at local level can occur at short or no notice, which impacts on the education and training experience of students or trainees on placement. The time to plan and adjust a rotational training programme can be significant, and is difficult to amend programmes at short notice. At times, NIMDTA has only become aware of a significant change to a placement after it has occurred.

Service providers also expressed concern that the impact of decisions and recommendations made in relation to training cannot always be acted on promptly due to resource constraints, or the need to engage commissioners.

The issues highlight the need for effective arrangements to be in place for coordination between education and service providers at both strategic and operational levels.

Since the review visit, RQIA has been advised that discussions are taking place between NIMDTA and the Belfast Trust to progress enhanced coordination.

Impact on Retention and Recruitment

RQIA's review team discussed the impact of pressures in unscheduled care on recruitment and retention of staff.

In nursing, the team was advised that nurses graduating from QUB have had difficulty in getting posts in ED, even when this was their desired career choice. They have therefore considered they had no alternative but to go elsewhere.

From the university perspective, sufficient nurses are being trained, but there are not enough vacancies for all students seeking employment after graduation.

There are moves to synchronise the period when trusts are recruiting nurses with the time when nurses are graduating; the university considers that this will lead to more effective recruitment.

For medicine, there has been a shortage of doctors available to apply for consultant posts in unscheduled care, including ED and AMU. This is a national issue that will take time to resolve.

Pressures in unscheduled care are likely to reduce the attractiveness of posts. However, the reported emigration of doctors to other countries, such as Australia, may be linked to the lifestyle and terms and conditions available to medical staff there.

A key issue in a professional's consideration as to whether to apply for, or stay in a post, is likely to relate to whether they perceive that they can carry out their practice to contemporary standards. Views expressed by consultants to the review team about AMU, highlighted their concerns that the current model of operation does not reflect current thinking on models for the delivery of acute internal medicine. This has impacted on decisions by some consultants to seek alternative posts.

4. Regional Perspectives

4.1 Regional Context and Challenges

The terms of reference for this review include the requirement:

- To review the effectiveness of the arrangements in place for the regional coordination of unscheduled and emergency care, including primary care and ambulance services regionally and arrangements for regional escalation when required. This will include consideration of the effectiveness of planning for periods of increased demand.

In this regard, the review team sought and received information about escalation and coordination arrangements from HSC organisations. Meetings were held with teams to discuss the systems in place.

Transforming Your Care

In 2011, a new vision was developed for the future delivery of health and social care in Northern Ireland, Transforming Your Care (TYC).[39] TYC sets out 12 principles to underpin the strategic approach (Figure 43).

Figure 43: Principles of Transforming Your Care Principles

1. Placing the individual at the centre of any model by promoting a better outcome for the user, carer and their family.
2. Using outcomes and quality evidence to shape services.
3. Providing the right care in the right place at the right time.
4. Population-based planning of services.
5. A focus on prevention and tackling inequalities.
6. Integrated care-working together.
7. Promoting independence and personalisation of care.
8. Safeguarding the most vulnerable.
9. Ensuring sustainability of service provision.
10. Realising value for money.
11. Maximising the use of technology.
12. Incentivising innovation at a local level.

Source: DHSSPS Transforming Your Care

In March 2013, the Minister briefed the Northern Ireland Assembly on the outcome of a period of consultation on an action plan to take forward the recommendations

[39] http://www.dhsspsni.gov.uk/transforming-your-care-review-of-hsc-ni-final-report.pdf

of the strategy.[40] The Minister highlighted that new integrated care partnerships (ICPs) would be a key element of moving forward.

ICPs would be multi-sector collaborative networks and include: "statutory, independent and voluntary and community practitioners and organisations in their membership and will come together to respond innovatively to the assessed needs of local communities, provide support for service users closer to home; and avoid unnecessary visits to hospital."

Seventeen ICPs have been established, each based around natural geographies of approximately 100,000 people and 25-30 GP practices.[41]

A key area of focus for the new ICPs is to understand patient pathways of care for priority areas, and to develop plans for improvement. Four clinical priority areas have been identified: [42]

- frail elderly
- respiratory disease
- diabetes
- stroke

The work on patient pathways was in progress at the time when fieldwork was being completed for this review on unscheduled care. Plans are being developed to ensure that "care is more joined up and person centred".[43] Areas being considered include enhancing community services to avoid the need for hospital admissions.

The ICP clinical priority areas identified, of frail elderly patients and respiratory disease, are clinical groups where particular challenges in relation to patient flow have been identified in the Belfast Trust.

Pathways between Primary Care and Hospital Services for Unscheduled Care

The review team was advised that there are differences between trusts as to the pathways in place for patients to be referred for urgent assessment and/or admission when they require unscheduled care.

For many hospitals, the usual portal of entry for most patients needing unscheduled care is the ED.

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[40] http://www.transformingyourcare.hscni.net/wp-content/uploads/2012/10/TYC-Vision-to-Action-Consultation-Document.pdf
[41] http://www.transformingyourcare.hscni.net/integrated-care-partnerships/
[42] http://www.transformingyourcare.hscni.net/icp-updates-march-2014-2/
[43] http://www.northernireland.gov.uk/news-dhssps-040614-think-global-and?WT.mc_id=rss-news

The review team was advised that in the Western Trust, Altnagelvin Hospital, Londonderry, has traditionally operated a model to encourage GPs to contact clinical teams directly, so that patients can bypass ED and rapidly access specialist teams. Initiatives to support the model include the development of an integrated AMU with both assessment and admission functions. A new ambulatory care unit for medical patients is being developed adjacent to the AMU.

The Northern Trust has developed a unit, as an alternative to ED, for GPs to refer medical patients for assessment at Antrim Hospital. While this unit was considered to be working well, it was not being universally used by GP practices in the catchment area of the hospital.

The Southern Trust advised the review team that, for several years, an unscheduled care network has been in place in the trust area. This brings together primary, community and secondary care providers to discuss issues relating to unscheduled care. It has been found to be a valuable process to allow issues to be discussed and resolved.

The TYC report identified the need to have clear pathways, to enable suitable patients to access hospital beds directly, when they required urgent care, and to provide more consistent approaches across Northern Ireland. [44]

- "Dedicated care pathways should be developed for children and people with long term conditions that will allow direct contact with a trained team available to support them in an emergency or when requiring urgent care. This should involve the ability to directly admit these patients to hospital beds" (page 103).
- "While there has been some progress in developing tailored care pathways for specific conditions and to address the issue of resilience in the service, there needs to be more consistency of approach across the region to ensure the best quality care is provided, the service is resilient and sustainable, and that people are treated in the right place at the right time" (page 107).

The review team found that there remains inconsistency of approach in Northern Ireland as to the referral arrangements from primary care for hospital-based assessment and/or admission. Most patients are accessing hospital-based care via EDs. There are gaps in the services available to facilitate direct access to specialist assessment, which could potentially reduce the need for attendance at ED and admission to hospital.

[44] http://www.dhsspsni.gov.uk/transforming-your-care-review-of-hsc-ni-final-report.pdf

Evidence from Scotland (page 6) indicates that hospitals with a lower proportion of their unscheduled care admissions via ED, tend to have better ED performance.

The review team considers that the establishment of ICPs in Northern Ireland offers an excellent opportunity to re-examine unscheduled care pathways between primary and hospital based care to ensure that:

- GPs can refer patients directly for the appropriate specialty assessment at hospitals on a daily basis, without them being required to go through EDs.
- Patients who have chronic conditions, and are under the care of hospital consultants, can have direct access to advice and assessment, when they have acute exacerbations of their condition.
- Hospitals have pathways, procedures and facilities in place to enable direct access to specialist assessment, bypassing ED, for patients who require unscheduled care.
- Patients who attend ED directly have rapid access to specialist assessment facilities, to avoid unnecessary admission where possible, and to avoid prolonged stays and multiple assessments, for those who are admitted.

Developments in Ambulance Services

TYC proposed that the Northern Ireland Ambulance Service Trust (NIAS) should develop new protocols which support: “right care, right place, right time, right outcome”. Protocols should be outcome-driven and reflect best practice. “They will provide alternatives to going to hospital, support people to safely manage their health at home (where appropriate) and take patients without delay to the most clinically appropriate destination.”[45]

In March 2013, many respondents to the consultation on the TYC Action Plan highlighted that: “the success of reconfiguring hospital services will be dependent on a fully resourced and responsive ambulance service”.[46]

NIAS advised the review team that a programme of new care pathways and models is being developed and put in place (page 74) in line with the TYC recommendations.

To support new models, the review team considers that it would be useful to review arrangements to ensure that specialist clinical advice is available when required by ambulance officers. This is required to aid decision making to leave appropriate patients at home, rather than take them to hospital, at time of first presentation.

[45] http://www.transformingyourcare.hscni.net/wp-content/uploads/2013/03/Transforming-Your-Care-Vision-to-Action-Post-Consultation-Report.pdf (page 103)
[46] http://www.transformingyourcare.hscni.net/wp-content/uploads/2013/03/Transforming-Your-Care-Vision-to-Action-Post-Consultation-Report.pdf (Page109)

During RQIA's summit event, held on 19 May 2014, relating to the regional aspects of the review, NIAS provided an update on its work. The presentation highlighted that NIAS can transport patients directly to locations other than ED under protocol, or where a clinician requests this. In designing future models for unscheduled care it is important that this is recognised, as it can facilitate the implementation of new models to access specialist assessment.

The review team was also advised of new arrangements which are being put in place, to help coordinate the wider hospital system at times of pressure, and to improve the priority system for patients referred by GPs (page 70).

In discussions with NIAS and other trusts, the review team was made aware that significant resources were being used to pay for additional patient transport arrangements to facilitate patient discharges and to transfer of patients between hospitals.

The review team considers that the development of whole system planning would be beneficial, to design systems to reflect the need for, and timing of non-emergency patient journeys. If planning for this area was better coordinated, and funding was pooled, there is the potential that NIAS could provide an enhanced intermediate tier service. This could create a more flexible and responsive service and help NIAS and other trusts to respond when there are system-wide challenges, to manage the capacity of unscheduled care.

Coordination in Response to System Pressures

The review team was advised that individual organisations had local escalation plans to respond to unscheduled care pressures, and that was a recognised gap in the coordination of responses across organisations.

Potential responses to periods of pressure differed within and between trusts:

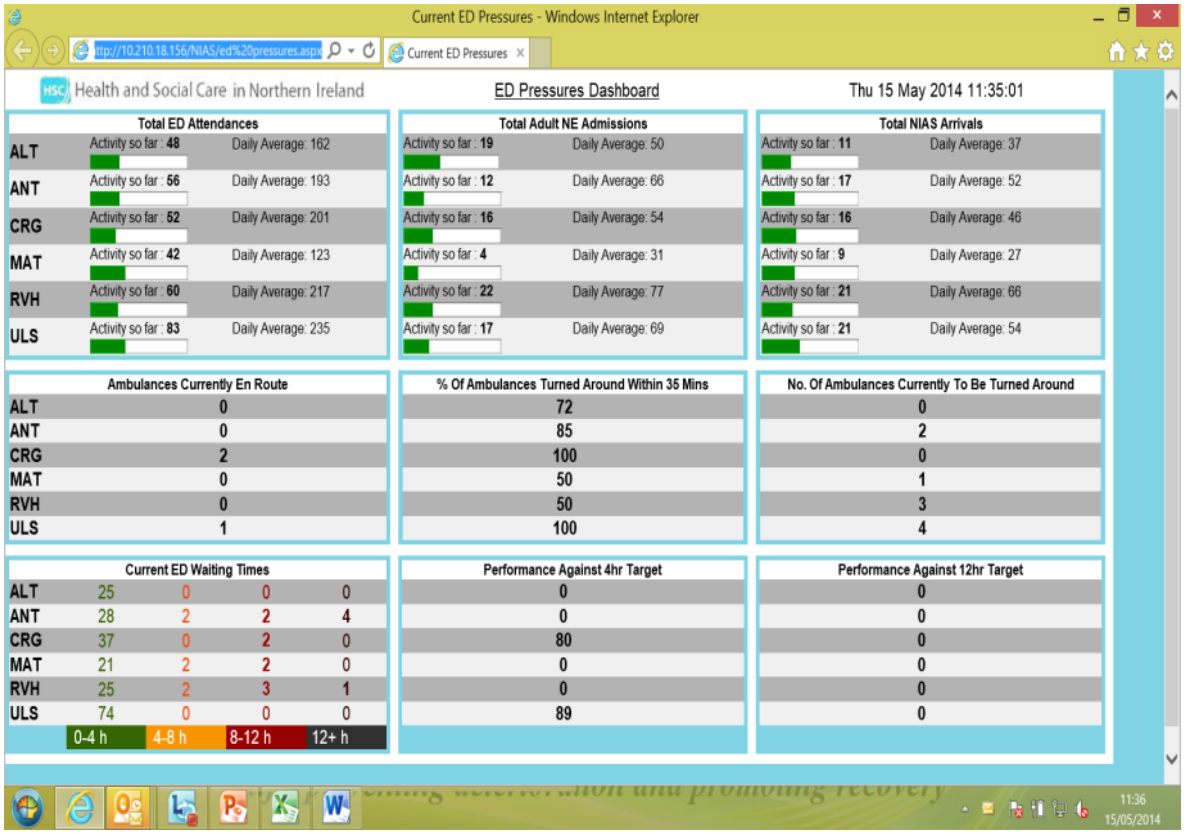
- For individual hospitals in the Western Trust, the large distances involved meant that there was limited opportunity to divert patients to other hospitals during periods of pressure on unscheduled care.
- For hospitals within the Southern Trust, diversions were arranged, at times, to help balance pressures between Craigavon and Daisy Hill hospitals.
- For hospitals within the Belfast, Northern and South Eastern trust areas, the situation was more complex, with significant cross-boundary flows of patients. Diverts of patients between hospitals could be requested both within and across trust boundaries.

Trusts informed the review team that, until recently, the system to request a within-trust diversion was relatively straightforward, as the trust could advise NIAS that they required a divert to be put in place. For cross-trust diverts, until recently the system required agreement from both trusts, and could take time to put in place.

To help to the address system difficulties, a team in the HSC Board, working with NIAS and other organisations, has developed a regional dashboard to provide real-time information about unscheduled care activity across the system (Figure 44).

In discussion with NIAS, it is rare for a divert for 999 emergency patients to be put in place. Most diverts relate to patients referred by GPs.

Figure 44: Regional Dashboard



Organisations have agreed that the NIAS can use this information to identify when there are emerging pressures in the system. Having an oversight of the whole system, NIAS can then take decisions to activate diverts for a period to seek to keep the system in balance. This system went live in April 2014.

The regional dashboard should increase opportunities for earlier system intervention in response to pressures, and avoid the need for cross-trust agreements to be negotiated, before a diversion can be put in place.

Regional Escalation

On exceptional occasions, the level of pressures on unscheduled care can exceed the ability for them to be managed by a single organisation, even with time-limited diversions in place.

The review team sought information as to who would take the lead in coordination of a multi-organisational response.

In 2009, significant work was carried out in Northern Ireland, when there were concerns that there may be a large outbreak of avian influenza. Although those plans were still in place, it was not clear that they would be activated in other circumstances.

The experience from the Belfast Trust's review of the major incident activation was that, although this did rapidly help to alleviate problems, major incident plans are not necessarily tailored to respond to periods of pressure in unscheduled care.

The review team considers that a review of escalation arrangements should be carried out by each organisation, and that the regional escalation arrangements to coordinate periods of exceptional pressures should be clarified and documented.

Coordination of Daily Flows of Patients

During discussions with trust teams and visits to departments, a common theme raised with the review team was that patients were arriving late in the afternoon, with ambulances arriving in batches. It was perceived that many of the patients had contacted their GP or other service early in the day, but that the time from initial contact to arriving at hospital was excessive.

The consequences of this pattern of arrivals included:

- limited opportunities for patients to be assessed and investigations completed that day so that the patient could return home
- a strong likelihood that the patient would be admitted
- the work of many departments stretching late into the evening when fewer staff are available
- reductions in efficient working in EDs due to batching of work with increased likelihood of trolley waits for patients

This pattern is not unique to Northern Ireland and is not easily resolved, as it requires change across the primary care, ambulance and secondary care systems.

To a significant extent, the pattern of arrivals is the result of prioritisation decisions taken across the patient pathway. At all stages in the patient journey, prioritisation

systems operate to identify emergency patients for fast tracking through the system. Trauma patients and patients with heart attacks or strokes are rapidly brought to emergency departments and then moved quickly to the appropriate environments.

However, patients who need urgent, rather than emergency assessment for possible admission, tend to be prioritised to categories where they may wait for a professional to attend, or an ambulance to arrive.

It is essential that the system can respond rapidly and effectively when emergencies occur. However, delays in bringing urgent patients for assessment in hospital are impacting significantly on their quality of care, and on the efficiency and effectiveness of services.

NIAS has identified that the current method of allocating priority to patients could be improved to ensure that urgent patients receive appropriate priority for transport to hospital.

New prioritisation arrangements are being put in place to help address this issue that will impact on ambulance flow patterns. The capacity of the intermediate care ambulance fleet will need to be reviewed to ensure that NIAS can meet the demand for transport of urgent patients

It is recommended that a regional flow improvement project is established to identify and test approaches to tackling this whole system problem.

4.2 Initiatives to Improve Unscheduled Care

During the fieldwork for this review, RQIA was made aware of a range of initiatives which were being taken across Northern Ireland to improve unscheduled care arrangements.

A regional summit event was held on 20 May 2014, during which these initiatives were shared by organisations to help spread learning across the wider system. The presentations from the summit events are available on the RQIA website.[47]

Initiatives have been taken across all steps in patient journeys through unscheduled care systems. Figure 45 sets out the broad approaches being taken. It is not possible in this report to describe initiatives in detail; however, the following examples provide an indication of the range of projects being undertaken.

