The Scottish Government
Health Delivery Directorate
Improvement and Support Team

UNIVERSAL CARE COLLABORATIVE PROGRAMME

Local Changes for Improvement:
The Journey, Ideas and Accomplishments

Case Study Examples
May 2005 – September 2007
The Scottish Government
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COLLABORATIVE PROGRAMME

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Case Study Examples
May 2005 – September 2007
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National Team  
National Leads

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Top Tips for Writing a Case Study
The staff of the NHS continue to work tirelessly in order to deliver excellent patient care in an environment of varying and challenging pressures. This publication is about evidencing the areas of best practice which can be shared and pooled collectively in order to make sustainable improvements across whole systems in acute care. The Unscheduled Care Collaborative Programme is now in its third and final year, however the methodology used throughout is applicable across all healthcare systems, and links closely with the patient safety agenda.

Importantly, improvement methodology is not just about teaching staff the tools and techniques, but developing and encouraging a culture within the NHS which values change and improvement on a continuing and ever-reaching basis. We want to cultivate and develop leadership at all levels to make the systems better for both staff and patients alike. Sharing our successes supports us to build this culture.

All those who are currently involved in the Unscheduled Care Collaborative Programme are wholly committed to service improvement and to ensuring that better patient care is always attainable. This Programme is about making it possible and these case studies are examples of how this is being achieved.

Dr Harry Burns  
Chief Medical Officer  
The Scottish Government

I am delighted that we are publishing case examples of good practice which have been developed as part of the Unscheduled Care Collaborative Programme. From the inception of the programme, we recognise the significant changes and improvements that individuals, teams and organisations have made to the acute care pathways for patients. It is important that this hard work is recognised. I would like to congratulate all those who have contributed to the improvement work which is continually evolving and show appreciation to all those who have been actively engaged throughout the Programme.

The case studies highlight areas of good practice including the benefits for patients and staff alike. They provide all organisations with the opportunity to continue to adapt and spread new ideas. We hope organisations and staff will continue to use the improvement methods and hence establish an improvement culture that is essential to providing safe and effective clinical care.

Professor Derek Bell  
National Clinical Lead  
Unscheduled Care Collaborative Programme

Dr Harry Burns  
Chief Medical Officer  
Health Directorate

Professor Derek Bell  
Professor of Acute Medicine  
Department of Medicine & Therapeutics  
Imperial College, London
This publication is an opportunity to exhibit many different examples of improvement work that has been undertaken by the teams across the Heath Boards.

These case studies are a way of showcasing the achievements of all the staff involved in the Collaborative from its launch in May 2005. These are a major accomplishment for all the clinical and administrative staff, without whom these improvements would never have been made. The programme is about ensuring that care is delivered in the right place, at the right time, first time and every time and these are examples of how this is being achieved.

The Unscheduled Care Collaborative Programme (UCCP) has been designed to provide a structured approach in order to support NHS staff in delivering the 4-hour emergency access target for December 2007.

What is the 4-hour emergency access target?
By the end of 2007, no patient will spend longer than 4 hours between arriving at the A&E unit and admission, discharge or transfer, unless there are stated clinical reasons for keeping the patient in the unit. This time limit will also apply to other emergency care in minor injury units or areas of assessment units where trolleys are used. *(Fair to All, Personal to Each, 2004)*

The target measures how well the whole health and social care system is performing and requires the engagement of all partners involved in the delivery of emergency care. It is extremely important that the changes made have the greatest impact on patient waiting times. The UCCP is developed to do this through redesigning systems and processes that also:

- improve reliability
- increase safety
- improve outcomes of care
- improve the experience of patients and their families.

5 Patient Flows

Methodology

The collaborative methodology was established by the Institute of Healthcare Improvements (IHI) in the USA and has been widely used around the world and has a strong evidence base to support the methodology.

Local teams are established to develop a whole system approach to redesign using this collaborative methodology. Process maps of the patient journey are undertaken to identify waits and delays. Using a PDSA (Plan, Do, Study, Act) approach small scale, rapid, incremental changes are made. The changes are measured and monitored to make improvements.
Teams are supported to make High Impact Changes through networking, sharing, learning workshops and masterclass events.