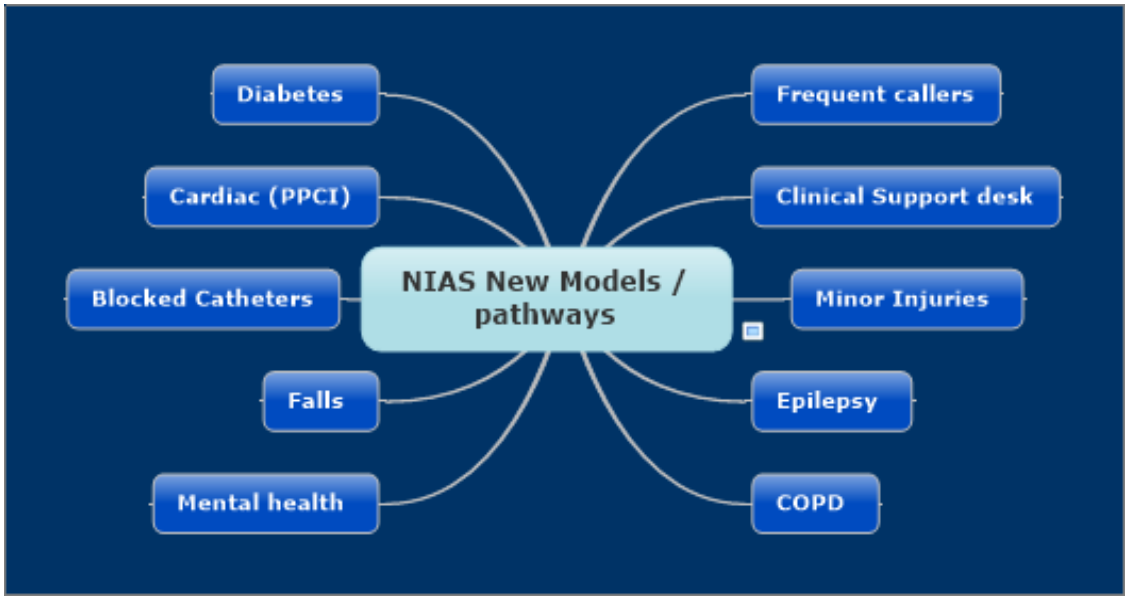
Figure 45: Approaches being taken to Improve Patient Flow

[47] http://www.rqia.org.uk/home/index.cfm

a. New System Designs

- The Belfast Trust has carried out an extensive remodelling of emergency surgery arrangements across the RVH, BCH and Mater Hospital. The new model includes an emergency surgery unit at the RVH, staffed by two surgeons of the week.[48] The new service is already considered to have brought significant benefits in care for patients.
- NIAS, in partnership with commissioners and providers, is developing a series of new models and pathways for patients with the objective of reducing attendance EDs. The pathways are being designed to ensure that patients are taken to 'the best place, in the best possible time, with the best treatment along the way' (Figure 46).

Figure 46: New Care Pathways being developed by NIAS



b. New Hospital Doors

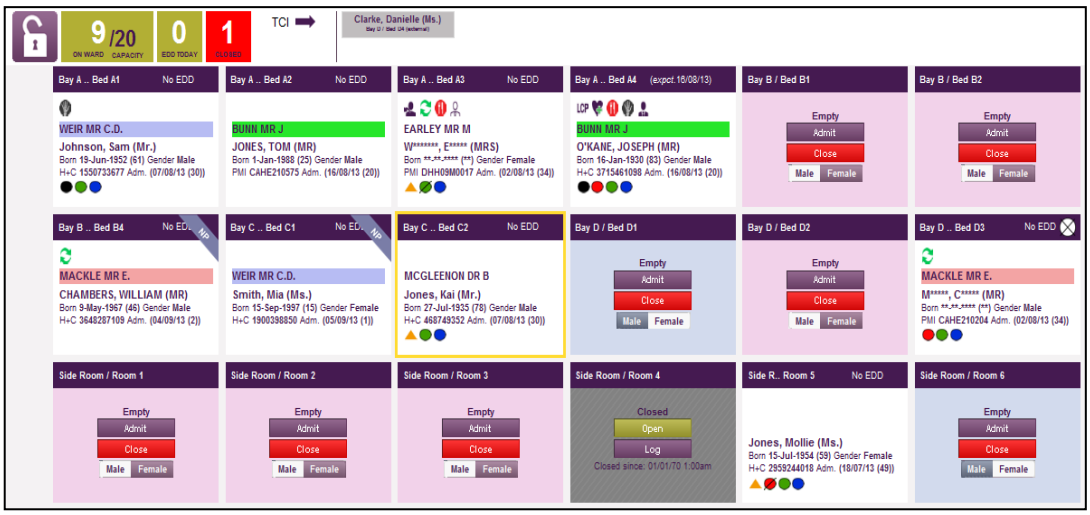
- The Northern Trust opened a new ED at Antrim Hospital in June 2013. The unit is designed to improve flows of patients and includes, for example, an area to facilitate transfer of patients from ambulance into the unit. The Northern Trust has also established new arrangements for GPs to refer patients directly to an assessment unit at the hospital rather than being taken to the ED.
- In the Western Trust, ambulances can now bring suitable patients to the Minor Injuries Unit at Tyrone County Hospital in Omagh, to avoid longer travel times to Altnagelvin or South West Acute hospitals.

[48] The surgeon of the week model operates where a dedicated surgeon is responsible for unscheduled admissions during that week. This minimises disruption to the planned activity of other surgeons.

c. Major ICT Initiatives

- The South Eastern Trust has established a system that enables staff to have information about patients who arrive in ED, though to their admission to wards. Junior doctors, for example, can then have access to information on the system about investigations that are required,and can record that they have been actioned. This electronic patient management system also facilitates electronic referrals for investigations
- The Southern Trust has worked in partnership with a commercial organisation to develop a flow management system (IMMIX) which is being rolled out across the hospitals in the trust. The system provides access to a wide range of information and is designed to support staff across a range of disciplines in their roles, and to enhance the flow of patients (Figure 47). The Western Trust is rolling out the same system in its hospitals.

Figure 47: IMMIX Flow Management System, Southern Trust



- Belfast and Northern Trusts have implemented electronic whiteboard systems in acute wards to enhance information for staff.

d. Improving Coordination

- The South Eastern Trust has established a project to enhance patient flows by working with an improvement and change specialist team (Alamac). The project aims to help the trust team to understand and improve flows of patients and to enhance skills in prediction. Each day, staff, across the Ulster Hospital, input information into the system. There is a daily call of 15 minutes between the ED, wards, social work teams, bed flow and surgery teams within the trust. This call also now includes staff in the Belfast Trust.

The call focuses on actual activity from the previous day, with an aim to predict the current day's activity. Plans are then agreed based on these predictions with a view to improve patient flow across the system.

- The Southern Trust has developed an information hub to support the proactive coordination of all complex and non-complex hospital discharges for patients aged over 65 years on both its acute hospital sites (Craigavon and Daisy Hill). The hub aims to improve communication between acute and community services and has embedded the use of estimated date of discharge (EDD) in order to support proactive discharge planning.

e. Remodelling Bed Profiles

- The Northern Trust has reviewed the bed requirements for different specialties to seek to have an improved balance between demand and availability of beds for patients. This exercise identified the need for an expanded number of beds for respiratory patients, while the number of acute medical beds was reduced.
- The Western Trust has established a major unscheduled care project, working with staff from the NHS Greater Manchester Commissioning Support Unit. The focus of the project is on addressing challenges for the trust in improving patient flow. The project has set up a number of improvement work streams of which one is to carry out a bed remodelling exercise.

f. New Roles of Staff

Trusts advised the review team of a number of new staff roles that have been developed to help ensure the effective flow of patients. These include:

- Hospital ambulance liaison officers (HALOs) who are NIAS officers, located within EDs, to facilitate staff in maintaining patient flows to and from hospitals.
- Patient trackers have been appointed within several EDs to expedite the smooth movement of patients though the departments, for example, by ensuring that investigation results are promptly available to clinicians.
- In the Northern Trust, additional staff have been employed at weekends to facilitate the discharge of patients. these include a discharge doctor, a hospital social worker and allied health professionals, together with increased pharmacy cover.

g. Tackling Local Bottlenecks

- The South Eastern trust established a turnaround team in September 2013, with a focus on eliminating 12 hour waits, and to refocus the trust on improving four hour ED performance. An assistant director was assigned to lead the team. The team has been identifying areas where delays occur in the system and tackling them to improve patient flows. Examples of improvements areas have included: remodelling clinical handover times in AMU to reduce delays; making better use of other hospitals in the trust to reduce pressure at the Ulster Hospital; and extending pharmacy cover at weekends.

h. New Ambulatory Services

- The Belfast Trust established a programmed treatment unit (PTU) in 2010. It facilitates ambulatory investigations, interventions and treatments. The unit is now housed in a recently refurbished unit with five beds and five treatment chairs.
- The number and range of treatments carried out has expanded rapidly. These include day case liver biopsies, ambulatory liver transplant assessments, day case paracentesis, day case lumbar punctures and day case endoscopic retrograde cholangiopancreatography (ERCP) among others, all of which were previously undertaken purely on an inpatient basis.

  In addition, the unit now facilitates infusions of numerous drugs including biological therapies for patients with inflammatory bowel disease from across all sites in the Belfast HSC Trust. It also facilitates infusions of neurological drugs for patients with multiple sclerosis, meaning nurse specialists in those areas can focus their efforts and expertise in one area.

4.3 Building Skills and Enhancing Collaboration

From the information provided at the summit event, it is clear that there is significant learning to be shared between organisations in Northern Ireland through the ongoing experience of the wide range of initiatives currently taking place.

At the summit there was also considerable interest expressed in learning more about work to improve flows, which was presented by the Health Foundation. This work is now being taken forward in England, Scotland and Wales. In Wales, this has been established as a collaborative, a model that has been used in Northern Ireland through the work of the HSC Safety Forum.

To take this process forward the review team recommends that a collaborative is established in Northern Ireland to build skills and capacity in flow management, and to share the wide learning from the initiatives that are currently underway.

5. Conclusions and Recommendations

5.1 Conclusions

RQIA's review of unscheduled care was established following concerns raised about the arrangements for the provision of services in the Belfast Trust and the declaration of a major incident at the Emergency Department of the Royal Victoria Hospital on 8 January 2014.

In carrying out the work for the review, members of the independent review team are conscious that there have been significant recent reviews and inspections relating to urgent and emergency care in the trust including:

- A review carried out by the College of Emergency Medicine in 2013 which made 10 recommendations for improvement.
- RQIA's Inspection of the ED and AMU, which took place from 31 January 2014 to 3 February 2014. A total of 59 recommendations were made following this inspection.
- A programme of visits by NIMDTA, which have led to recommendations relating to training and unscheduled care.
- A trust review of the circumstances surrounding the declaration of a major incident on 8 January 2014.

The Belfast Trust developed action plans to take forward the recommendations from these reviews and inspections. At the time of this review, there was evidence that the actions being taken were leading to improvements in staffing in key areas, and improved local systems, and that this was still work in progress.

In developing recommendations for this review, the focus has been to identify areas for overall system improvement, and not to duplicate the work of the other processes, or restate previous recommendations. From the review team's perspective, actions to progress the previous recommendations should continue to be taken forward to completion.

The review team has reached the following conclusions in relation to the terms of reference of the review.

1. ***To assess the appropriateness of the actions taken by the Belfast Trust and wider HSC in the immediate periods before and after the declaration of a major incident by the Belfast Trust on 8 January 2014.***

RQIA's review team considers that, given the difficulties experienced in the RVH ED on 8 January 2014, it was appropriate to declare a major incident to establish control arrangements and to bring in additional staff to alleviate the situation.

The post-incident review carried out by the Belfast Trust, together with the analysis of data carried out for this review, indicates that there was a period of building pressure on the unscheduled care arrangements, for which there was potential for earlier intervention in the immediate period before the incident. However, this should be considered in the context that the findings of this review indicate that there were significant ongoing problems in flows of patients within the hospital system in the trust. The wide impact of these challenges was set out in the report of RQIA's Inspection at the RVH several weeks after the incident.

The Belfast Trust has identified significant recommendations from its review of this incident, which have potentially wider relevance for systems in other trusts, Figure 6 (page 18).

Recommendation 1:
All HSC organisations should review their escalation arrangements for responding to periods of exceptional pressure for unscheduled care. Plans should set out arrangements for: creating additional capacity; bringing in additional staff; and contacting senior decision makers. The arrangements for coordination of responses within and across HSC organisations to exceptional periods of demand should also be reviewed.

Recommendation 2:
Regional and trust plans for coordination and responding to predictable periods of increased demand should be reviewed. In particular, early planning should be instituted for the post-Christmas and New Year period, to better manage system flows, including improved scheduling of elective activity.

2. To assess the effectiveness of the systems in place in Emergency Care in the Belfast Trust to ensure that patients receive safe, effective and compassionate care including seamless transition, between the different care teams and locations giving due regard to the unsatisfactory experience perceived by some patients.

The review team has considered information about the flow of patients to, within and between hospitals in the Belfast Trust; met with staff; and visited units and departments.

The review team has concluded that, while some parts of the unscheduled care system are working effectively, patient flows for the specialties of acute internal medicine, respiratory medicine, and care of the elderly need to be improved at the RVH and for transfer to the BCH.

Difficulties with patient flows within these specialties, are leading to major difficulties for the ED at the RVH, due to delays in patients leaving the department. If this exit block was addressed effectively, there would be a significant improvement in the functioning of the department.

From analysis of available data, there is evidence that a particular issue relates to the arrangements for patients to access specialty beds at the BCH.

At the Mater Hospital, there is evidence that the hospital is taking an increasing share of the total number of medical patients.

In developing an overall strategy to tackle the underlying issues with flow in the medical specialties, the review team considers that each of the three hospitals can play important roles, reflecting their particular strengths.

In relation to the care of the elderly, clinicians and managers have been actively working to design a new model of service, in particular for frail elderly patients. The proposed model builds on the learning from a pilot approach, OPTIMAL 7 and evidence about effective approaches to delivering care for the frail elderly.

The model is designed to enable the majority of frail elderly patients to directly access services in the BCH, reducing pressure on ED and AMU at the RVH. This will reduce the number of transfers, and provide more rapid and patient centred care. In future, the model could support links with community services as envisaged in Transforming Your Care.

From the information provided, it would be possible to have the initial stages operational before the next winter pressures period.

Recommendation 3:

It is recommended that the Belfast Trust aims to have the first stage of implementation of new arrangements, for the direct assessment and admission of the majority of frail elderly patients, being treated at the Belfast City Hospital, in operation by November 2014, before next winter.

Pressures in respiratory medicine are the most seasonal of any of the medical specialties. This creates particular challenges in the design of services to enable winter peaks in admissions to be managed. The hospitals in Belfast serve local populations with high prevalence of respiratory disease.

Respiratory medicine is provided at the BCH, Mater and RVH. The largest bed base is at the BCH, which provides regional services.

In other UK cities, models have been established to facilitate patients with exacerbations of respiratory diseases to access respiratory services, rather than through ED. This can include patients referred by GPs, ambulance patients under protocols and patients who have patient passports if they have been treated by the respiratory team previously.

Recommendation 4:

It is recommended that the Belfast Trust reviews arrangements for the assessment and admission of patients with acute exacerbations of respiratory disease. The potential for developing a direct assessment and admission arrangement to Belfast City Hospital should be explored for suitable respiratory patients. This would enable most patients using respiratory services there, to avoid accessing them via an emergency department.

From discussion with members of the acute medical team and other specialties, and from examination of data, the review team has concluded that there are significant challenges with the current operation of the AMU at the RVH. There is a need to examine the flows to, through, and from the unit, to identify solutions.

Changes in flows for the care of the elderly and respiratory medicine services to facilitate assessment and admission to the BCH would reduce the number of patients going through AMU. This would help to enable the acute medical team to operate their service as originally designed, as an assessment and short-stay service.

The current arrangement, through which acute internal medical consultants have responsibility for medical outliers across the hospital during periods of pressure, is reducing the effectiveness and efficiency of the AMU. Plans should be put in place as quickly as possible to prevent this happening.

Recommendation 5:

It is recommended that the Belfast Trust establishes a flow improvement project for acute internal medicine at the Royal Victoria Hospital. This could be taken forward as part of the proposed regional flow collaborative. Plans to avoid the need for acute medical consultants having responsibility for inpatients, not in the acute medical unit, should be implemented as soon as possible.

At present, there is evidence that the medical service at the Mater Hospital is taking an increasing share of admissions of patients within the Belfast Trust. The location of the service means that it serves both a very deprived local population, as well as patients from the Northern Trust area, since the closure of acute services at Whiteabbey Hospital.

While the service has expanded, it does not have a dedicated resource for assessment of patients prior to a decision to admit. With the transfer of emergency surgery from the Mater Hospital to the RVH, there is the potential to develop an assessment service. From experience of other units, there can be potential benefits from co-locating an assessment area close to an AMU.

Recommendation 6:

It is recommended that the Belfast Trust considers the development of an assessment facility at the Mater Hospital, potentially integrated with the Medical Admission Unit, to enhance the medical assessment and admission arrangements there.

In discussion with teams from hospitals across the Belfast Trust, the review team concluded that, while there are systems in place for coordination of flows within hospitals, there is more limited coordination across hospitals on a daily basis.

Recommendation 7: It is recommended that the Belfast Trust reviews its flow coordination arrangements across all hospitals in the trust, to ensure that there are effective systems for daily coordination of flows; and for cross-site responses, when there are pressures in unscheduled care.

3. *To consider the operation of the Belfast Trust emergency departments in the regional context, in order to assess current practice in unscheduled care services and to identify how existing best practice might be applied through learning across the region.*

During this review, the review team was made aware of a wide range of initiatives across trusts to enhance the experience and flow of patients requiring unscheduled care. A summit event was arranged to share this learning.

The work of the review team has also drawn on the experience of a major project to test approaches to coordination of flows at two hospitals in England. This work is now being taken forward in Scotland and Wales. A summary of the work in England was presented at the regional summit for the review.

Introduction to the use of some of the analytical approaches in the work for this review with the Belfast Trust has also demonstrated the potential value in taking this forward, on a regional basis.

Recommendation 8:
It is recommended that an improvement collaborative is established between health and social care organisations, using external expertise on approaches to improving flow. The aims should include: building capacity in the analysis and management of patient flows; and sharing learning from local and national improvement projects.

4. *To review organisational governance in relation to oversight of unscheduled care within the Belfast Trust.*

The review team has concluded that the Belfast Trust has governance systems in place to oversee the delivery of unscheduled care, including reporting of serious adverse incidents. In relation to reporting of incidents, some staff advised that they had difficulty finding time to report incidents. Staff who reported incidents would welcome more feedback on the outcome following their report.

There were differences in perception among staff, in different hospitals and different teams, as to potential causes and solutions of challenges in unscheduled care.

Staff in the Mater and Belfast City hospitals considered that more focus could be given as to the situation in those hospitals which could contribute to solutions for the particular challenges at RVH. There were views expressed that more

devolved decision making on use of resources could allow small local initiatives to be taken to enhance patient flows.

Belfast Trust has evidence of good examples, where, with effective clinical engagement and leadership, significant improvements to service models have been put in place for unscheduled care. These include a major redesign of emergency surgery services and the development of an integrated stroke services.

Belfast Trust has implemented many aspects of the strategic direction which was set out in 2007-08. [49] These have led to the consolidation of specific surgical services, and stroke services, on fewer sites.

In relation to other medical specialties, the current distribution of services across sites is broadly in line with the strategic focus established for each hospital. This means that specific specialties are provided on up to three sites.

The review team recognises the challenges that the current distribution can cause for service provision, with staff sometimes working across sites and patients requiring transfer, at times, between sites for particular aspects of services. Services should be designed, as far as possible to reduce the need for patient transfer.

The review team has concluded that the current arrangements for many patients to access beds in medical specialties in BCH, via attendance at RVH ED and initial admission to the BCH AMU, is leading to delays and pressures in the hospital system.

Developing direct access to assessment and admission arrangements for frail elderly patients, and potentially also respiratory patients at BCH, could improve patient experience and enhance service effectiveness, while reducing pressures on ED and AMU. This approach could be relevant to other specialties as well, which have a significant bed base at BCH, including gastroenterology.

Recommendation 9:

It is recommended that the Belfast Trust reviews the assessment and admission arrangements for all medical specialties at Belfast City Hospital to enhance direct access arrangements. The potential for consolidation of specific medical specialties on fewer sites would be useful to consider for the longer term.

[49] New Directions: A conversation on the future delivery of health and social care services in Belfast http://www.belfasttrust.hscni.net/pdf/New_Directions_Final(1).pdf

In the longer term, the potential for consolidation of specific medical specialties on fewer sites would be useful to consider, as has been taken forward for particular surgical specialties, and stroke services, within the trust.

5. *To assess the extent to which the Belfast Trust has addressed recommendations from relevant reports related to emergency care in the Belfast Trust.*

As highlighted above, the review team is aware that there have been significant previous reviews and inspections relating to unscheduled care in the Belfast Trust.

The review team discussed progress in relation to the College of Emergency Medicine Review with the trust and noted that there has been progress made in relation to the recommendations, but in some areas there are actions which have not yet been fully implemented.

In relation to the recommendations made following the RQIA inspection, the review team was advised that a follow-up visit had taken place and a report would be published on progress in line with the RQIA reporting arrangements.

In relation to recommendations made following visits by NIMDTA, the review team was informed that these are subject to ongoing review through NIMDTA arrangements. There has been progress made in relation to particular issues raised relating to training delivery in the AMU at the BCH.

6. *To review the effectiveness of the arrangements in place for the regional coordination of unscheduled and emergency care, including primary care and ambulance services regionally and arrangements for regional escalation when required. This will include consideration of the effectiveness of planning for periods of increased demand.*

The review team found that there are inconsistent approaches in Northern Ireland for referral arrangements from primary care for hospital-based assessment and/or admission of patients requiring unscheduled care. Most patients are accessing hospital-based unscheduled care via EDs. There are gaps in the services available to facilitate direct access to specialist assessment, which could potentially reduce the need for ED attendance and hospital admission.

The review team considers that the establishment of integrated care partnerships in Northern Ireland offers an excellent opportunity to re-examine unscheduled care pathways between primary and hospital based care to ensure that:

- GPs can refer patients directly for the appropriate specialty assessment at hospitals on a daily basis, without them being required to go through EDs.
- Patients who have chronic conditions, and are under the care of hospital consultants, can have direct access to advice and assessment, when they have acute exacerbations of their condition.
- Hospitals have pathways, procedures and facilities in place to enable direct access to specialist assessment, bypassing ED, for patients who require unscheduled care.
- Patients who attend ED directly have rapid access to specialist assessment facilities, to avoid unnecessary admission where possible, and to avoid prolonged stays and multiple assessments, for those who are admitted.

Recommendation 10:

It is recommended that trusts, together with the other members of integrated care partnerships, examine arrangements for provision of direct access to hospital-based assessment and admission services for appropriate patients.

The review team was advised that there are significant developments taking place within NIAS to enhance flows of patients requiring unscheduled care. These include: a new regional dashboard to help identify pressures earlier and to support decision making in relation to hospital diverts; new patient pathways and models that will enable appropriate patients to stay at home, or to be taken directly to the right services for them; new prioritisation arrangements for patients referred by GPs; and an enhanced fleet of intermediate care vehicles to transport non-emergency patients.

Recommendation 11:

To support new models of provision, it is recommended that arrangements are reviewed to ensure that specialist clinical advice is available, by telephone, for ambulance staff. This is required to aid decision making to enable appropriate patients to stay at home, rather than take them to hospital, at time of first presentation.

The review team was also advised that considerable resources are being used to pay for additional transport of patients from other services, to facilitate patient discharges and transfer of patients between hospitals.

Recommendation 12:

The review team recommends that whole system planning is carried out to design systems to reflect the need for, and timing of non-emergency patient journeys to and from hospitals.

The review team was advised that a particular challenge for many hospitals is that patients requiring unscheduled urgent, rather than emergency care, arrived at hospital late in the afternoon, It was perceived that many of the patients had contacted their GP or other service much earlier in the day.

The consequences of this pattern of arrivals included:

- Limited opportunities for patients to be assessed and investigations completed that day so that the patient could return home.
- A strong likelihood that the patient would be admitted,
- The work of many departments lasting late into the evening with periods in the morning when systems were staffed and had capacity,
- Reductions in efficient working in ED departments due to batching of work; with increased likelihood of trolley waits for patients.

Recommendation 13:

It is recommended that a regional flow improvement project is established, to ensure that patients requiring assessment for unscheduled care, who are referred by general practitioners or other professionals, can access hospital services as early as possible in the day.

When considering regional and local arrangements for coordination of unscheduled care, a common theme which has emerged during the review is the need to ensure that patients can access the services they need without undergoing multiple assessments and transfers between sites and services.

“Providing the right care in the right place at the right time” is one of the core principles underpinning Transforming Your Care.

In England, a set of four principles has been developed to take forward the development of unscheduled care (page 5). One principle is:

- To provide access to the right care in the right place, by those with the right skills, the first time.

The review team considers that the additional focus on providing access to the right skills, the first time, is an important message to strengthen the focus on providing direct access to assessment and treatment by appropriate specialists.

When system changes are being introduced, patient views and perceptions of emergency care should be considered during the implementation process.

Recommendation 14:

A set of principles should be agreed to guide the future design of urgent and emergency care in Northern Ireland. Systems should be designed to ensure that patients have access to the right care, in the right place, by those with right skills, the first time. When system changes are being introduced, patient views and perceptions of emergency care should be considered during the implementation process.

7. To review the impact of the arrangements for unscheduled care on the education and training systems for medical and nursing staff within the Belfast Trust. To assess the impact of these arrangements on recruitment and retention of staff.

The review team met with education providers and with students, trainees and trainers to consider the relationships between education and training systems and unscheduled care provision.

There are significant strengths in many aspects of the arrangements for teaching and training of health professionals in Northern Ireland. Education providers value the training opportunities provided in services for students and trainees. Education and service providers have arrangements in place so that concerns about services, raised by students and trainees, can be brought to the attention of the relevant organisations.

Education providers raised concerns that the planning cycles for service changes are not necessarily synchronised with planning arrangements for courses and placements. They are not always made aware of significant changes to the place or manner in which services are provided. This can impact on the suitability of placements for students and trainees.

Recommendation 15:

It is recommended that arrangements between education and service providers are reviewed to ensure that there is effective coordination, when changes to educational programmes or service delivery are being planned.

In addition, there is not always clarity on the future requirements for particular courses for postgraduate nursing students, creating difficulties in planning future provision.

Recommendation 16:

It is recommended that an assessment is carried out of the requirements for postgraduate training for specialist nurse training in unscheduled care to inform the planning of courses by educational providers.

5.2 Reviews and Initiatives to Improve Unscheduled Care

During the period when the report of the RQIA review was being completed, two other important processes were being undertaken in Northern Ireland, to examine and improve unscheduled care.

College of Emergency Medicine

The College of Emergency Medicine held a summit on 9 April 2014 which examined the issues and challenges facing unscheduled and emergency care services both regionally and nationally. The summit was designed to identify best practice strategies on which to build greater capacity and resilience.

Following the summit, the college prepared a policy paper setting out draft recommendations to address current challenges, for consideration at a follow up summit on Monday 9 June 2014.

RQIA Review of Discharge Arrangements

Effective discharge arrangements from hospital are an essential component of any strategy to improve patient flow.

At the time this review began, RQIA had already commenced a planned review of discharge arrangements from acute hospitals across Northern Ireland. The fieldwork for that review has been completed. The unscheduled care review team were briefed on the emerging findings from the review of discharge arrangements.

The report of the review of discharge arrangements will make a series of recommendations to improve discharge processes. It is planned that the report of the discharge review will be available within two months of the publication of this review.

5.3 Recommendations

Recommendation 1:
All HSC organisations should review their escalation arrangements for responding to periods of exceptional pressure for unscheduled care. Plans should set out arrangements for: creating additional capacity; bringing in additional staff; and contacting senior decision makers. The arrangements for coordination of responses within and across HSC organisations to exceptional periods of demand should also be reviewed.

Recommendation 2:
Regional and trust plans for coordination and responding to predictable periods of increased demand should be reviewed. In particular, early planning should be instituted for the post-Christmas and New Year period, to better manage system flows, including improved scheduling of elective activity.

Recommendation 3:
It is recommended that the Belfast Trust aims to have the first stage of implementation of new arrangements, for the direct assessment and admission of the majority of frail elderly patients, being treated at the Belfast City Hospital, in operation by November 2014, before next winter.

Recommendation 4:
It is recommended that the Belfast Trust reviews arrangements for the assessment and admission of patients with acute exacerbations of respiratory disease. The potential for developing a direct assessment and admission arrangement to Belfast City Hospital should be explored for suitable respiratory patients. This would enable most patients using respiratory services there, to avoid accessing them via an emergency department.

Recommendation 5:
It is recommended that the Belfast Trust establishes a flow improvement project for acute internal medicine at the Royal Victoria Hospital. This could be taken forward as part of the proposed regional flow collaborative. Plans to avoid the need for acute medical consultants having responsibility for inpatients, not in the acute medical unit, should be implemented as soon as possible.

Recommendation 6:
It is recommended that the Belfast Trust considers the development of an assessment facility at the Mater Hospital, potentially integrated with the Medical Admission Unit, to enhance the medical assessment and admission arrangements there.

Recommendation 7:
It is recommended that the Belfast Trust reviews its flow coordination arrangements across all hospitals in the trust, to ensure that there are effective systems for daily coordination of flows; and for cross-site responses, when there are pressures in unscheduled care.

Recommendation 8:
It is recommended that an improvement collaborative is established between health and social care organisations, using external expertise on approaches to improving flow. The aims should include: building capacity in the analysis and management of patient flows; and sharing learning from local and national improvement projects.

Recommendation 9:
It is recommended that the Belfast Trust reviews the assessment and admission arrangements for all medical specialties at Belfast City Hospital to enhance direct access arrangements. The potential for consolidation of specific medical specialties on fewer sites would be useful to consider for the longer term.

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Recommendation 11:
To support new models of provision, it is recommended that arrangements are reviewed to ensure that specialist clinical advice is available, by telephone, for ambulance staff. This is required to aid decision making to enable appropriate patients to stay at home, rather than take them to hospital, at time of first presentation.

Recommendation 12:
The review team recommends that whole system planning is carried out to design systems to reflect the need for, and timing of non-emergency patient journeys to and from hospitals.

Recommendation 13:
It is recommended that a regional flow improvement project is established, to ensure that patients requiring assessment for unscheduled care, who are referred by general practitioners or other professionals, can access hospital services as early as possible in the day.

Recommendation 14:
A set of principles should be agreed to guide the future design of urgent and emergency care in Northern Ireland. Systems should be designed to ensure that patients have access to the right care, in the right place, by those with right skills, the first time. When system changes are being introduced, patient views and perceptions of emergency care should be considered during the implementation process.

Recommendation 15:
It is recommended that arrangements between education and service providers are reviewed to ensure that there is effective coordination, when changes to educational programmes or service delivery are being planned.

Recommendation 16:
It is recommended that an assessment is carried out of the requirements for postgraduate training for specialist nurse training in unscheduled care to inform the planning of courses by educational providers.

5.4 Next Steps

Implementation arrangements

Several of the recommendations of this review, together with some of those made by the College of Emergency Medicine and the future Review of Discharge Arrangements fall clearly to particular organisations to take forward. Others will require joint work across organisations such as the establishment of a regional collaborative.

To ensure that actions are progressed quickly in advance of winter 2014, implementation arrangements will need to be clearly defined and agreed. The review team consider that establishing a regional task force would enable specific regional recommendations to be taken forward including:

- developing a set of principles to guide the future design of urgent and emergency care in Northern Ireland
- reviewing regional coordination and escalation arrangements for periods of exceptional demand
- ensuring patients requiring assessment for unscheduled care, can access hospital services as early as possible in the day.
- enhancing coordination between education and service providers

Recommendation 17:

The review team recommends that a regional task force is established to take forward specific regional projects to improve unscheduled care.

6. Glossary of Terms

Acute Internal Medicine: That part of general (internal) medicine concerned with the immediate and early specialist management of adult patients suffering from a wide range of medical conditions who present to, or from within, hospitals, requiring urgent or emergency care.

Algorithms: A step by step process for calculations used for data processing.

Cardiology: The medical specialty dealing with disorders of the heart.

Chronic condition: A health condition or disease that is persistent or otherwise long-lasting in its effects.

College of Emergency Medicine: An independent membership organisation which supports and represents emergency physicians, engages in their development and works to raise standards of patient care.

Critical Care: A branch of medicine concerned with life support for critically ill patients.

Department of Health, Social Services and Public Safety (DHSSPS) : The DHSSPS is one of 12 Northern Ireland Departments created in 1999 as part of the Northern Ireland Executive by the Northern Ireland Act 1998 and the Departments (Northern Ireland) Order 1999. It is the DDHSSPS's mission to improve the health and social well-being of the people of Northern Ireland. The DHSSPS has three main business responsibilities:

- **Health and Social Care (HSC)**, which includes policy and legislation for hospitals, family practitioner services and community health and personal social services;
- **Public Health**, which covers policy, legislation and administrative action to promote and protect the health and well-being of the population; and
- **Public Safety,** which covers policy and legislation for fire and rescue services.

Diagnosis: The identification of the nature and cause of anything.

Elective Care: Scheduled care which does not involve a medical emergency.

Emergency 999 Service: The official emergency UK telephone number for the caller to contact emergency services and for emergency assistance.

Emergency Admission: An admission that is unpredictable and at short notice because of clinical need.

Emergency Department (ED): Also known as accident and emergency (A&E), or casualty department, is a medical facility specialising in acute care for patients who present without prior appointment, either by their own means or by ambulance.

General Practitioner (GP): A medical practitioner who treats acute and chronic illnesses and provides preventative care and health education to patients.

Health Foundation: An independent charity working to improve the quality of healthcare in the UK. They carry out research and in-depth policy analysis, run improvement programmes to put ideas into practice in the NHS, support and develop leaders and share evidence to encourage wider change

Health and Social Care (HSC) Board: The HSC Board, established on 1 April 2009, faces a diverse and challenging role as it seeks to develop health and social care services across Northern Ireland. The role of the HSC Board is broadly contained in three functions:

- To arrange or commission a comprehensive range of modern and effective health and social services for the people who live in Northern Ireland;
- To work with the health and social care trusts that directly provide services to people to ensure that these meet their needs;
- To deploy and manage its annual funding from the Northern Ireland Executive to ensure that all services are safe and sustainable.

Health and Social Care (HSC) Trusts: In Northern Ireland there are six HSC trusts responsible for providing health and social care services to the Northern Ireland public. These services are provided locally and on a regional basis

Inpatient: A patient who is admitted to the hospital and stays overnight for an indeterminate time.

Laboratory Services: A facility that provides controlled conditions in which scientific research experiments and measurement may be performed.