**High impact changes**

- Streaming and locally agreed model of See and Treat (Zero breaches for minors)
- Management of the 4-hour journey
- Initial clinical assessment
- Access to evidence based diagnostic tests
- Access to specialist opinion (surgery, mental health)
- Reducing variation in admission
- Proactive bed management
- Management of the inpatient episode and timely discharge to reduce variation in length of stay

This publication has been split into Six Sections including an Overview Flow and the 5 Flow Groups which are used to streamline patients through the system. These are outlined below and at the beginning of each section.

**Overview and 5 Patient Flows**

**Overview Flow**
This is for the case studies which have overarching themes and improvement work across 2 or more flows.

**Group 1 – Minor Injury and Illness**
This includes care provided in A&E Departments, in Minor Injury & Illness Units and through schemes such as Paramedic See and Treat.

**Group 2 – Acute Assessment**
This includes the ‘majors patients’ in A&E and patients referred to Acute Assessment and Receiving Units. The key to understanding the definition of this flow is patients’ predominant need for ongoing assessment to determine the next step in their care pathways. The flow should be limited to a maximum of 48-72 hours in Assessment Units, reflecting patient needs. However, the 4-hour waiting time target also applies to trolleyed areas in these units to ensure that patients are treated equitably (irrespective of the point of access) and in the most appropriate clinical environment. Redesign of this flow group will have a significant impact on reducing the number of avoidable hospital admissions and for those who require a period of acute hospital care, reducing length of stay.

**Group 3 – Medical Admissions**
Patients who require a period of acute hospital care under the management of a Medical Speciality or Elderly Care team. Work will concentrate on the active management of length of stay to reduce clinically unnecessary acute hospital care, through use of estimated date of discharge and proactive discharge planning. Improvement work is linked to the development of alternative management of long-term conditions.

**Group 4 – Surgical Admissions**
Patients who require a period of acute hospital care under the management of a Surgical Team. Work should be linked to redesign of the elective surgical flow and links to theatre redesign. Redesign of the surgical flow needs to recognise the systematic process steps which apply to the majority of patients across all surgical specialties.

**Group 5 – Out-of-Hospital Care**
This flow will support the development of alternatives to hospital attendance and admission, reducing waits and delays for patients who need urgent hospital assessment and treatment and facilitating timely discharge for those who are ready to leave hospital. Involvement of partners in community care will be essential to the delivery of significant change. Again, there is significant opportunity to support improvements in the management of patients with long-term conditions.
CHAPTER 1: WHAT’S IN A NAME?

THE IMPROVEMENT AND SUPPORT TEAM
What’s in a name?
The Improvement and Support Team

During the second year of the Unscheduled Care Collaborative Programme, the Centre for Change and Innovation (CCI) changed its name to become the Improvement and Support Team (IST). This change occurred following the creation of the Directorate of Delivery, now the Health Delivery Directorate within the Scottish Government. The Directorate is tasked with ensuring that Ministers’ key priorities, objectives and targets for delivery by NHSScotland are achieved.

IST is fully focused on the delivery of Ministerial priorities and aims to support the NHS to build capacity and capability to continually improve service performance. IST comprises staff on secondment from NHS Boards and from within the Government.

The team achieves results by supporting Boards through a hands-on approach to use a range of evidence-based tools and techniques for improvements. IST will operate across three broad areas of activity:

1. Designing and leading national improvement programmes such as the UCCP, Diagnostics Collaborative and Planned Care Improvement Programme.
2. Identifying and promoting innovative and leading-edge practice and the High Impact Changes.
3. Providing tailored support for NHS Boards where sustainable improvement is needed.

To find out more about IST you can access the website at www.scotland.gsi.gov.uk

Staff experience

Improvement work is not only about improving patient care but also about making a difference for staff. Change is not always perceived as progress and so it is also about how you need to take people with you on a journey to change rather than trying to force change upon others. This is an example from NHS Highland as an insight to why making small changes can make a big difference to people’s working lives and make advances in patient care.

The Unscheduled Care Collaborative Programme: Taking Things Forward in Highland
www.show.scot.nhs.uk/nhshighland

“ Trading Places ”
Face your Fears

“ You must do the things you think you can’t do. ”
Eleanor Roosevelt

Who are you?

Name: Christina Mackenzie
Designation: Emergency Nurse Practitioner
Location: Emergency Department, Raigmore Hospital

How long have you worked there?
Many, many years

What exchange did you do?
Rotation to ward 6A (Acute Medical Receiving)

How long did it last for?
3 months
How did you feel before doing the exchange?
Terrified! My main fear was that I would discover that I had a huge knowledge shortfall and that I would not be able to function effectively.