Northern Ireland Medical Dental Training Agency (NIMDTA): Responsible for funding, managing and supporting postgraduate medical and dental education within the Northern Ireland Deanery. It provides a range of services for those engaged in the delivery of postgraduate medical and dental education and training.

Patient Flow: Describes the progressive movement of products, information and people through a sequence of processes. In healthcare, flow is the movement of patients, information or equipment between departments, staff groups or organisations as part of a patient's care pathway.

Pharmacist: Healthcare professionals who practice pharmacy, the field of health sciences focussing on the safe and effective medication use.

Physician: A professional who practices medicine.

Primary Care: The health care given by a health provider who typically acts as the principle point of consultation for patients within the healthcare system and coordinates other specialists that the patient may need.

Public Health: Helping people to stay healthy and protecting them from threats to their health.

Queens University School of Medicine: Provides undergraduate and postgraduate training in Medicine, Dentistry and a range of Biomedical Science subjects.

Queens University School of Nursing: Provides undergraduate, continuing professional development and postgraduate programmes. These programmes integrate theory and clinical practice.

Registrar: A new training grade used to train doctors up to the specialist level required to become a consultant.

Respiratory: The anatomical system that includes the lungs, airways and respiratory muscles.

Royal College of Nursing (RCN): An independent membership organisation which represents nurses and nursing, promotes excellence in practice and shapes health policies.

Royal College of Physicians (RCP): An independent membership organisation which supports and represents physicians and engages in physician development and raising standards in patient care.

Secondary Care: Healthcare services provided by medical specialists and other healthcare professionals who generally do not have first contact with patients.

Society for Acute Medicine: The national representative body for staff caring for medical patients in the acute hospital setting.

Triage: The process of determining the priority of patients' treatments based on the severity of their condition.

Trolley Wait: A term used for patients who cannot be admitted due to a lack of bed capacity.

University of Ulster School of **Nursing:** Provides undergraduate, postgraduate, short courses and credit bearing modules on campus and via distance learning.

Unplanned Care: Healthcare which cannot reasonably be foreseen or planned in advance.

Unscheduled Care: A term used to describe any unplanned health or social care.

Urgent Care: The delivery of ambulatory care in a facility dedicated to the delivery of medical care outside of the hospital emergency department.

7. Appendices

Appendix A: Recommendations from the Report of the College of Emergency Medicine: Emergency Care Services Review Visit to the Belfast Health and Social Care Trust

Appendix B: Report into the Major Incident 8 January 2014 (May 2014), Belfast Health and Social Care Trust

Appendix C: RQIA Analysis of the period before and after the declaration of a Major Incident by the Belfast Health and Social Care Trust, 8th January 2014

Appendix A: Recommendations from the Report of the College of Emergency Medicine: Emergency Care Services Review Visit to the Belfast Health and Social Care Trust

There are 10 recommendations for the Trust Executive and Board to consider. Each will require a separate stream of work to be developed with timelines and metrics of success that can be easily understood by an external visitor or more importantly any member of staff.

5.1 Leadership

A dedicated Urgent and Emergency Care directorate team comprising experienced Consultants in the major acute specialties (Emergency Medicine, Acute Internal Medicine, and Surgical specialties), senior nurses in the same relevant specialties and a senior manager with a track record for delivering successful change is recommended. Representation from general practice and the community social care teams would also be ideal.

The group must inspire confidence and provide clarity of a shared vision that all staff can clearly relate to. The chair of the directorate should report directly to the trust board.

5.2 System design

The reconfiguration of major services in Belfast for the long term has created short term distress in system performance. Major concerns that must be addressed are:

- The need for dedicated medical and surgical assessments areas for stable GP referrals that will bypass the ED.
- Adequate staffing of these areas especially out of hours (till 10pm and at weekends) by experienced decision makers
- Better bed management systems to cope with ‘surge’ in the system.
- Resilient escalation planning to share the burden of emergency care across the system.

5.3 Specialty engagement

There is a need to ensure that each of the major specialties is able to take responsibility for their cohorts of patients both in-hours and ability to create capacity out-of-hours.

At present the emergency care system seems to be too heavily ‘carried’ by Emergency Medicine and Acute Internal Medicine.

5.4 Safe and sustainable working practices for the EM Consultant body

There is clear evidence that the Consultants in Emergency Medicine in the UK and especially in Northern Ireland are working unsustainable job plans. International

evidence shows that failure to address concerns leads to ‘burnout’ and prolonged sickness rates amongst physicians if not properly managed.

The Trust should review national College guidance (to be published in September 2013) and discuss ways in which job planning and satisfaction in Emergency Medicine can be optimised to maintain well-being. Consultant staff levels should also be benchmarked against national standards to create both adequate breadth of clinical cover as well as depth (number of senior decision makers working together at busy times).

5.5 Trainee supervision

There is a clear need to improve the supervision and support of EM trainees working in Belfast. The situation seems to have deteriorated. Dedicated programmes to attract FASSGEM doctors should also be developed.

5.6 Core ED nursing levels

The Trust should seek the advice of the Faculty of Emergency Nursing at the RCN to ensure nursing levels and skill mix meets the needs of the two departments. A tool has been developed in the RCN to aid in this.

5.7 Resources for ENP and ANP development

There is a need to develop a resilient minor injuries and illness work stream that will broaden the workforce in the ED and better manage the 50% of cases in this category. Resources will be required to support training too. There should be adequate numbers of staff especially ENPs to cover busy periods.

5.8 Safety systems and communication

There is a need to significantly improve the safety culture in the EDs, to help improve reporting, address areas that need to be changed and then be able to regularly communicate this change to staff.

5.9 IT Systems

The Trust should find resource to actively engage the EM Consultants to help optimise the existing IT systems and develop a business plan for a system that is ‘fit for purpose’ for the long term.

5.10 Patient experience

The Trust should review its strategy for gathering patient experience data in the Emergency Department and find better ways in which to communicate success and areas for improvement to its staff.

Appendix B: Report into the Major Incident 8 January 2014 (May 2014), Belfast Health and Social Care Trust

Report into the Major Incident

8th January 2014

Glossary

Term	Meaning
AHP	Allied Health Professionals
AMU	Acute Medical Unit
BCH	Belfast City Hospital
BHSCT	Belfast Health & Social Care Trust
ED	Emergency Department
ESU	Emergency Surgical Unit
HDU	High Dependency Unit
HSCB	Health and Social Care Board
HSW	Health Support Worker
ICT	Incident Control Team
MI	Major Incident
MIH	Mater Infirmorum Hospital
MPH	Musgrave Park Hospital
NHSCT	Northern Health and Social Care Trust
NIAS	Northern Ireland Ambulance Service
RABIU	Regional Acquired Brain Injury Unit
RVH	Royal Victoria Hospital
SEHCT	South Eastern Health and Social Care Trust

1.0 Executive Summary, including key recommendations

The following report describes and reviews events which led up to the declaration of a Major Incident by BHSCT on the 8th January 2014. At the time the incident was declared, there were 98 patients in the ED of whom 41 were waiting on trolleys with no beds allocated. The incident was called based on the number of CAT 2* [50] patients in the Emergency Department, the length of time that these patients were waiting for clinical assessment, which was three hours and the lack of additional staffing in hospitals needed to enhance capacity. The Incident Control Team (ICT) successfully coordinated a response to the escalating pressures in the RVH ED and at 23:42 on Wednesday 8th January, the incident was stood down for the Trust.

Following the debrief for this incident, it was agreed that there is important learning to be derived from the experience particularly in terms of having appropriate systems in place and supporting communications for management of escalating pressures in Unscheduled Care and across all Trust services. In preparing this report we are conscious that a separate RQIA inspection has been completed and an RQIA review of Unscheduled Care is underway in the Trust. A Quality Improvement Plan has been completed as part of this review and progress against this plan continues to be monitored by RQIA.

These recommendations have been made in this context and should inform the wider project of reform.

RECOMMENDATION 1

- Decision makers should have access to real time data on patient flows and capacity to inform decision making and appropriate escalation.
- The Trust's escalation plan needs to be revised and updated to aid earlier decision making and reflect the actions required of all clinical and social care teams. It needs to be owned by these teams.

RECOMMENDATION 2

- The BHSCT should finalise and implement an Enhanced Capacity Plan taking account of the points made above. This plan should include arrangements for cross site transfers.

RECOMMENDATION 3

- The BHSCT should consider a separate communication cascade for the call out of key staff who can provide an appropriate response to the management of pressures and activation of an Enhanced Capacity Plan.

RECOMMENDATION 4

- The BHSCT should have a pre-identified on site co-ordinating centre to support the co-ordination of an Enhanced Capacity Plan.

Section 1

1.1 Introduction

The following report describes and reviews events which led up to the declaration of a Major Incident by BHSCT on the 8th January 2014. It also outlines the subsequent management of the major incident response on Wednesday 8th of January and transition to the recovery phase of this incident.

1.2 Methodology

This report was compiled following a debrief with key stakeholders a review of meeting records, collation of activity data and discussions with the following staff: Director on call, Co-Director for Unscheduled Care and Patient Flow and the Chief Executive. The final report was approved by BHSCT Executive Team

1.3 Purpose and scope

The purpose of this report is to review the circumstances leading up to the declaration of a major incident for the BHSCT on the 8th of January. The scope of this report as follows:

In Scope

- Review of actions taken to manage pressures across the BHSCT and wider system from Thursday 2nd January 2014.
- Review of the circumstances leading up to the decision to declare a major incident on Wednesday 8th January 2014.
- Management of the incident response.
- Transition to the recovery phase.
- Identification of key learning from this event.

Out of Scope

- Review of pressures across the wider health system for December 2013 and January 2014
- Review of Unscheduled Care operational procedures and decision making in response to pressures across the wider system.

- Review of additional contributing factors to pressures across the system. This is part of the wider review of the management of unscheduled care which is being completed by RQIA in conjunction with the BHSCT.

1.4 Background and summary of the incident.

At 21:26 on Wednesday 8th January 2014, a major incident was declared for the BHSCT, due to the pressure on unscheduled care services.

Historically, the first week after the Christmas holiday season is the most challenging time for Emergency Departments and Unscheduled Care for a number of reasons. These include an increase in the number of people attending primary and secondary care, pressures on social care after the holiday period, and seasonal increases in respiratory illness. The Trust had managerial and escalation arrangements in place to cover unscheduled care over the Christmas and New Year holiday period. Daily bed pressures meetings were held and a key area of concern was the increasing number of ED attendances, increased pressure on availability of beds in the system and the reduced number of discharges.

The major incident was declared on Wednesday 8th January, following an assessment by the Director on call and the Chief Executive of the escalating situation in the RVH Emergency Department that evening. At the time the incident was declared, there were 98 patients in the ED of whom 41 were trolley waits with no beds allocated. The incident was called because the number of CAT 2* [51] patients in the Emergency Department, the length of time that these patients were waiting for clinical assessment, which was three hours, and the advice received by directors regarding the difficulties service teams were having in sourcing additional staff to open beds and enhance capacity.

The purpose of activating the major incident plan was to utilise the major incident group paging system to call in key staff who have management responsibility for services, and who could coordinate a response across services and create additional capacity across the system. This process also allowed the Director on- call to convene the Incident Control Team (ICT) out of hours by dispatching a standard group message via the major incident paging system.

The Incident Control Team (ICT) coordinated an effective response to the escalating pressures in the RVH ED and at 23:42 on Wednesday 8th January, the incident was stood

[51] Manchester Triage System- CAT 2 Patients- Very Urgent- should be clinically assessed within 10 minutes following triage

down for the Trust. There was evidence of coordination and cooperation between the Incident Control Team and Emergency Department which was supported by the efforts of staff from a wide range of disciplines. However, there is important learning to be derived from the experience particularly in terms of having appropriate systems in place and supporting communications for management of escalating pressures in Unscheduled Care and across all Trust services.

Section 2

Chronology of events and contextual factors from the 24th December 2013-15th January 2014

The following is a chronology and supporting analysis of the activity and pressures within the BHSCT from the 24th December 2013- 15th January 2014 and is supported by statistics which are referenced under the following headings:

- Pressures on admissions
- Impact of diverts from other hospitals.
- Previous Major Incident
- Escalation measures
    - *Communication with other Trusts*
    - *Activation of divert on 8th January*
- Additional Information

Pressures on admissions

The ED attendance at RVH during the period averaged at 209 (see Table 1 below) which is in line with the previous year. However, it is notable that there was a significant increase in the conversion rate of attendances in comparison to the previous year. Note the conversion rate in table 1 which indicates an average conversion rate of (36%) during the period in comparison with the previous year (31%).

Table 3 shows the detail of daily conversion rates and it is noted that the conversion rate increased from 41% on the 8th to 44% on the 9th January. The conversion rate is only calculated after a patient has been admitted to an inpatient bed, therefore those patients still in the Emergency Department will not have been included as part of the conversion rate for the 8th January.

On the 8th January, it is noted that there was a significant increase in category 1 and category 2 patients attending the RVH ED in comparison with the previous 3 month period (see table 2). Table 2 also shows the average daily proportion by triage category for the 3 months to December and there is evidence from this that the 8th was a “heavy” day.

Table 1: Comparison between RVH and MIH Emergency Department 24.12.12 – 15.1.13 and 24.12.13 – 15.1.14

Average per day	RVH		MIH	
	24/12/12 – 15/1/13	24/12/13 - 15/1/14	24/12/12 – 15/1/13	24/12/13 - 15/1/14
Attendances	213	209	117	115
ED Admissions (inc to BCH)	65	73	26	25
Conversion Rate (%)	31%	36%	23%	22%
Ambulance Arrivals	72	74	27	27
Total Non-Elective Admissions	91	110	26	25
Deaths and Discharges	86	105	26	26

Table 2: Attendances in triage category – RVH 8th January 2014 (figures calculated from 12MN- 12MN)

Triage category Code	Numbers attending 8/1/14	Proportion in Category 8/1/14	Proportion in category Oct - Dec 13
1	6	3%	1%
2	52	23%	14%
3	114	50%	50%
4	52	23%	35%
5	2	0%	1%

Impact of diverts from other hospitals

On 3rd January, the Trust accepted diverts from the NHSCT and SEHCT. The impact of these diverts was not significant (see table 5).

Previous Major Incident

On 30th December 2013, a major incident was declared by NIAS in response to a stabbing incident. Six casualties were transferred to the RVH ED. This incident was managed and stood down in line with Trust major incident procedures.

Escalation measures

Recognising that the first week after the Christmas holiday season is the most challenging time for unscheduled care. The Trust had managerial and escalation arrangements in place to cover unscheduled care over the Christmas and New Year holiday period.

A key area of concern was the increasing number of ED attendances, increased pressure on availability of beds in the system and a perception that there were a reduced number of discharges. Additional beds were opened across the three acute hospital sites to respond to the surge in demand and facilitate the increased number of admissions.

Communication with other Trusts

The difficulties in repatriating patients to other Trusts contributed to increased pressures across the sites. Direct communications were maintained with the NHSCT and SEHSCT over the weekend 3rd / 4th January and into the following week. The focus of these communications was the repatriation or transfer of patients from the BHSCT acute hospital sites to relevant care areas in both Trusts.

Activation of divert on 8th January

On the night of the 8th January 2014, there was a requirement for a divert from the Trust. From approximately 18:30, the SEHCT accepted the divert, however, during this period ambulances continued to arrive.

Additional information

Workforce

During discussions at the debrief for the major incident, it was indicated that the standard on call arrangements are for the provision of emergency cover out of hours and do not respond to service pressures. This, linked with practical difficulties in delivering 7 day working reduce flexibility in responding to unscheduled demands.

Summary

In summary, there are some key points identified which should be considered when reviewing the declaration of the major incident on the 8th January:

- In comparison with the previous year, ED attendances during the period in question, were similar to the same period for the previous year. (Table 1).

- On the 8th January, there was an exceptionally high number of category 1 and category 2 patients (Table 2) and this was leading to patients waiting too long for assessment.

- There is an increase in the average conversion rate (36%) in comparison with the previous year (31%) for the period from 24th December to 15th January 2014 (table 1) and in particular the increase in conversion rates on the 8th and 9th January (table 3).

Table3: RVH- Daily Pressures across the system from 24th December 2013-15th January 2014

	Attendances	ED Admissions to RVH	ED Admissions to BCH	Total ED Admissions	Conversion Rate	ED Ambulance Arrivals	Elective Adms	NonElective Adms	Total Admissions	Deaths & Discharges	Delayed Complex Discharges
24/12/2013	157	78		78	50	75	10	95	105	181	2
25/12/2013	110	44	1	45	41	52	0	52	52	49	
26/12/2013	186	54		54	29	75	3	73	76	51	
27/12/2013	273	80	4	84	31	102	9	103	112	75	
28/12/2013	195	77	6	83	43	68	1	91	92	71	
29/12/2013	194	67	3	70	36	76	7	82	89	52	
30/12/2013	255	78	3	81	32	78	25	100	125	91	1
31/12/2013	198	70	5	75	38	70	8	91	99	143	2
01/01/2014	212	85	1	86	41	91	11	100	111	74	1
02/01/2014	241	75	4	79	33	80	38	96	134	120	1
03/01/2014	225	75	5	80	36	79	22	91	113	141	
04/01/2014	231	55	2	57	25	80	2	72	74	73	
05/01/2014	208	67	5	72	35	83	14	82	96	70	1
06/01/2014	255	74	7	81	32	82	40	96	136	120	
07/01/2014	240	65	7	72	30	78	44	98	142	138	1
08/01/2014	226	89	3	92	41	72	34	106	140	140	1
09/01/2014	176	69	9	78	44	63	32	91	123	154	4
10/01/2014	185	62	3	65	35	64	26	86	112	140	1
11/01/2014	176	54	2	56	32	63	4	78	82	88	1
12/01/2014	195	67	6	73	37	68	16	76	92	71	
13/01/2014	223	72	4	76	34	63	46	100	146	116	1
14/01/2014	223	69	2	71	32	69	32	96	128	132	2
15/01/2014	217	75	1	76	35	61	41	101	142	130	
average daily	**209**	**70**	**4**	**73**	**36**	**74**	**20**	**89**	**110**	**105**	**1**

Table 4: Mater- Daily Pressures across the system from 24th December 2013-15th January 2014

Arrival Date	Attendances	Ed Admissions to MIH	ED Admissions to BCH	Total ED Admissions	Conversion Rate	ED Ambulance Arrivals	Elective Adms	NonElective Adms	Total Admissions	Deaths & Discharges	Delayed Complex Discharges
24/12/2013	109	24		24	22	27	1	26	27	49	2
25/12/2013	41	9	4	13	32	12	0	10	10	12	
26/12/2013	83	20	1	21	25	32	0	20	20	4	
27/12/2013	136	33	3	36	26	28	2	33	35	30	2
28/12/2013	104	19	2	21	20	34	0	20	20	15	
29/12/2013	145	19	2	21	14	30	0	19	19	4	
30/12/2013	126	29		29	23	28	3	31	34	31	1
31/12/2013	124	25	1	26	21	35	2	28	30	46	2
01/01/2014	112	25		25	22	23	0	25	25	10	
02/01/2014	139	28	2	30	22	29	2	30	32	31	1
03/01/2014	142	30	3	33	23	34	0	32	32	29	
04/01/2014	103	5	9	14	14	21	0	6	6	12	1
05/01/2014	108	10	4	14	13	23	1	10	11	4	
06/01/2014	122	26		26	21	29	6	28	34	35	1
07/01/2014	132	24	1	25	19	26	8	25	33	30	
08/01/2014	125	32		32	26	32	6	35	41	40	
09/01/2014	129	25		25	19	31	1	32	33	31	1
10/01/2014	94	24	2	26	28	26	0	26	26	42	4
11/01/2014	97	21	2	23	24	24	0	21	21	16	1
12/01/2014	93	21	2	23	25	20	0	21	21	14	
13/01/2014	133	21	1	22	17	28	8	21	29	35	3
14/01/2014	140	32		32	23	32	7	34	41	37	2
15/01/2014	104	23		23	22	19	3	24	27	31	
average daily	**115**	**23**	**3**	**25**	**22**	**27**	**2**	**24**	**26**	**26**	**2**

Table 5 Table 5- NIAS report for diverts 24.12.13-15.01.14

Northern Ireland Ambulance Service Health and Social Care Trust

NORTHERN IRELAND AMBULANCE SERVICE

DIVERTS TO AND FROM BELFAST HOSPITALS 24th Dec 2013 to 15th Jan 2014

DIVERTS PUT IN PLACE FROM BELFAST HOSPITALS TO OTHER HOSPITALS 24th Dec 2013 to 15th Jan 2014

Divert Start	DivertEnd	LengthOf Divert (HH:MM:SS)	Day of Divert	Month/Year of Divert	Diverted From	Diverted To	Date and Time Divert Created	Reason for Divert	Escalated By (Trust)	Grade of Staff Put on Divert
27/12/2013 23:47	28/12/2013 02:52	3:05:00	Fri	Dec-13	Royal Victoria	Mater Hospital	27/12/2013 23:47	Full 999 Divert	Same Trust	Director
30/12/2013 17:02	30/12/2013 18:00	0:58:00	Mon	Dec-13	Royal Victoria	Mater Hospital	30/12/2013 17:02	Medical and Surgical Divert	Same Trust	NIAS
30/12/2013 17:02	30/12/2013 18:00	0:58:00	Mon	Dec-13	Royal Victoria	Ulster Hospital	30/12/2013 17:04	Medical and Surgical Divert	Different Trust	NIAS
04/01/2014 12:35	04/01/2014 20:00	7:25:00	Sat	Jan-14	Mater Hospital	Royal Victoria	04/01/2014 12:35	Full 999 Divert	Same Trust	Director
08/01/2014 18:42	08/01/2014 23:44	5:02:00	Wed	Jan-14	Royal Victoria	Ulster Hospital	08/01/2014 18:42	Medical and Surgical Divert	Different Trust	Director
08/01/2014 19:03	08/01/2014 23:43	4:40:00	Wed	Jan-14	Royal Victoria	Ulster Hospital	08/01/2014 19:03	Full 999 Divert	Full 999 Divert	Director

DIVERTS PUT IN PLACE TO BELFAST HOSPITALS FROM OTHER HOSPITALS 24th Dec 2013 to 15th Jan 2014

Divert Start	DivertEnd	LengthOf Divert (HH:MM:SS)	Day of Divert	Month/Year of Divert	Diverted From	Diverted To	Date and Time Divert Created	Reason for Divert	Escalated By (Trust)	Grade of Staff Put on Divert
03/01/2014 11:50	03/01/2014 14:03	2:13:00	Fri	Jan-14	Antrim Area	Royal Victoria	03/01/2014 11:50	Medical and Surgical Divert	Different Trust	Director
03/01/2014 16:14	03/01/2014 18:05	1:51:00	Fri	Jan-14	Ulster Hospital	Royal Victoria	03/01/2014 16:14	Medical and Surgical Divert	Same Trust	NIAS
03/01/2014 16:15	03/01/2014 18:04	1:49:00	Fri	Jan-14	Ulster Hospital	Mater Hospital	03/01/2014 16:15	Medical and Surgical Divert	Same Trust	NIAS
09/01/2014 16:39	09/01/2014 18:27	1:48:00	Thurs	Jan-14	Ulster Hospital	Royal Victoria	09/01/2014 16:39	Medical and Surgical Divert	Different Trust	Director
09/01/2014 18:49	09/01/2014 23:56	5:07:00	Thurs	Jan-14	Ulster Hospital	Royal Victoria	09/01/2014 18:49	Medical and Surgical Divert	Different Trust	Director

Produced by NIAS Information Department
Knockbracken Healthcare Park, Saintfield Road, Belfast, BT8 8SG.
Tel: 028 9040 0710 - Fax: 028 9040 0908 - Email: statistics@nias.hscni.net

Section 3 The Major Incident Activation / Response

The following is an overview of the decision to declare a major incident for the BHSCT in response to increased pressures across the Trust and the response to the incident.

3.1 Activation of the Major Incident Plan on Thursday 8th January 2014

At **8am** on the 8th January 2014, all sites (RVH, BCH and Mater) were on 'RED'.
The situation was monitored on an on-going basis and two bed pressures meetings were held (**12:30** and **16:00**) to review and manage pressures across the three hospital sites (see appendix 1).

Key Actions:
- Opening of extra beds (RVH Recovery -22; MPH 12 and additional beds were identified in BCH).
- All electives cancelled, with the exception of those cases discussed at scheduled bed meetings that were identified as truly urgent electives.

Despite further increasing bed capacity, demand exceeded the capacity available. On the evening of the 8th January 2014, the situation in the RVH ED which led to a declaration of a Major incident was as follows: **(Time: 19:48)**

- 98 patients in the department.
- 41 patients on trollies waiting on clinical assessment
- 34 patients waiting on clinical assessment
- 52 CAT2 patients waiting 3 hours to be clinically assessed
- 5 hour waiting time for Emergency Department attendances
- Divert from RVH to SEHCT in place (however, during this period ambulances continued to arrive).

The Co-Director for Unscheduled Care contacted the Director on call and explained how busy the ED was, the concern being expressed by those working in the department, in particular the Consultant in Charge. The Co-Director also advised of his own concern. He advised that it was everyone's view that given the circumstances that this was a Major Incident. The Director on call and Director for Unscheduled Care then made their way to the ED.

The following is a synopsis of the key issues identified following a walk- through of the ED by the Director on call and the Director for Unscheduled Care at 20:30;

- Department extremely busy, many patients waiting on trolleys, difficult to simply walk through ED, no room for staff to attend to patients
- No room in resus, (2 CAT 1 patients in Resus and 5 CAT 2 patients went through resus between 20:00 and 23:59)
- Discussions with key colleagues and the ED Consultant in Charge. Latest SITREP obtained and review of actions already taken and actions proposed which had not yet taken effect.
- 20:48- Divert from RVH to Ulster Hospital extended to 00:00 hours.

Key Issues:

- Over 100 patients were in the ED with 41 waiting on trolleys for admission to a hospital bed.
- Requirement to create additional bed capacity and identify additional staff and beds
- Required input from other medical teams.
- Concerns regarding the potential for patients to come to harm given the large numbers and the inability to assess patients appropriately and in a timely way.

Discussions followed around the potential to call people and ask them to respond. The prevailing view from those present was that in order to ensure a sufficiently timely response a major incident should be declared.

All those present indicated that while the Department was often very busy, none had ever seen it with this number of people and especially with the number of people on trolleys. There was particular concern in respect of how long Category 2 patients were waiting for clinical assessment.

Following on-going review of the situation and discussions with the Chief Executive of the BHSCT, at **21:26** a major incident was declared for the BHSCT.

The purpose of activating the major incident plan was to alleviate pressure in the system and create capacity for patients in the ED.

3.2 Immediate actions taken

- Incident Control Team (ICT) convened.
- Medical specialisms called in to assess patients.
- Senior Managers with site management responsibility contacted via major incident communications system.
- Staff callouts initiated- 9 Medical staff responded to the ED staff callout and a number of ED nursing staff stayed on after their shift had finished.

Prior to activating the major incident pagers in adherence to Trust major incident protocols, the Director on call contacted those on the group call out who were not required to respond. These people were provided with a full explanation as to the rationale behind the decision and were advised that on this occasion they were not required to respond. Staff who were required to respond were those who had management responsibility for a service, had the authority to implement decisions as directed by the ICT and who could establish and manage an enhanced capacity area as part of the required response.

Enhanced Capacity Care areas opened- 5 patients moved to theatre recovery. Additional beds in Fracture Clinic opened.
NIAS offered two options for assistance- (A) Activate and set up the 50 bedded temporary ward outside the RVH ED (B) Transport patients to other hospital where capacity is available. Both of these options were considered by the ICT. Given the criticality of patients in the ED, a decision was made to assess patients for transfer to RVH recovery and MPH to create capacity for new admissions.

3.3 Timeline and actions

Emergency Department Situation Report				
	19:48	**22:05**	**23:05**	**23:32**
Number of patients in ED	98	70	56	50
Number of patients on trolleys	41	36	23	20
Number of patients waiting on Clinical Assessment	34	43	18	8
Waiting Time (hours)	5 hours	8 hours	4.5 hours	4.5 hours

Enhanced Capacity actions/ status	N/A	12 beds created in MPH 15 patients transferred to RVH Theatre recovery. 10 transferred to BCH	**RVH bed capacity**: 14 medical beds 9 speciality beds 3 spinal beds **MPH**- 12 beds available	4 patients transferred from RVH to MPH. Additional 3 patients identified for transfer. 11 patients were cared for in RVH Theatre Recovery 2 patients were transferred to BCH. 1 patient was in RVH Fracture Clinic 6 beds were available in RVH 4C 28 beds are available to accept patient admissions. 2 patients identified for transfer to MPH
Additional Information	N/A	PCSS co-ordinated the provision of catering for patients and staff. Corporate Communications coordinated the media response. Spokesperson nominated for 'Good Morning Ulster' at 07:30 as requested.	2 patients to go to ED Resus. One Resus space available at this time.	**NIAS update** A number of patient transfers were waiting in the Mater and Lagan Valley. Rapid Response had 2 patients awaiting transfer.

Stand Down

At 23:45 a decision to Stand Down the major incident was taken. The Ambulance Divert for the RVH was also stood down at this time.

Hot Debrief / Staff acknowledgement

A ‘Hot Debrief’ was run to identify any outstanding issues and the key issues to be taken forward at the planned debrief. The contribution made by staff was acknowledged and appreciation extended.

Section 4 Areas of key learning from a BHSCT perspective with recommendations for improvement

4.1 What went well during the Major Incident:

- The call in of clinical staff from specialist teams
- Efficient assessment and triage of Category 2 patients into medical specialities;
- Opening of additional capacity areas; Theatre Recovery and Fracture Clinic with benefit of transfer of patients out of ED
- Access to additional clinical staff
- Welfare needs of patients and staff were met.
- Management of the incident by the ICT
- Co-ordination of patient transfers with NIAS

4.2 What did not go well during the major incident:

- Pre identification of enhanced capacity care areas.
- The availability of real-time data and predictive analysis information for senior management.
- Varied response of clinical teams
- Arrival of ambulances during “Divert” period

4.3 Areas of key learning and recommendations in relation to the BHSCT response.

Following the incident, staff involved considered lessons learned for the BHSCT. The following are key areas of learning that were recognised and recommendations on how the identified gaps may be addressed.

AREA OF KEY LEARNING 1. Planning for management of increased pressures

The BHSCT Escalation Plan (2013) provides guidance to staff regarding specific actions to be taken at the various escalation phases as outlined in this document. Experience to date has demonstrated that sites are continuously in ‘RED. The existing plan not stimulate a response across all directorate and teams, as pressures increase. In the absence of such a graduated response one of the few processes which can be put in place to “step up a gear” when managing persisting pressures and address the levels of increasing risk due to increased numbers of patients in the system is the Trust Major Incident Plan. Operational and senior management staff do not have access to timely patient flow information to aid

early decision making. This when combined with the late availability of beds (due to discharge of patients later in the day) means that the response to increasing pressure is delayed, and consequently reduces managerial options. It also makes the effective communication of revised service priorities (including cancellation of elective patients) more difficult.

As demonstrated on this occasion, the Major Incident Plan responding is not designed for a response to pressures across the system for the following reasons;

- Health "incidents" can be from a very wide range of events and the Trust Major Incident and Mass Casualty plan has been structured in line with National and Regional Guidance to provide a response to the following ;
    - Acute, no-notice events
    - Mass casualty events which have the potential overwhelm the closest hospital(s)
    - Hazardous materials response
    - Prolonged health threats
    - Infectious disease outbreaks
    - Weather events
    - Infrastructure failures

- Criteria for activation of the BHSCT Major Incident and Mass Casualty Plan do not reflect triggers for management of escalating pressures across the system.
- The major incident group call out system reflects the skill set required to respond to a major incident as outlined above.

RECOMMENDATION 1

- Decision makers should have access to real time data on patient flows and capacity to inform decision making and appropriate escalation.
- The Trust's escalation plan needs to be revised and updated to aid earlier decision making and reflect the actions required of all clinical and social care teams. It needs to be owned by these teams.

AREA OF KEY LEARNING 2. Identification of Enhanced Capacity Care Areas

As outlined in the report, patient flow were managed, patient transfers were planned and enhanced capacity care areas were opened in response to the pressures. A key area to be considered as part of future planning is the importance of allocating patients to the right facility which has the supporting ward infrastructure and staff skills to meet their clinical and nursing care requirements. On this occasion, RVH Theatre Recovery was in a position to provide staff and beds for patients, but this was a short term out of hour's arrangement. During working hours, this facility would not have been available as theatre lists were running. Recovery does not meet the requirements for the care of patients who are not immediate post-operative.

The care of acutely ill patients outlying from their specialty ward is an area of concern during times of increased pressures. Patients, who are transferred or admitted to ward facilities as part of the response, should be allocated to a ward that meets their clinical requirements, has appropriate medical cover and nursing staff with the skills to manage patient needs.

RECOMMENDATION 2

The BHSCT should finalise and implement an Enhanced Capacity Plan taking account of the points made above. This plan should include arrangements for cross site transfers.

AREA OF KEY LEARNING 3. The Incident Response

As outlined in the report, a decision to call a major incident was made for the following reasons;

- To alleviate pressure in the system and create additional capacity
- To utilise the major incident communication system to call in nursing staff and other members of clinical teams who had responsibility for co-ordination of services.

On review of activation of the major incident communication system, it was highlighted that a number of areas did not adhere to their major incident action cards and varied from agreed processes. For example, some areas did not respond to the incident as they normally would, therefore additional staff were not called in across a number of services. A contributing factor to this was the message which was dispatched on the communications system. The message indicated that the incident had been declared due to the excessive number of

patients awaiting admission in the ED. Those who would normally respond to major incidents interpreted this message as an ED/ Patient Flow issue and did not interpret the situation as an incident where they would have a responding role. This contributed to a breakdown in communications between services, departments and sites. Declaration of a Major Incident requires all staff to respond in line with their action cards, process and procedures as outlined in the BHSCT Major Incident and Mass Casualty plans. Potential Major Incidents and Declared Major Incident messages are not open to individual interpretation and staff are required to respond as outlined in Trust plans and fulfil their roles as outlined in the action cards

Procedures for management and activation of the Control Room and Emergency Operations Centre as outlined in the Trust Major Incident and Mass Casualty plan are for management of a site specific or Trust wide major incident response which may have implications for the wider health community. These procedures are in adherence to regional guidance for major incident management. As the focus of the incident response was the management of pressures in the ED, the ICT was located the ED seminar room. This meant that the ICT could communicate directly with the ED and oversee the management of the response and co-ordinate communications with responding areas on site. On discussion it was agreed that a co-ordinating room close to the ED would be helpful in the management of similar incidents.

RECOMMENDATION 3

- The BHSCT should consider a separate communication cascade for the call out of key staff who can provide an appropriate response to the management of pressures and activation of an Enhanced Capacity Plan.

RECOMMENDATION 4

- The BHSCT should have a pre-identified on site co-ordinating centre to support the co-ordination of an Enhanced Capacity Plan.