In reality what was the experience like?
Thoroughly enjoyable! It took me a month to familiarise myself with new surroundings, people and a completely different work pattern. After that I realised that perhaps I could make a contribution and enjoyed it very much from then on.

“Realising why some A&E patients have to wait was an eye opener.”

Overall, how did you think you benefited from the experience?
Understanding how ward 6A operates, the problems and pressures they experience. Realising why some A&E patients have to wait was an eye opener. Sometimes there are genuinely no beds and the volume of GP admissions are far greater than I had appreciated.

Overall what I didn’t enjoy
On very busy days, it seemed like we were continually moving patients to accommodate others.

Would you recommend it to others?
Absolutely.

Any other comments?
- I was made very welcome and I really enjoyed getting to know the staff.
- I enjoyed looking after the patients for longer periods that I am used to.
- I was completely unaware of the time spent by 6A nursing staff looking for beds.

Twinning
A programme of work will shortly be launched to help build and sustain trust and understanding between staff working in different settings.

Overarching aim of twinning
To facilitate appropriate, timely and smooth transfer of patients between departments and/or care settings.

Objectives
To promote professional and trusting relationships between practitioners
To share knowledge and skills and provide education and training opportunities

Further information available from:
Hilda Hope, Lead Nurse, South East Highland Community Health Partnership
Iona McGauran, Nurse Manager, Medical Directorate
Raigmore Hospital
Liz McLurg, Nurse Manager, Surgical Directorate
Raigmore Hospital
Maimie Thompson, Programme Manager, UCCP
Maimie Thompson@haht.scot.nhs.uk

By the end of 2007 there should be a maximum 4-hour waiting time for patients in Emergency Departments
Implementation of colour coded discharge system within Medical Directorate at Wishaw General Hospital

Background

Timely and effective discharge systems within a ward based system can be difficult. The prioritisation and stratification of patients approaching discharge is an area that has proven challenging throughout the medical directorate. A ward patient could take hours to be discharged from the point of confirmation of discharge to the freeing up of the bed. It was also extremely difficult to effectively predict the ability of the system to accommodate expected admissions, since expected discharges were identified in an ad-hoc manner.

In other Boards the use of a “Traffic Light” system had been used to alleviate many of these problems. This tiered all in-patients with a colour - identifying the proximity to discharge: RED-AMBER-GREEN-BLUE. (Blue = Delayed discharge/Person no longer needing medical intervention). With discussion and support from the UCCP national team members it was decided to implement the system as a PDSA cycle.

Objectives

- To facilitate the timeous discharge of appropriate patients
- To refocus ward staff on their role in UCCP targets
- To improve the flow of patients from receiving area to ward bases
- To develop a system for the effective prediction of the hospital discharge profile

Approach

An experienced, highly motivated medical ward manager was approached to lead the implementation of traffic lights within Wishaw’s medical directorate (Margaret Douglas). This ward manager was a highly respected, capable individual with a known interest in the role of general wards in relation to Unscheduled Care. With high level support from the national UCCP service development manager she was tasked to implement the system within a PDSA cycle lasting 6 weeks: 2 weeks preparation, 2 weeks implementation, 2 weeks evaluation. This was on a full secondment basis.

The first 2 weeks involved the education and support of staff, particularly the ward managers. All appropriate
supplies were bought in to update the command and control boards for traffic light compliance. The educational aspect expanded to the multidisciplinary team very quickly, with pharmacy, physiotherapy, occupational therapy, and cardiology soon becoming active participants in the scheme.

During implementation each board was reviewed on a daily to twice daily basis by one or both of the senior managers as well as the seconded ward manager. Compliance was quickly established.

During evaluation the seconded ward manager tracked patients in each ward, in each colour through the patient journey. This was shown to be a highly effective system as the timescales to discharge were shown to be accurate. At this point the document used by the night co-ordinators to identify potential discharge was updated to be traffic light compliant. Prior to this the document had been shown to be highly inaccurate. Marked improvement in the accuracy and therefore usefulness of the document was highlighted.

The system is now fully embedded within the directorate. All staff are highly conversant with the system and are more confident in predicting potential discharge profiles.

Pharmacy and other AHP groups are also highly supportive of the system. Pharmacy now pro-actively manage discharge prescription issues for green (discharge imminent) patients, with cardiology following suit for in-patient echo cardiography.