AREA OF KEY LEARNING 4. Out of hours working

Currently out of hours working is through on call arrangements for senior clinical staff. These arrangements are intended to provide support and supervision to trainee or junior staff and to provide urgent or emergency care to individual patients. On call is not ordinarily intended to provide clinical capacity for dealing with service pressures out of hours, except in

situations such as a major incident. This gap is part of a wider consideration of extended working hours, 7 days per week. This incident has learning for work force planning and working arrangements across the region. This situation contrasts with the on call arrangements for managerial staff who are available to respond to service pressures, but whose response may be limited by the availability of clinical staff.

Appendix C: Analysis of the period before and after the declaration of a major incident by the Belfast Health and Social Care Trust, 8th January 2014

Analysis of the period before and after the declaration of a major incident by the Belfast Health and Social Care Trust, 8th January 2014

Report prepared by Dr Sinéad McGuinness and Dr David Stewart to inform the work of the RQIA Review Team

Analysis of the period before and after the declaration of a major incident by the Belfast Health and Social Care Trust 8th January 2014

Introduction

On the evening of 8th January 2014, the Belfast Health and Social Care Trust declared a major incident at the Royal Victoria Hospital (RVH), due to high pressure in its unscheduled care services. This was against a background of a high number of Emergency Department (ED) attendances in the hospital, and a high number of hospital admissions in the previous two days.

On the evening of 8th January, there were a large number of patients in the Emergency Department, including many Category 2 patients[52] who were waiting three hours for clinical assessment. There were pressures on bed availability for patients who required admission to wards from the ED, and service teams outside of the ED expressed difficulties in sourcing additional staff to open beds and enhance capacity in the hospital.

The trust declared a major incident at 21:26. The aim was to alleviate pressure in the system and to create capacity for patients in the ED. Activation of the major incident plan allowed the trust to utilise its major incident group paging system, to convene an Incident Control Team and to call in key staff, who could coordinate a response across services in the trust.

As a result of the major incident being declared, staff call outs of medical and nursing staff were initiated and senior managers with site management responsibility were contacted.

The actions of these individuals resulted in additional capacity being identified in the Royal Victoria Hospital, Musgrave Park Hospital (MPH) and Belfast City Hospital (BCH), with patient transfers from ED to RVH wards and other areas within the hospital, including the theatre recovery area and the fracture clinic, and to MPH and BCH. The number of patients in the RVH ED decreased, including both the number waiting for assessment and the number on trolleys awaiting inpatient beds. The Incident Control Team stood down the major incident at 23:42pm.

The Belfast Trust has produced a document, 'Report into the major incident, 8th January 2014' (Appendix B) which outlines the background to the incident, reasons for activation of the major incident plan and the responses resulting from this. However, it is important to set the events of the 8th January in the regional context. This document provides a review of the pressures across the wider healthcare system in Northern Ireland for the weeks before and one week after the major incident, from 24th December 2013 to 15th January 2014.

[52] Manchester Triage System – Cat 2 'Very Urgent' patients should be clinically assessed within 10 minutes following triage

Background

Health System in Northern Ireland

Northern Ireland has an integrated system of health and social care, Health and Social Care Northern Ireland (HSCNI), which is free at the point of delivery.
The Department of Health, Social Services and Public Safety has overall authority for health and social care. This is one of eleven departments in the Northern Ireland Assembly and is led by the Minister, for Health, Social Services and Public Safety, currently Edwin Poots.

Services are commissioned by the Health and Social Care Board (HSCB). HSCB is responsible for managing resources and for performance improvement. This organisation also manages the contracts for Family Health Services provided by general practitioners, dentists, opticians and community pharmacists.

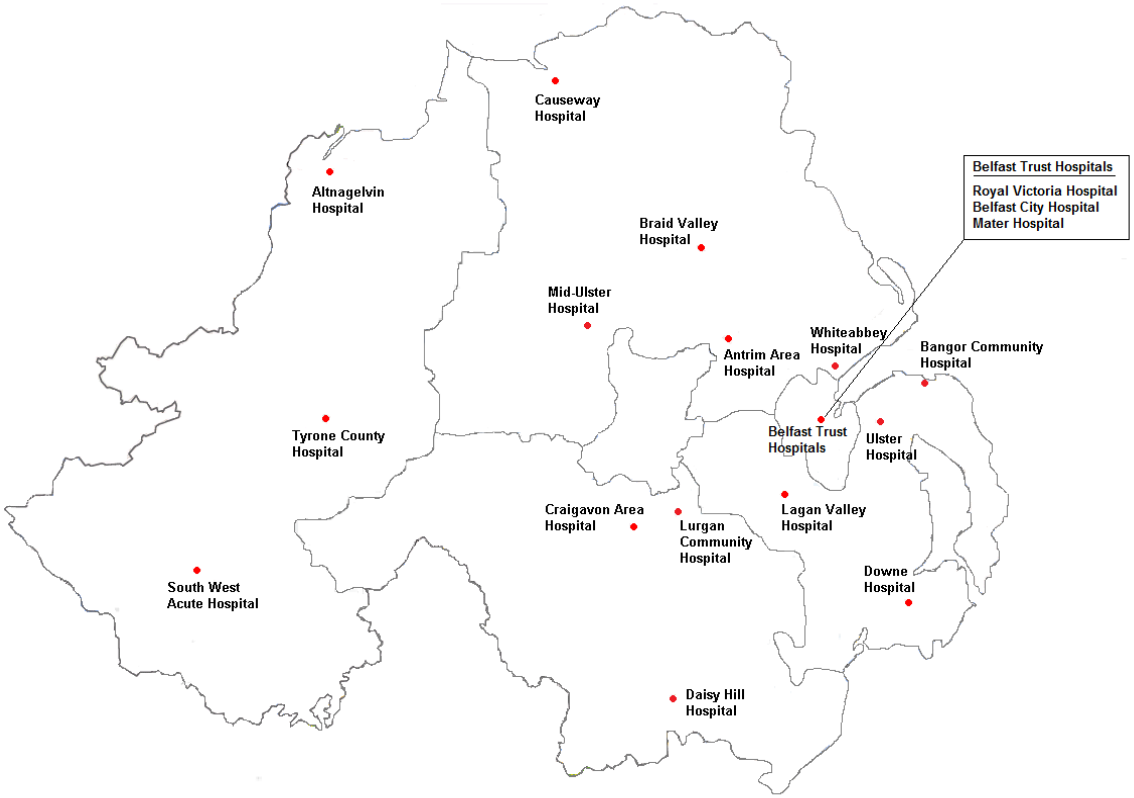
Services commissioned by the HSCB are provided by five Health and Social Care Trusts: Belfast, Northern, Southern, South Eastern and Western. Ambulance services are provided by the Northern Ireland Ambulance Service (NIAS), a separate trust. Each trust controls its own budget and manages its own staff and services.

Hospitals

Each Health and Social Care Trust contains a number of hospitals which provide services primarily for those living in the trust area. The Belfast Trust hospitals are also responsible for most of the provision of tertiary-level regional services for Northern Ireland.

Figure 1 is a map of Northern Ireland outlining the hospitals in each trust area. Within the Belfast Trust, there are three main hospitals that provide unscheduled care to the adult population – the Royal Victoria Hospital (RVH), Belfast City Hospital (BCH) and Mater Infirmorum Hospital (MIH). RVH is the largest hospital in Northern Ireland, providing local services, including unscheduled care, to the Belfast population and regional specialist services including cardiac surgery, critical care and the Regional Trauma Centre.

Figure 1: Map of hospitals in Northern Ireland



Plans and Procedures For Escalation

Escalation Plans

Each trust has an escalation plan in place to guide its responses to pressures on both unscheduled and planned care. These plans would be triggered by increases in pressures across the service, which would be identified, for example, at scheduled or additional patient flow meetings within hospitals, or by assessment of ED activity levels, face to face in the ED itself or via computer notifications to senior staff.

Actions identified in escalation plans may include that hospitals should hold meetings to facilitate more rapid patient discharges, or should attempt to increase bed availability in wards, perhaps by staffing extra beds with bank or agency staff.

Winter Pressures

It is well recognised that in winter months the HSC services may expect increased pressure on unscheduled care services. This has been linked with an increase in numbers of patients requiring admission, for example for respiratory problems.

Changes in the way services operate over the Christmas and New Year period have also been considered to be contributory factors.[53] [54] [55] [56]

To facilitate the continued functioning of services safely and effectively over the winter, the Health and Social Care Board invited trusts to each submit an Investment Proposal Template (IPT) outlining their plans to address some of these winter pressures.

For 2013-14 the approach to addressing winter pressures differed in each trust. For example, the Northern Trust proposal outlined a range of activities including the opening of a short stay elderly care unit on the Antrim Area Hospital site and the provision of additional endoscopy sessions while the Southern Trust plan focussed on the opening of an additional 18 bedded winter pressure ward in Craigavon Hospital.

Major Incidents

The Department of Health, Social Services and Public Safety Emergency Response Plan defines a major incident as an 'event or situation requiring a response under one or more of the emergency services' major incident plans.' It states that a 'Local Emergency' or 'Major Incident' will usually be confined to a relatively small area or number of people, with coordination of response and recovery facilitated by a local organisation, for example a Health and Social Care Trust.[57]

Within the health service, examples of a major incident may be where a large number of people are transferred to hospital at once, such as during a mass casualty incident, or an outbreak of a communicable disease. In December 2013, for example, NIAS declared a major incident in response to a stabbing incident and again in February 2014 after a concert where many young people became unwell within a short period of time as a result of ingesting alcohol and drugs.

Trusts each have major incident plans to guide their declaration of and response to major incidents.

[53] Fullerton K.J. Crawford V.L.S: The Winter Bed Crisis - quantifying seasonal effects on hospital bed usage. QJM (1999) 92 (4): 199-206.
[54] Afza M. Bridgman S: Winter emergency pressures for the NHS: contribution of respiratory disease, experience in North Staffordshire district: Journal of Public Health Medicine (2001) Vol. 23 No. 4 pp. 312-313
[55] Kause J. Fielding R. Arnell-Cullen V. Sandeman D: Easing Winter Pressures: Health Service Journal (25 October 2012)
[56] Vasilakis C. El-Darzi E: A simulation study of the winter bed crisis: Health Care Manag Sci. 2001 Feb; 4(1):31-6.
[57] Department of Health, Social Services and Public Safety. DHSSPS Emergency Response Plan (DHSSPS ERP), 23 February 2014. Available online at: http://www.dhsspsni.gov.uk/microsoft_word_-_dhssps_emergency_response_plan_v2_2_-_internet_-_28feb2012.pdf.

Chronology of Hospital Activity, 24th December 2013 – 15th January 2014

This chronology provides an overview of pressures experienced across trusts in Northern Ireland on the day of the major incident declared by the Belfast Trust on 8th January 2014 and on the weeks surrounding this date. Information is provided firstly for the region as a whole and then by individual trust.

Data Sources

Information on activity in each hospital in Northern Ireland, including the numbers of ED attendances, hospital admissions and discharges, hospital diverts and the numbers of 12 hour breaches was provided by the Health and Social Care Board. This information may differ slightly to the data recorded in trusts' own information systems, as the times at which events occur may be defined differently across different systems. For example, HSCB defines a 12 hour breach by the time the patient left the Emergency Department, while trusts may record this at a different time in the patient journey.

Information provided on ED attendances includes both paediatric and adult attendances, to indicate the full extent of pressures on each ED. Information provided on admissions and discharges is for adult patients only, as paediatric care is beyond the scope of the Unscheduled Care Review.

As part of the RQIA review process, each hospital with an ED was asked to complete a questionnaire outlining its arrangements for unscheduled care. The aim was to provide background information on the systems and processes in place for management of unscheduled care, initiatives and recent reports on unscheduled care in each hospital and pressures experienced by trusts in the period from 24th December 2013 to 15th January 2014. Information from these questionnaires and information from the Belfast Trust report of the major incident (Appendix B) were used to supplement the data provided by HSCB.

Northern Ireland

Figures 2, 3 and 4 show Emergency Department attendances, adult hospital admissions and adult discharges respectively for all hospitals in Northern Ireland in the period 24th December 2013 to 15th January 2014.

Figure 2: ED attendances in Northern Ireland, 24th December 2013 – 15th January 2014 *Data source: HSCB*

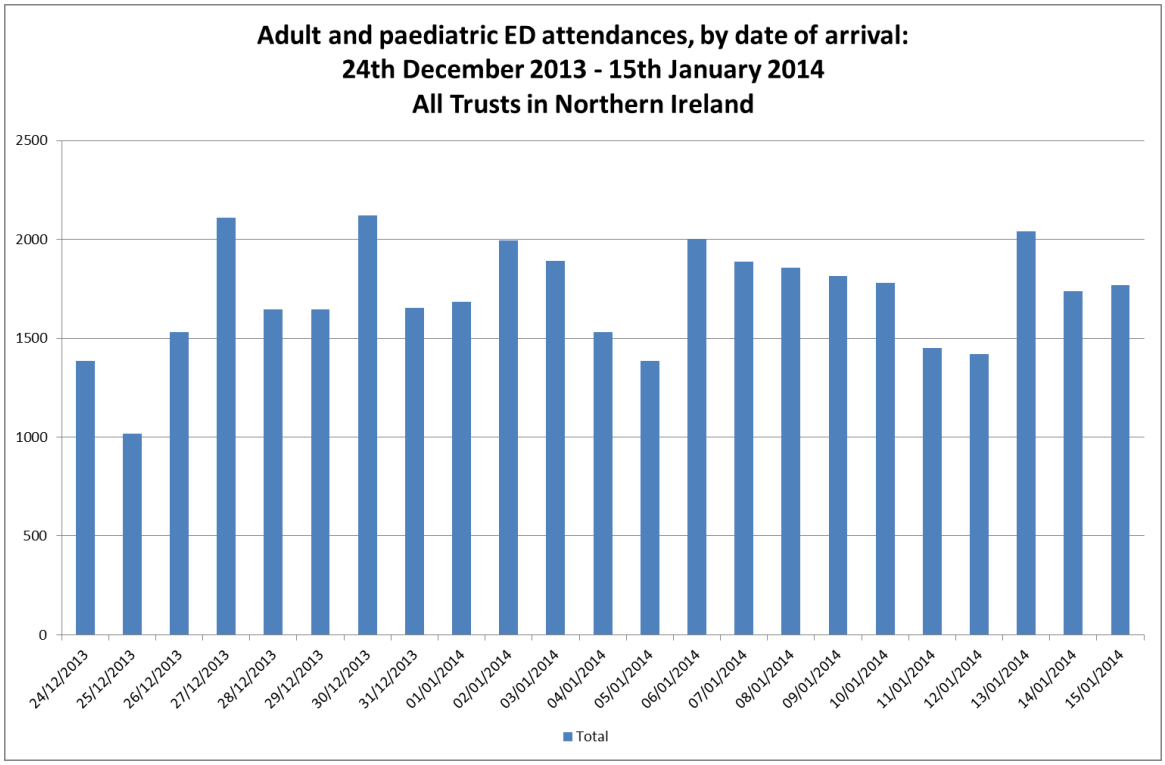


Figure 3: Hospital admissions in Northern Ireland, 24th December 2013 – 15th January 2014 *Data source: HSCB*

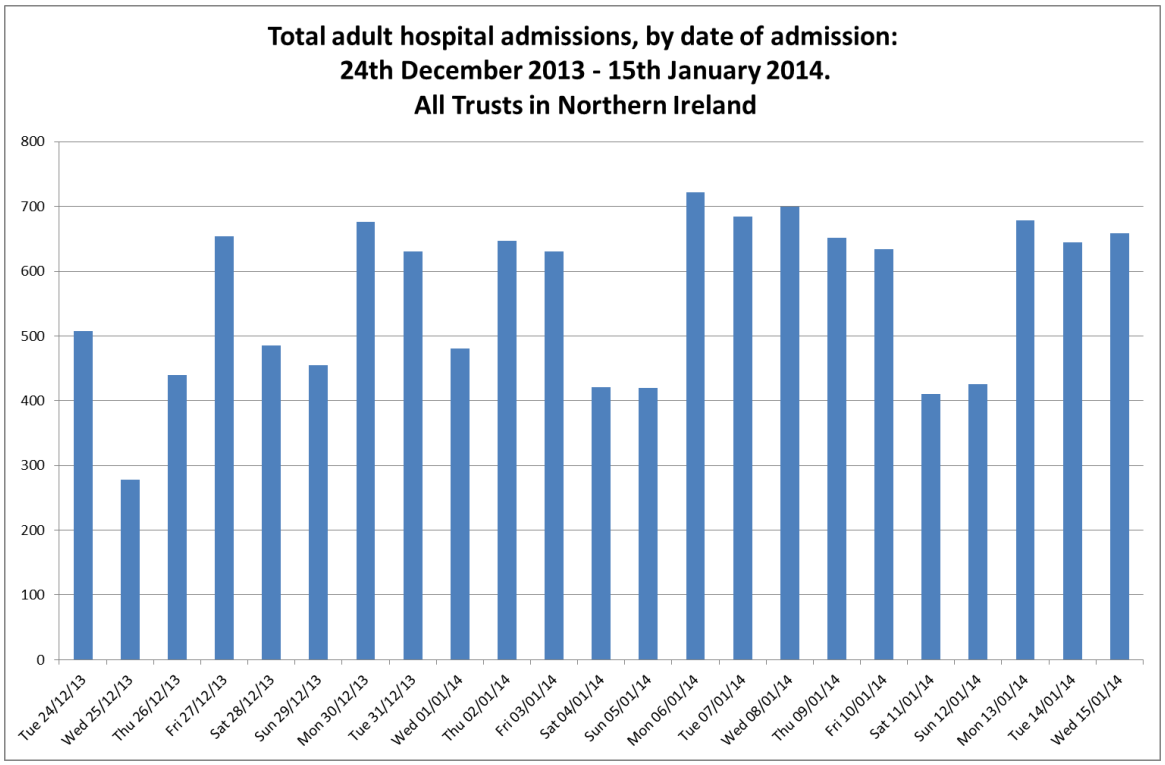
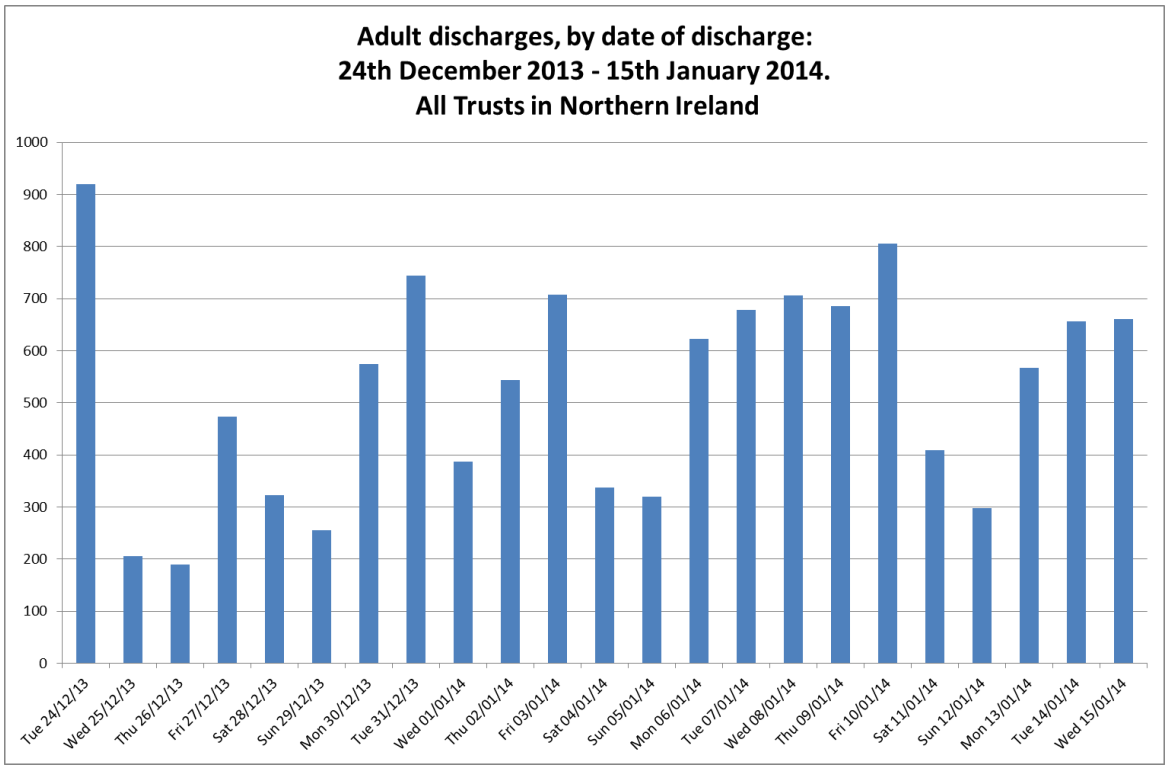


Figure 4: Discharges in Northern Ireland, 24th December 2013 – 15th January 2014.
Data source: HSCB



As may be expected, for the period from 24th December 2013 to 15th January 2014, Christmas Day was the date with the lowest number of ED attendances and the lowest number of adult hospital admissions. Christmas Eve was the date with the highest number of discharges.

Following the Christmas public holidays there was an increase in ED attendances and total admissions on Friday 27th January and again on Monday 30th January, reflecting the first days that people may have returned to their normal activities following the Christmas period. There were 473 admissions specifically from EDs on 27th December, the highest number for any day in the period under review.

There were fewer ED attendances and fewer total admissions on the public holidays (Christmas Day, Boxing Day, and New Year's Day) and on the weekends than on the working days in the period under review (ED attendances were also low on New Year's Eve). The number of discharges also dropped on public holidays and at weekends, most noticeably on Christmas Day, where there were only 206 discharges across Northern Ireland, and on Boxing Day, where there were 190. There were four peaks in discharges in the period: on the days before the public holidays, 24th December (920 discharges) and 31st December (744 discharges) and on two of the Fridays in the period, 3rd January (708 discharges) and 10th January (806 discharges).

There was less variation in the number of ED attendances in the week beginning Monday 6th January than there had been in the previous weeks which had contained public holidays. Attendances were highest on Monday 6th. Admissions ranged from 634 to 722 per day in the weekdays of this week.

There were 722 total admissions on Monday 6th January, the highest number of admissions in the time period. A large proportion of these (29%) were elective admissions. Daily admissions from ED in the week of Monday 6th January were lower than observed on many days in the previous week.

The number of daily discharges from Monday to Friday 6th - 10th January ranged from 623 to 806. These were larger numbers than observed on many days of the previous weeks.

On 8th January itself there were no obvious increases in pressures across Northern Ireland as a whole. Overall there were fewer ED attendances than there had been in the previous two days. The number of total admissions was the second highest for the period under review and there were many discharges.

The weekend after the major incident had a low number of ED attendances across Northern Ireland and a low number of total admissions. The number of discharges dropped following a peak on Friday 10th January. On Monday 13th January, the number of ED attendances increased again, as with every Monday in the period under review, falling again on the Tuesday and Wednesday. This pattern was also apparent with the number of admissions, but the Monday peak less evident than in the previous week. Again, many of the admissions on Monday 13th were elective .

The number of discharges increased after the weekend of 11th and 12th January, but did not meet the levels observed on many days in the previous week.

Belfast Trust

The separate document prepared by the Belfast Trust, 'Report into the major incident, 8th January 2014' (Appendix B), outlines the actions taken by the Belfast Trust over the time period from 24th December to 15th January, specifically in relation to the major incident on 8th January. The chronology below is intended to supplement the more detailed analysis provided in the Belfast Trust report.

Patients admitted to RVH or to MIH but subsequently transferred to a bed in BCH , as per Belfast Trust arrangements for unscheduled care in some specialties, are not classified, in HSCB data, as discharged from the first hospital. Therefore, the number of discharges from RVH or MIH provided on any date may be an underestimation of the true number of patients who left the hospital on that date.

Royal Victoria Hospital

The number of discharges on Christmas Eve was the highest number for RVH in the period from 24th December to 15th January. Christmas Day had low numbers of ED attendances, admissions (both the lowest numbers in the entire period) and discharges. While discharges remained low on Boxing Day, admissions and ED attendances began to rise again, with very high numbers of ED attendances on 27th December and increases in both admissions and discharges. A full 999 divert to MIH was put in place, from 23:47 on 28th to 2:52am on December 28th. 16 patients were transferred from RVH to wards in BCH on 28th December, the second highest number for the period under review.

Over the weekend 28th-29th December, the number of ED attendances fell, although not to the level observed on Christmas Day. There were two 12 hour breaches on the Sunday.

On Monday 30th December there was an increase in ED attendances and hospital admissions. There were twenty-five 12 hour breaches in the ED. Northern Ireland Ambulance Service (NIAS) declared a major incident due to a stabbing and six casualties were transferred to RVH ED. Medical and surgical diverts were put in place with both MIH and the Ulster Hospital (both lasting from 17:02 – 18:00).

There was another large number of discharges on 31st December and fewer admissions and ED attendances than on the previous day. However, two 12 hour breaches were recorded. 1st January had a greater number of ED attendances with 105 admissions overall, 85 from the ED. Apart from the date of the major incident, 8th January, this was the date with the highest number of admissions via ED in the period under review.

Admissions increased to 132 on Thursday 2nd January with 38 of these elective admissions. There were more discharges than there had been on New Year's Day. 19 patients were transferred to BCH wards from RVH. However, the number leaving RVH was not enough to match the number of admissions. Discharges were higher on Friday 3rd, with 16 patients also transferred to BCH. RVH ED accepted two diverts from other hospitals – a medical and surgical divert from Antrim Hospital, from 11:50 to 14:03 and a medical and surgical divert from the Ulster Hospital, from 16:14-18:05. Despite this, there were fewer ED attendances and admissions than on the day before.

The weekend of 4th-5th January had a low number of admissions, particularly on the Saturday, with only 69 across the hospital, and a low number of discharges. A divert was in place from MIH to RVH on the Saturday. There was one 12 hour breach on Sunday 5th.

Monday 6th had 295 ED attendances, the highest number in the period from 24th December to 15th January. There were four 12 hour breaches. Overall there were 130 admissions. 30% of these were elective and only 74 were from the ED. The number of discharges was greater than it had been over the weekend preceding.

Although there was a reduction in ED attendances on 7th January, there were seven more admissions overall. Again, many were elective (32%). Monday 6th and Tuesday 7th had low numbers of patients transferred from RVH to BCH, 6 on the Monday and 7 on the Tuesday.

On Wednesday 8th, RVH continued to have a high number of ED attendances and admissions, although fewer than on the previous two days. The hospital was under pressure from early morning. Following bed pressures meetings actions were taken across the trust in an attempt to manage pressures. These included opening extra beds in RVH and MPH, identification of extra beds in BCH and cancellation of non-urgent elective admissions. 25% of admissions were elective on 8th January. The patients attending ED had conditions of higher acuity compared to those in the previous two days. For example, 2.7% were of ED Category 1 and 21.2% were in Category 2, compared to 0.9% and 12.8% respectively on Tuesday 7th January.[58]

Two diverts were put in place from RVH to the Ulster Hospital Dundonald (UDH) in the South Eastern Trust, a medical and surgical divert from 18:42 – 23:44 (length 5 hours 2 minutes) and a full 999 divert from 19:03 – 23:43 (length 4 hours 40 minutes). The trust noted that despite these diverts, ambulances continued to arrive at the hospital. However, the NIAS questionnaire return stated that the diverts were for patients from East Belfast and Holywood only and so ambulances may have continued to arrive with patients from other areas.

At 21:26, in light of pressures across the hospital, the Belfast Trust declared a major incident. A full chronology of the events and assessments that led up to this decision is provided in the separate document by the Belfast Trust 'Report into the major incident, 8th January 2014' (Appendix B). Activation of the major incident allowed staff to convene an Incident Control Team out of hours and allowed key staff to be called in, to coordinate a response and create additional capacity across the system.

The major incident was stood down at 23:42.

In the days following the incident, ED attendances dropped, by over 50 on 9th January. Admissions also fell, although the number of elective admissions was similar to the number seen on 8th January. There were many discharges and a larger number (13 patients) transferred to BCH from RVH wards than on previous days. 9 patients were transferred directly from RVH ED to BCH wards. Some may have been people who had been waiting for beds during the major incident of the

[58] Manchester Triage System – Category 1 patients – should be seen immediately. Category 2 patients – very urgent – should be clinically assessed within ten minutes

night before. RVH accepted two diverts from UHD on Thursday 9th January, a medical and surgical divert from 16:39 to 18:27 and a medical and surgical divert from 18:49 to 23:56.

Over the weekend of 11th-12th January, ED attendances fell slightly. There were many fewer admissions compared to the preceding weekdays. The number of discharges also fell.

ED attendances rose slightly on Monday 13th January, but not to the same level as in the previous week. Despite this, there were large numbers of admissions, many elective. The number of discharges was lower than in the weekdays of the previous week, but higher than in many of the days during the Christmas and New Year period.

Mater Hospital

As with RVH, MIH had a high number of discharges on Christmas Eve and a very low number of ED attendances (38), admissions (9) and discharges (12) on Christmas Day. The number of ED attendances and admissions increased again on Boxing Day, with one 12 hour breach, but discharges remained very low, at only 5. On 27th December there was a much greater number of ED attendances and admissions. Some of these may have been due to a full 999 divert from RVH, from 23:47 to 2:52am on 28th December. The number of discharges on this date also increased.

Saturday 28th December had some decrease in ED attendances, which rose again on the Sunday. The number of admissions was lower than on Friday 27th. There were a very low number of discharges, especially on the Sunday, when only two occurred.

As with RVH, Monday 30th had a very large number of ED attendances, the highest for MIH in the period from 24th December to 15th January. There was also a large number of admissions. A medical and surgical divert was in place from RVH from 17:02 – 18:00. On New Year's Eve, discharges were at the highest for the whole period under review. Despite fewer ED attendances compared to previous days, there were ten 12 hour breaches. New Year's Day had few discharges. Admissions and ED attendances increased on 2nd and 3rd January, with one 12 hour breach on each of these days. A divert from UHD was in place on the 3rd. Numbers fell again at the weekend of 4th and 5th January. Sunday 5th had the second lowest number of discharges (4) in the time period under review. On 4th January, a full 999 divert was implemented from MIH to RVH, from 12:35 – 20:00.

On 6th and 7th January there were fewer ED attendances and admissions compared to the previous weekdays.

There was no increase in ED attendances on 8th January, but almost 10 more admissions than in the preceding days. The number of discharges remained similar to that seen in the previous days. Despite the major incident being declared for the trust, no diverts were in place from RVH.

On 9th January, ED attendances remained stable, with a slight reduction in the number of admissions. Friday 10th had fewer ED attendances and admissions, and more discharges.

ED attendances remained low over the weekend of 11-12th January, increasing again on Monday 13th. A similar pattern was seen with admissions and discharges. There was a big increase in admissions on Tuesday 14th January, with most of these being from ED. The number of admissions reduced again on Wednesday 15th.

Belfast City Hospital

Non-elective admissions to BCH come from a variety of sources: including transfers from RVH, MIH or the Cancer Centre located at the BCH site; direct admissions from the ED at RVH or MIH; or via the GP direct admission route at the BCH site.

Over the period from 24th December to 15th January, non-elective admissions ranged from 8 to 39 per day. There were few recorded on Christmas Eve, Christmas Day, Boxing Day, New Year's Day and the weekend of 11th-12th January. Non-elective admissions were highest on 27th December (37 admissions) and 2nd January (39 admissions), following the public holidays.

Elective admissions were low over the period from 24th December to 5th January, with two peaks in this time, on Monday 30th December and Thursday 2nd January. There was a large increase in elective admissions on 6th January, with 54 admissions, and lower numbers in the rest of this week (ranging from 25-38 per day in the period from Tuesday to Friday). Monday 13th had a second, smaller peak in elective admissions.

Discharges from BCH were highest on Christmas Eve, with 92 discharges, and fell to 9 on Christmas Day, increasing gradually over the next week. In the week of 6th January, there were 54 and 53 discharges respectively on the Monday and Tuesday, with 78 on Wednesday 8th, perhaps in response to the major incident.

South Eastern Trust

Ulster Hospital Dundonald (UHD)

Throughout the time period from 24th December to 15th January, UHD ED attendances remained relatively stable, ranging from 161 on Christmas Day to 245 on 7th January.

ED attendances were lowest on 24th and 25th December. There were only 39 admissions on 25th, the lowest number for the entire period and very few discharges. Discharges were highest on 24th December. On Boxing Day the number of discharges remained low but ED attendances and admissions increased again.

ED attendances and admissions increased further on Friday 27th, but fell again on the Saturday and Sunday, with few discharges on these dates. On Monday 30th, while ED attendances did not greatly increase, there were a large number of admissions (92). 66 of these were from ED. There were five 12 hour breaches. The hospital had accepted a medical and surgical divert from RVH between 17:02 and 18:00.

There were more discharges on Monday 30th December, and a large number on New Year's Eve. ED attendances and admissions were slightly lower than on the day before but there were twelve 12 hour breaches.

While ED attendances only slightly increased on New Year's Day compared to 31st December there were many admissions, most from the ED and almost 40 more admissions than discharges.

ED attendances continued to increase on 2nd January, but the number of admissions fell again. On Friday 3rd diverts were put in place medical and surgical diverts – to both RVH, from 16:14 to 18:05 and MIH, from 16:15 to 18:04. There were more discharges than on the previous two days.

4th - 5th January was the first weekend of the new temporary weekend ED closure arrangements for other hospitals in the South Eastern Trust, Lagan Valley and Downe Hospitals. Despite this, the Ulster Hospital did not have a high level of ED activity compared to other days in the period. There were a low number of admissions and discharges. On Sunday 5th one 12 hour breach was recorded.

ED attendances rose again on 6th January, although to a similar level to that seen on weekdays in the previous week. Admissions rose slightly and discharges increased. There was one 12 hour breach, on Monday 6th.

On 8th January, the date of the major incident in the Belfast Trust, there were 206 ED attendances in Ulster Hospital, lower than on the previous two days. The hospital accepted a medical and surgical and then a full 999 divert from RVH. This was only for patients residing in East Belfast and in Holywood. Despite these diverts there was no great increase in the number of patients being admitted from ED. There were more admissions compared to previous days, but 22 were elective admissions and 17 categorised as 'other non-elective admissions' which would not have gone through the ED.

ED activity was relatively stable on 9th and 10th January, with fewer admissions and more discharges. Friday 10th had 120 discharges, the second highest number for the period. The hospital requested two medical and surgical diverts to RVH on 9th January, from 16:39 to 18:27 and from 18:49 to 23:56.

ED attendances fell on Sunday 12th January, to 199, increasing again after the weekend. Admissions and discharges followed a similar pattern. There were 100 admissions on Tuesday 14th.

Lagan Valley Hospital (LVH)

As with other hospitals, LVH had a large number of discharges on Christmas Eve, and fewer ED attendances compared to many other days in the period. There were 13 admissions. A divert was put in place to Downe Hospital.

Christmas Day had few ED attendances and only 5 admissions. ED attendances increased again on 27th December, but fell each day subsequent to this, until 31st December. There was a spike in ED attendances on 2nd January.