Findings and lessons learned

- Importance of data
- Systems capabilities
- Key element to success: Motivated lead
- “Live tool” status
- Local Adaptability
- Needs to be user-friendly

What would you do differently next time?

Given the success of the local project it is difficult to identify any key changes.

Measurable outcomes

1. On an audit of one hundred patients the average time from identification to discharge was less than 90 minutes
2. Most discharges are now facilitated before 12 midday
3. Flow group 3 - Performance percentage has significantly improved
4. “Wait for a bed” breaches in medicine are virtually eliminated

Future thoughts

What are the plans to spread the change?

Traffic light systems are now in place throughout the medical division in Lanarkshire. The surgical division are currently implementing the same.

Is the change sustainable?

Undoubtedly. On a number of occasions the local systems have been “tested” by external experts. They have been shown to be robust and effective with minimal input from senior managers.

Further information available from:

Danny Rankin, Service Manager
danny.rankin@lanarkshire.scot.nhs.uk

Margaret Douglas, Ward Manager
(Lead on traffic light implementation)
Margaret.douglas@lanarkshire.scot.nhs.uk
Background

Active management of patient journeys and efficient discharge processes were identified in NHS Borders as one of the key issues in effective management of our in-patient capacity. A workshop was held with multi-disciplinary and public representation to discuss how these could be achieved. Presentations were given during the workshop from our mental health team who already had a traffic light system in place and NHS Lothian who had also been using a similar system. The consensus of the meeting was to implement a traffic light system for Discharge Planning across all in-patient beds.

‘Traffic lights’

- The patient is in the Acute phase of their admission and requires Consultant/GP input. Type of patients included in the group would be having Intensive interventions/rehab, are acutely unwell.
- Dept. of Medicine for the Elderly (DME)/Community Hospitals – patients who are likely to go home/be transferred in 1 – 10 days. Medical – patients who are likely to go home or be transferred in 1 – 3 days.
- Patients who are for discharge within 24 hours.
- Patient is ready for discharge but may be awaiting further care, eg transfer to rehabilitation wards/community hospitals, another hospital, or having social reasons for delay.

Objectives

- To actively manage in-patient journeys
- To establish planned and proactive discharge as the norm
- To enable ‘simple’ discharges to be discharged in the morning

Approach

A working group was established with staff from a range of professional groups across primary and secondary care, social work and public representation. Volunteer wards and Community Hospitals (CH) were requested to pilot this. The pilot ran in a CH and an acute ward for a month and definitions and roles and responsibilities were adapted during the pilot phase. Then a phased roll out was planned over three months until all adult in-patient beds had traffic lights in place. Each ward was provided with an information folder and offered tailored support to meet their requirements. Two individuals were allocated one day each per week for three months to support wards in the implementation of traffic lights across the organisation.
Findings and lessons learned

1. Public representatives at the workshop and on the working group welcomed this development.
2. Feedback from ward managers and ward staff is that this is a useful tool for actively managing the patient journey.
3. There was concern initially from colleagues in Social Work that traffic lights would be used for ‘focusing blame’. This has never been the intention and they have not been used for this. Traffic lights are simply a tool to monitor the status of an individual’s journey through in-patient care.
4. The work required to put traffic lights in place with clear definitions that are consistent across the organisation should not be underestimated.
5. Some wards require considerable support to implement these effectively.

Measurable outcomes

1. There has been a shift in the pattern of discharging over the day (see graph).
2. Traffic lights are used daily to inform the bed meeting.
3. At any given time the organisation has information on how many patients are delayed in acute beds and the reasons for this.
4. This has helped focus wards on actively managing patient journeys.

Results

![Graph showing % of Patients Discharged by Time Bands]

Future thoughts

What are the plans to spread the change?

This has been spread across NHS Borders and the work of the Working Group has been adapted and used by several other Health Boards including Lanarkshire, Dumfries and Galloway and Tayside. This has been spread by posters and presentations at national learning workshops and by visits from other areas.

Is the change sustainable?

The change has now been sustained for a year in NHS Borders.

Further information available from:

Erica Reid, Programme Manager, Unscheduled Care
NHS Borders
Erica.reid@borders.scot.nhs.uk
Tel. 01896 826191
Root Cause Analysis of Patient Waiting Times in Emergency Department at Raigmore Hospital

Background
At the launch of the Unscheduled Care Collaborative Programme, Raigmore Hospital (Inverness) did not think they had a problem with patients waiting over 4 hours in A&E. Notably, however, there was no reliable system in place to monitor waiting times. It was not until March 2006, when the National System – Emergency Department Information System (EDIS) was introduced, that detailed monitoring was introduced; prior to this 25% of data were missing. Compliance against the 4-hour target was confirmed at 83%. There was no robust process in place to analyse waits but it was perceived that delays were primarily for Medical Beds, Transport and Specialist Review.

Objectives
• To accurately monitor patient waiting times
• To identify reasons why patients were waiting
• To take actions to reduce waits and delays
• To raise awareness about the 4-hour target as a whole system measure

Results
Graph 1
January 2007
Raigmore A&E: Comparison of waiting times distribution for patients waiting more than 4 hours (March 2006 and January 2007)

Graph 2
June 2007
Raigmore A&E: Comparison of waiting times distribution for patients waiting longer than 4 hours (March 2006 and June 2007)
Approach
During the early stages of the Programme the main focus was to develop a team approach and to raise the profile of the 4-hour wait. Good quality and timely information has played a huge part in making progress. It has consistently dispelled anecdote being a catalyst to support change. Following a national peer-review visit in September 2006, the General Manager (Medical Directorate) set up and chaired a Daily Meeting to review any patient who waited over 4 hours. Reps from A&E, receiving wards (Medical and Surgical) and a Manager review the notes and agree the main reason for waits. Any corrections were made and monthly analysis carried out.

The Programme has actively involved Patient and Public representatives including carrying out patient feedback surveys. The plans are to repeat these every 6 months. A research project is also underway to look at staff values within the Department.

Findings and lessons learned
• Having real time and accurate information has had a positive impact on the process.
• Sharing information with managers and clinicians has allowed them to reflect on practice and come forward with suggestions for improvements.
• Involving ward staff in the whole process has helped to improve joint working and build constructive working relationships.
• The daily meetings are strongly supported by senior managers and this has helped raise awareness across the hospital.
• There was a tendency to mask some of the main delays. Accurate reasons for delays are now determined and coded.
• Getting the pace of change right, involving key stakeholders and creating a supportive environment for staff to make changes have been important.
• Having external peer review visits have offered both encouragement and constructive criticism.
Measurable outcomes

- Daily and cumulative monthly position available for 9am Hospital Bed Meeting.
- Compliance with max 4-hour wait has improved from 83% in March 2006, to 98% (June and July 07).
- Every day the reasons why patients wait is analysed. Although a medical ward was closed in December 2006, delays are seldom due to waits for beds.
- There is excellent awareness, support and understanding about the 4-hour target.
- Two external peer review visits have commented on the enthusiasm and progress being made.

Graph 3
Future thoughts

What are the plans to spread the change?
Monitoring now takes place across 19 sites in Highland. Plans are underway to have more robust measuring systems in place across all sites.

Discussions are underway to integrate A&E and Out-of-Hours at other sites.

Is the change sustainable?
While the Daily Breach Meetings and information to support the process are now routine, work is ongoing to assure sustainability of the 4-hour target. In July the process was refined and now all patients waiting between 3 hours 45 minutes and 4 hours are reviewed. The aim is to pull this back to 3 hours 30 minutes. An Escalation Policy is currently being considered.

The Emergency Department and Out-of-Hours Service fully integrated in April 2006 bringing further challenges and opportunities. Work is underway to introduce a new daily report which reflects total activity, hour by hour.

Further information available from:
Linda Kirkland, Medical Directorate General Manager
NHS Highland
Tel. 01463 705752 (pager 7078)
linda.kirkland@haht.scot.nhs.uk
To provide A&E staff with a mechanism to access appropriate and timely support when required in the department to avoid unnecessary patient delays

Background
Traditionally within the A&E/MAU (Medical Admissions Unit) departments within Clyde the mechanism for recognising when and in what form the departments were under pressure was a personal judgement of the “nurse in-charge”.

Objectives
In the advent of the 4-hour emergency access delivery target it was identified that the response to increased pressure on departments varied from day to day. A clear mechanism for accessing support from clinicians and managers was requested by staff.

Approach
The introduction of EDIS (Emergency Department Information System) enabled A&E/MAU staff in Clyde to recognise where and when increased activity would be likely to produce delays.

The escalation process gave a corresponding visual guide of when and who to contact for support at each stage.