The first weekend closure of the hospital ED occurred on 4th and 5th January under revised temporary arrangements for the South Eastern Trust. On these days there were four admissions daily, categorised as 'other non-elective' and likely via the GP OOH service. On reopening on 6th January, there were 92 ED attendances. Admissions also increased. A divert was put in place to Downe Hospital. Attendances and admissions were lower on the other days of that week, with discharges ranging from 9-17 per day in the period from Monday 6th to Friday 10th January.

After the second weekend closure, on 11th and 12th January, the Monday spike in admissions was less obvious. There were fewer ED attendances and similar number of admissions on the Tuesday and Wednesday of this week. Diverts were in place from LVH to Downe Hospital on both dates.

Downe Hospital

ED attendances were lowest on Christmas Eve and on Christmas Day, with 36 and 24 attendances respectively. There were 20 discharges on Christmas Eve, the highest for the period. A divert was in place from LVH. There were few admissions and discharges on Christmas Day and no discharges on Boxing Day. ED attendances increased again, to 46 on Boxing Day and between Boxing Day and 3rd January ranged from 39 to 53. Admissions ranged from 5 to 13 in this period, highest on Saturday 28th December.

The South Eastern Trust implemented its new temporary weekend ED closure arrangements for Downe Hospital for the first time on 4th and 5th January. Despite this there were three admissions on the Saturday and two on the Sunday, likely via the GP OOH service. Attendances were higher on the Monday following the weekend closure, at 68. A divert was in place from LVH. Admissions also increased in the days following the weekend closure, to 15 on both the Monday and the Tuesday.

There was a further weekend closure on the 11th and 12th January. There were nine admissions on the Saturday and one on the Sunday, again likely via the GP OOH service. ED attendances rose once more on the following Monday falling on the next two days. Despite the number of ED attendances on Monday 13th, there were only four admissions. There were more admissions on the Tuesday and Wednesday of this week. Diverts were in place from LVH on both these dates.

Northern Trust

Antrim Area Hospital

Although Christmas Eve had a low number of ED attendances, 139, there were many admissions from these, 62 from the ED. There were many discharges. On Christmas Day, ED attendances, admissions and discharges were all low. Discharges remained low on Boxing Day, but ED attendances began to increase again and the number of admissions rose from 32 on Christmas Day to 58, almost all from ED. 27th December had a further increase in attendances and admissions. The number of discharges also increased.

Over the weekend of 28th - 29th December, ED attendances, admissions and discharges fell. A divert was put in place from the hospital to Causeway Hospital, also in the Northern Trust, on both days.

There was an increase in ED attendances, admissions and discharges on Monday 30th December, with three 12 hour breaches. 31st December had the highest number of admissions from ED in the period, 76, with 91 admissions overall. The number of discharges was also high.

On New Year's Day ED attendances remained high, but admissions fell again. A divert was in place to Causeway Hospital and eight 12 hour breaches were recorded.

The highest number of ED attendances in the period was on 2nd January, with 249 attendances. These resulted in 75 admissions from the ED. A divert was put in place from Antrim to Causeway Hospital. On Friday 3rd there were many discharges, the highest number for the period under review. There were fewer admissions and ED attendances than on the day before, although the numbers still remained high. There were eighteen 12 hour breaches. Three diverts were in place, two to Causeway Hospital and one to RVH. During this time, only one patient was actually diverted to RVH.

On 4th and 5th January, ED activity remained relatively high. There were ten 12 hour breaches recorded in the ED on the Sunday. The number of admissions and discharges fell.

ED attendances, admissions and discharges increased again on 6th January. Fourteen 12 hour breaches were recorded on 6th January and six on 7th January. Two diverts to Causeway Hospital were in place on Monday 6th.

On Wednesday 8th January, there was another divert to Causeway Hospital. There were 195 ED attendances and 75 admissions, many elective compared with previous days. Seven 12 hour breaches were recorded. There were a large number of discharges.

Thursday 9th had more ED attendances compared to 8th January. Admissions also increased, but there were fewer discharges. ED attendances fell on Friday 10th January, but there was no decrease in admissions, 15 of which were elective. There were many discharges.

As on the previous weekend, activity fell on 11th-12th January and picked up again on Monday 13th, with 218 attendances. Seven 12 hour breaches were recorded on Tuesday 14th. Both 14th and 15th had more discharges than admissions.

Causeway Hospital

Causeway Hospital had very few ED attendances and admissions on Christmas Eve and Christmas Day. The number of discharges was very high on Christmas Eve, but low on Christmas Day and Boxing Day. Boxing Day ED attendances were almost twice that of the day before and there were 10 more admissions. Attendances increased further on Friday 27th December, to the highest number for the entire period under review. There were also more discharges on this date.

Attendances fell at the weekend of 28th and 29th December, although not to the level seen over Christmas. There was a reduction in discharges, especially on the Sunday. Causeway accepted diverts from Antrim Hospital on both the Saturday and Sunday.

On Monday 30th December, ED attendances were high. There were 30 admissions, 26 from ED. The number of discharges also rose after the weekend and further on New Year's Eve. There were more admissions both overall and from the ED on this date, despite fewer attendances.

Attendances increased again on New Year's Day, although admissions and discharges fell. Causeway accepted a divert from Antrim Hospital on both 2nd and also 3rd January. 3rd January had the highest number of admissions in the period, 40 overall. Despite this, there were more discharges than admissions.

As with the previous weekend, on 4th and 5th January admissions and discharges decreased. There was no great reduction in ED attendances.

Admissions and discharges increased again on 6th January. Admissions were lower on the Tuesday, Wednesday and Thursday. A divert was in place from Antrim Hospital on Wednesday 8th. Thursday 9th and Friday 10th January had high numbers of discharges.

On 11th and 12th January, as with previous weekends there were few admissions and discharges and these increased again on Monday 13th January.

Southern Trust

Craigavon Hospital

As with other hospitals, Christmas Eve had the highest discharges recorded for the period under review. Both Christmas Eve and Christmas Day had few ED attendances, 162 each day, and few admissions. Boxing Day had over 20 more admissions than Christmas day. A divert was in place to Daisy Hill Hospital.

ED attendances, admissions and discharges all increased on Friday 27th. While many admissions (20) were elective, this day had the highest number of ED admissions in the period under review. There was one 12 hour breach. A divert was put in place to Daisy Hill Hospital. There were a large number of discharges, 74.

Saturday 28th and Sunday 29th December had fewer admissions and discharges. ED attendances were lower, but a divert was in place to Daisy Hill Hospital (DHH), also in the Southern Trust, on the Saturday.

On Monday 30th December there was the highest number of ED attendances in the time period. There were many admissions, 82, with 21 of these elective. Two diverts were in place, to DHH. ED attendances fell to 184 on Tuesday 31st and discharges increased.

New Year's Day had more ED attendances but fewer admissions than the day before. Most of the decline in admissions was due to a fall in elective admissions. Diverts were in place both to and from Daisy Hill Hospital.

Admissions rose again on 2nd and 3rd January, mainly due to elective activity rather than any increase in admissions from ED. There were more discharges. On Thursday 2nd there were two diverts, again to DHH.

Saturday 4th and Sunday 5th January had fewer admissions and discharges than previous days. Once more, two diverts were in place on both dates, in all cases to Daisy Hill Hospital.

There was no great increase in ED attendances on Monday 6th January but this date had the second highest number of total admissions in the period, with 25 elective admissions. Two diverts were in place to Daisy Hill Hospital. In view of the pressures being experienced, including prolonged waiting times, the HSCB and other trusts were contacted, to request full ambulance diverts. South West Acute Hospital in the Western Trust was the only hospital which could assist and a divert was put in place for two hours. Admissions, including elective admissions, remained high on 7th January. There were 10 more discharges than on the previous day. On 8th January, admissions remained high, but there was a dip in the number of discharges. Again, a divert to Daisy Hill Hospital was in place.

Discharges increased on both 9th and 10th January. 9th January had fewer admissions than previous days, but elective admissions remained high. ED admissions rose on 10th January, to 55.

Attendances dropped on Sunday 12th. Admissions and discharges were also lower during this weekend. Three diverts to Craigavon Hospital were in place on the Sunday, all from DHH.

On the Monday ED activity increased once more. Admissions rose by over 50% compared to the weekend. As before, many were elective. Discharges remained relatively low. The hospital accepted a divert from DHH. Admissions rose again on Tuesday 14th January with 24 elective admissions on the Tuesday and 22 on the Wednesday. While discharges increased on the Tuesday, there was a reduction in these once more on Wednesday 15th.

Daisy Hill Hospital

Daisy Hill Hospital had a high number of discharges on Christmas Eve, and few ED attendances, the lowest in the period under review, on Christmas Eve and on Christmas Day. Admissions and discharges were low on both Christmas Day and Boxing Day, despite a divert from Craigavon Hospital (CAH) on 26th, and increased again on 27th December. Friday 27th had the highest number of ED attendances in the period. Discharges were also higher than they had been on the previous days. A divert was in place from CAH.

ED attendances fell on each of the days after the 27th December, to a low of 95 on New Year's Day. During these days there was fluctuation in the numbers of admissions, which fell on the weekend of 28th and 29th December and rose again on the following weekdays. On Saturday 28th and Monday 30th December diverts were in place from CAH. New Year's Eve had 38 admissions, the second highest number in the period. Discharges were also low on 28th and 29th December, and increased on the subsequent days, but not to the same degree on New Year's Eve as seen in other hospitals. New Year's Day had just 16 admissions. As before, a divert was in place from Craigavon Hospital. DHH also diverted back to CAH.

On 2nd January, ED attendances and admissions increased again. Two diverts were in place from CAH. Friday 3rd had the highest number of discharges in that week. Activity fell again on the weekend of 4th and 5th January. On both days two diverts were in place from CAH.

Monday 6th had an increase in ED attendances compared to the weekend days. There were 30 admissions and 29 discharges. The hospital had a big rise in admissions and discharges on 7th, with the highest number of admissions in the period under review. These numbers fell again on 8th and 9th January, despite a divert from CAH on 8th January. Friday 10th had a large number of discharges.
As before, weekend admissions and discharges fell on 11th and 12th January, although there was no great decrease in ED attendances. The hospital put 3 diverts in place to CAH on Sunday 12th, and another on Monday 13th January. On Tuesday 14th January there was the highest number of discharges in the period.

Western Trust

Altnagelvin Hospital

There were low ED attendances and admissions on Christmas Eve and Christmas Day, and a high number of discharges, 101, on Christmas Eve. Discharges fell greatly on Christmas Day and on Boxing Day. There was an increase in ED attendances, admissions and discharges on Friday 27th December. Over the weekend of 28th - 29th December, there was no great drop in ED attendances, but admissions fell again on Saturday 28th, before rising on the Sunday and Monday. Discharges fell over the weekend, but increased again on Monday 30th. Five 12 hour breaches were recorded on Sunday 29th.

New Year's Eve had many discharges (96). There was a drop in ED attendances, of over 20 from the days before, which rose again on New Year's Day, although admissions and discharges were low on this date. Admissions and discharges increased on 2nd and 3rd January, with 3rd January having the second highest number of ED attendances in the period, before falling at the weekend. There was one 12 hour breach on Saturday 4th and two on Sunday 5th.

Monday 6th January had some increase in ED attendances compared to the weekend, but a big increase in admissions. This date had the joint highest number of admissions in the period. Many of these were elective. Although discharges also increased the number did not match the number of admissions. There were fewer admissions on 7th January, due to fewer elective admissions. There was one 12 hour breach.

Wednesday 8th January had a similar number of ED attendances to the day before, but more admissions from the ED. After Christmas Eve, this was the day with the highest number of discharges in the period.

Admissions remained at a similar level on 9th January, with fewer discharges. On Friday 10th, ED attendances and discharges rose again before the weekend but admissions fell, again due to a decline in elective admissions. There were fewer attendances, admissions and discharges on 11-12th January, but despite this on Sunday 12th there were 30 more admissions than discharges and one 12 hour breach. Activity increased again on Monday 13th January, with a large number (39) of elective admissions. This was the date with the joint highest number of total admissions in the period under review.

While admissions dropped on Tuesday 14th, the number of discharges rose. Both admissions and discharges were high on Wednesday 15th January.

South West Acute Hospital

Christmas Eve had the highest number of discharges for the period. The lowest number of ED attendances was on Christmas Day. On this date there were also a low number of admissions and discharges. ED attendances increased again on 26th December but admissions and discharges fell.

Friday 27th had a peak in ED attendances and admissions, the highest in the period under review. Discharges also rose, before dropping again over the weekend, along with attendances and admissions.

On Monday 30th December there were more ED attendances compared to the weekend. Admissions and discharges also increased. The number of discharges was relatively constant over New Year's Eve and New Year's Day, with no peak in discharges on 31st December. Admissions fell on New Year's Day, to 25.

On Thursday 2nd January, ED attendances fell by almost 20. The number of admissions remained the same as on the previous day. Friday 3rd had a spike in admissions and discharges prior to the weekend, when there were a low number of ED attendances, admissions and discharges. Sunday 5th had the least admissions (11) and discharges (13) in the period.

Admissions and discharges rose on Monday 6th January, with many discharges (39) on Tuesday 7th and an increase in admissions on Wednesday 8th. Admissions declined on subsequent days.

The number of admissions was very low on Sunday 12th January, although ED attendances were similar to the numbers in the weekdays preceding this. There were more discharges on Monday 13th, with admissions higher again, at 33. Tuesday 14th January had an increase in ED attendances, to 84, although this was not reflected in admissions. Wednesday 15th was the day with the second highest number of discharges in the entire period.

Analysis

Review of information on ED attendances, admissions and discharges indicates that across Northern Ireland many hospitals had similar patterns of activity over the period 24th December to 15th January.

There were fluctuating numbers of admissions and ED attendances over the Christmas and New Year period, with low levels of each especially on the public holidays and at weekends and higher levels on the days following these.

In the week commencing 6th January, there was a more constant high level of attendances and admissions. Many admissions were elective, compared to the Christmas and New Year period.

A number of hospitals appeared to be under pressure over the period under review, as evidenced by the number of 12 hour breaches recorded in the Emergency Departments and by the number of diverts. Many of these diverts were internal to trusts, but often occurred several times in one day.

Root Cause Analysis of Major Incident, Belfast Trust

On 8th January 2014 the Belfast Trust declared a major incident in response to pressures in the RVH ED. Pressures were due to a large number of patients within the ED who required admission, and a lack of bed capacity in the hospital for these patients.

Compared to previous days, on 8th January a greater proportion of patients attending the ED were of higher acuity. Manchester Triage Category 2 patients were waiting three hours for assessment.

Some of the difficulties in assessing patients were due to problems in transferring patients who had already been assessed to wards outside of the ED. These patients could not be transferred due to a lack of beds identified on the hospital wards.

In the days preceding the major incident a large number of patients were admitted to the hospital and the number admitted did not match the number who left the hospital (patients discharged or transferred to a ward in BCH). Some of the increase in cases was due to the increased number of elective patients admitted to RVH in the week commencing 6th January. Some of the bed capacity issues may have been due to discharges not occurring in a timely fashion or early enough in the day.

In order to try and reduce the number of ED attendances and the number of admissions from ED on 8th January, the hospital requested a divert to the Ulster Hospital. The Belfast Trust report states that ambulances continued to arrive in this time period. NIAS has advised that the divert in place was only for patients from East Belfast and Holywood.

These differences in understanding indicate a need to clarify the communication arrangements around diverts.

Possible Opportunities for Earlier Intervention

On 8th January, prior to the declaration of the major incident, it had been recognised that the RVH was under pressure. Escalation meetings during the day led to some actions being identified to address the pressures. These included review and cancellation of elective admissions where they were non-urgent. 33 elective admissions to RVH on 8th January did occur, but this may reflect the regional role of the hospital.

The first week in January can be predicted to have an increase in unscheduled care activity compared to the Christmas and New Year period. It is possible that the number of elective admissions could have been reviewed earlier, in anticipation of these increased pressures, and admissions planned to commence later in the week.

To assist in addressing pressures in the ED on the evening of 8th January, the hospital requested a divert to the Ulster Hospital. Despite this, ambulances continued to arrive at the RVH ED. NIAS information indicates that the divert arrangement was in place only for patients from East Belfast and from Holywood.

Improved communication of the potential impact of a divert could have been beneficial at this time.

A divert was not put in place to the Mater Hospital on the evening of 8th January. Other trusts appear to have made more use of internal trust ambulance diverts throughout the period under review. It would be useful to review internal systems to coordinate response to pressures across hospitals within the trust.

Declaration of the major incident led to an Incident Control Team being convened. Staff identified beds in BCH and MPH to which patients could be transferred. Many of the transfers to other trust sites on 8th January occurred in response to the incident as opposed to earlier in the day. Earlier identification of suitable patients for transfer to other hospitals, and indeed of patients suitable for discharge altogether, could have potentially provided the hospital with more capacity earlier in the day for new patients who required admission from the ED.

Recommendations

Recommendation 1: All HSC organisations should review their escalation arrangements for responding to periods of exceptional pressure for unscheduled care. Plans should set out arrangements for: creating additional capacity; bringing in additional staff; and contacting senior decision makers. The arrangements for coordination of responses within and across HSC organisations to exceptional periods of demand should also be reviewed.

Recommendation 2: Regional and trust plans for coordination and responding to predictable periods of increased demand should be reviewed. In particular, early planning should be instituted for the post-Christmas and New Year period, to better manage system flows, including improved scheduling of elective activity.

The **Regulation** and **Quality Improvement** Authority

The Regulation and Quality Improvement Authority
9th Floor
Riverside Tower
5 Lanyon Place
BELFAST
BT1 3BT

Tel: (028) 9051 7500
Fax: (028) 9051 7501
Email: info@rqia.org.uk
Web: www.rqia.org.uk

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