Methodology
One of the staff members who regularly made key decisions in A&E and had a working knowledge of EDIS, began to work to design an escalation process appropriate to local needs; with consultation and involvement of clinical and management colleagues. This enabled the policy to be refined quickly, ready for implementation.

The policy was implemented initially at the Royal Alexandra Hospital site as a PDSA pilot. Agreement from senior managers and clinicians was sought, with small group sessions enabling education and comment from A&E staff.
Impact

Following the initial pilot at the RAH the Escalation Plan was rolled out to the other acute sites within Clyde-Inverclyde Royal Hospital and the Vale of Leven Hospital. The plan underwent minor local adjustments and was again piloted then adopted as policy at each site.

The future of the plan is to extend into out of hours services at all sites. A template for this has been devised and will undergo a similar process of introduction and implementation as the original plan.

Sustainability

At present the plan is currently well embedded into normal working practice at all three sites. There is measurable evidence that it has improved patient flow, which is coupled with anecdotal evidence of increased satisfaction from both frontline and managerial staff.

Further information available from:

Contact:
Dan Anderton, UCCP Programme Manager
NHS Greater Glasgow & Clyde
Tel. 0141 314 7102
Daniel.Anderton@rah.scot.nhs.uk

John Gomez, UCCP Information Manager
NHS Greater Glasgow & Clyde
John.Gomez@renver-pct.scot.nhs.uk
Background
A traffic lights system for identifying the estimated date of discharge for patients was initiated in the medical wards of Hairmyres Hospital in May 2007.

Objectives
- To accurately monitor patient waiting times.
- To increase efficient discharge processes.
- This study compared the time of arrival of prescriptions in pharmacy for March, when the traffic light system had not been implemented and June, when it was fully operational.
- Surgical wards, where the traffic light system has not yet been introduced, were also evaluated as a control group.
- To raise awareness of the 4-hour target and improvement methodology.

As can be seen from the Graph 1, more medical prescriptions were sent to pharmacy earlier in the day in June, compared to March.

- By 10.30am in June, pharmacy had received 22% of prescriptions from medical wards. In March this figure was only 9%.
- By 12.30pm in June pharmacy had received 55% of prescriptions from medical wards, compared to 41% in March.

Conversely, only 23% of medical prescriptions were received after 2.30pm in June, compared to 41% in March.

- In March 36% of surgical prescriptions were sent to pharmacy by 10.30am, compared to 26% in June
- In March 64% of prescriptions had been received from the surgical wards by 12.30pm, compared to 61% in June.

Results

Graph 1 – Percentage of prescriptions received from medical wards throughout the day.

Graph 2: Demonstrates that there has been no improvement in the time that surgical wards send their prescriptions to pharmacy. It could be argued, however, that they were already sending down the majority of their prescriptions in the morning in March and the need for improvement was not as great as in the medical wards.
**Approach**

On admission, patients are allocated a red, amber or green status, depending on how long they are expected to remain in hospital and this is reviewed throughout the patient journey. As a general rule, ‘red’ patients are expected to be remain in an acute ward for five or more days, ‘amber’ patients will have an expected stay of two to four days and ‘green’ patients are those who are expected to be discharged home in the next 24 hours.

Junior medical staff were encouraged to review the patient board in their ward every morning and make sure that all discharge arrangements, including the sending of a prescription to pharmacy, have been completed for green patients. It is hoped that this will expedite the discharge of patients from the ward.

**Findings and lessons learned**

- Value of monitoring patient waiting times and proactively managing them.
- Improved working relationship between ward and pharmacy due to better communications.

**Measurable outcomes**

- Surgical wards, where the system has not been implemented, have not shown the same improvement.
- Since the introduction of the traffic light system, the medical wards appear to be sending prescriptions to pharmacy earlier in the day.

**Further information available from:**

Alison Marshall, Senior Pharmacist  
Emergency Receiving, Hairmyres Hospital  
NHS Lanarkshire

Alexa Wall, Principal Pharmacist  
Emergency Receiving, Wishaw Hospital  
NHS Lanarkshire

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Background
Between January and March 2006 in NHS Borders over one hundred patients were cared for in the A&E corridor. These were always patients who were clinically unwell and requiring admissions. Patient dignity and confidentiality was difficult to maintain. Several reasons were identified for this ‘queue’ developing. The main ones were:

- ‘Burden of bed management not shared’
- No Discharge Lounge facility
- Lack of focus on active management of in-patient journeys

Objectives
- To ensure that no patients were nursed and cared for in the A&E corridor
- To effectively manage in-patient capacity so that no patient waited for more than 4 hours in A&E for a bed.

Results
Daily achievement 1 August 2006 to 31 January 2007
Approach

There were several actions taken to ensure the quality of the patient’s experience while in A&E. This included: implementation of Traffic Light System for Discharge planning to focus wards on actively managing patients journeys; development of proactive Discharge Lounge enabling the capacity to be freed in a timely manner; Bed Buster role to facilitate patient movements; and implementation of Daily Operational Bed Meetings.

The Daily Bed Meetings are led by a General Manager and scripted. Information gathered regarding available beds, definite and potential discharges are used together with predictive data to inform the pace of work for the day.

Findings and lessons learned

- No one individual action will ensure efficient management of in-patient capacity.
- Initiatives around managing in-patient capacity have to be focused and interlinked.
- When all initiatives around bed management are linked and focused (eg through Daily Operational Bed Meeting) their effect becomes synergistic.

Measurable outcomes

- No patients have waited in the A&E corridor since these initiatives have been put in place.
- Medical admissions no longer wait in A&E but transferred directly up to the ward.
- Since December 2006, Flow 3 operates at above 96% and has achieved 100% for the previous two months.

Future thoughts

What are the plans to spread the change?

This has been presented during a plenary session at a National Learning Workshop. Other Boards have visited to enable sharing of experience.

Is the change sustainable?

This process is now firmly embedded. This has been in place since December 2006.

Further information available from:

Erica Reid, Programme Manager Unscheduled Care
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Background

The Flow Coordinator was introduced in April 2006 at the Queen Margaret Hospital in Dunfermline. This post was designed to primarily improve the coordination of the patient flow within the Accident and Emergency department. Not only was it anticipated that this post would improve patient care but it would also help more patients be seen within the 4 hours once they reach Accident and Emergency.

Evidence:

Approach

The role of flow coordinator in A&E was developed on the basis that all senior staff nurses would undertake the role on a rotational basis in order to achieve a cultural shift within the department in relation to managing patient flow. This approach also ensures that the learning from the period of rotation is spread across all staff and ensures a far greater level of capacity and capability within A&E. The benefit of this approach is that it achieves not only an improvement in the flow of patients but also an improvement in the clinical systems supporting patient care.

Findings and lessons learned

- There has been a reduction in duplication of tasks, steps and processes within the patient journey.
- Reduced waste in terms of staff duplicating tasks particularly communication steps allowing more time to be focused on providing better clinical care and patient contact.
- Having a single point of contact for liaising with bed management and arranging admissions has improved patient flow reducing breaches in Flow 3 and 4.

Measurable outcomes

- Reduced time to first clinical assessment.
- Direct link to the improvement in performance of Flow 1 patients with 95% now being seen within 3 hours and 99% of patients now being seen within 4 hours.
- Reduction in number of breaches resulting from “wait for a diagnostic test or result”.
- Significant reduction in number of breaches resulting from “wait for a bed”.

Number of Breaches by Flow
What would you do differently next time?

Since April 2006 the role of the Flow Coordinator has continually developed and expanded. However, retrospectively, concentrating on improving the push at the front door without creating the available capacity across the whole system did initially create pressures further along the patient journey.

This particular PDSA led onto several iterations involving flow coordination across the whole patient journey and out into community beds.

The role of flow coordinator was extended to the Victoria Hospital site in September 2006 followed by Clinical Coordinators managing the flow across both acute hospitals in Fife in November 2006. From June 2007, NHS Fife introduced a fully Integrated Admission and Discharge Team operating across both our acute hospitals with aligned bed management arrangements in primary care. The role of the flow coordinator is firmly embedded within this team.

Future thoughts

What are the plans to spread the change?

In terms of spreading the change and sharing the learning, this has already taken place with the introduction of clinical coordinators receiving all GP calls for medicine on both sites and the incorporation of both these roles into an integrated admission and discharge team who coordinate the flow of patients across the whole system ensuring that we have:

“The right patient in the right place at the right time”

Is the change sustainable?

The true benefit of rotating all staff into the role of the flow coordinator is that it ensures sustainability of the change on a long-term basis by embedding the change within the routine clinical systems and the daily routine. Because the role is covered on a rotational basis by any member of the clinical team it means success is not dependant on individuals and it also achieves a paradigm shift in the behaviour and mind set of all staff within the team even when they are not undertaking this role.

Further information available from:

Yvonne McCallion, Integrated Admission and Discharge Manager
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Background
Statistical Process Control (SPC) involves the use of statistical techniques to monitor and control the variation in processes, and to stabilise out-of-control processes. The technique was developed in the USA by Walter Shewhart in the early 1920s. W.E. Deming later applied SPC methods during World War II thereby successfully improving quality in the manufacture of munitions and other strategically important products. Deming was also instrumental in introducing SPC methods to Japanese industry after the war ended. Japanese manufacturing, particularly in the automotive and electronics sectors, further developed the technique as a quality improvement tool.

Objectives
To use SPC to
- better understand patient flow within the ED
- share performance with staff of the ED
- identify potential bottlenecks
- tailor staffing levels to demand
- to improve the quality of service in the ED
- target PDSA work in particular parts of the system
- allow compliance with the 4-hour emergency access target
- evidence-based problem solving

Approach
Stewart Cardwell, Information Manager, with the assistance of Dr. Veronica Devlin, Service Improvement Manager developed the technique for use in Ayrshire & Arran. Stewart came to the NHS from a background in the electronics industry, and had used the technique extensively as a quality improvement tool in this environment. With Dr. Devlin’s clinical input as a Staff Grade Doctor in the ED, they were rapidly able to develop a set of easily understandable SPC charts and a breach analysis format for use in the ED. Formal SPC charts were first run in Ayrshire & Arran in April 2006. SPC charts were placed on an open share platform via the hospital intranet, so senior staff could track progress on a daily basis.

Information is shared at UCC Flow Group meetings and ED Audit and Clinical Governance Meetings on a monthly basis, and performance is discussed as a matter of course on the shop-floor, with reference to the charts.

Over time, run charts have been developed for different stages in the patient journey, allowing targeted PDSAs in specific areas identified as out-of-control for target times.

SPC has been a major factor in understanding and improving patient flow in Ayrshire & Arran.

Findings and lessons learned
Staff in the ED are now familiar with the daily run charts and can understand and volunteer underlying reasons for periods when the system is out of control, using the charts.

SPC is used to monitor and address performance against the 4-hour emergency access target.

SPC has enabled various PDSAs addressing delays at triage, time to first consult and within specific streams, such as Paediatrics and Minor Injuries.
Measurable outcomes

- Separate control charts are run on a daily basis to allow assessment of performance in specific workstreams; paediatrics, minor injuries and majors.
- Individual patients who are seen by Emergency Nurse Practitioners (ENPs) can also be easily identified by use of the charts, allowing them to monitor their own performance.
- Performance management of medical staff is also enabled using this technique.
- Performance against the 4-hour target is managed and monitored with SPC.

Future thoughts

What are the plans to spread the change?
Most boards in Scotland have visited Ayrshire & Arran to see our use of SPC and better understand the techniques.

Stewart Cardwell, Information Manager, has spoken at several Learning Workshops and Information Managers meetings on the topic, and has supported several other boards in set-up and use of the technique.

Is the change sustainable?

SPC has been adopted as part of everyday departmental functioning in the ED. It has been used to alter staff rotas, and to understand where the department has bottlenecks and to address these.

A real time SPC system for use on PCs throughout the ED is being procured. This will allow immediate access to run charts so that when the system is beginning to go out of control, remedial action can be taken immediately.

SPC has been adopted as a tool by the Performance Directorate, as a way to sustainably monitor performance against the 4-hour target.

Further information available from:
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Dr Veronica Devlin, Service Improvement Manager
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Background
An audit was undertaken to examine the rate limiting steps to discharge, commencing when the patient was informed by the team that they were fit for discharge and ending when the discharge medication was handed to the patient Patients Own Drugs (POD). Data were collected over a one-month period from medical wards at Wishaw General Hospital.

A total of 183 completed forms were returned, not all were fully completed. The following data are based on completed information as percentages.

Results and approach
1. Percentage of Prescriptions Ready at Required Time of Discharge

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</tr>
<tr>
<td>8</td>
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</tr>
</tbody>
</table>

Objectives
- To monitor wards using POD and compare with those wards not using POD.
- To accurately monitor patient waiting times.
- To increase efficient discharge processes.
- To examine the rate limiting steps to discharge, commencing when the patient was informed by the team that they were fit for discharge and ending when the discharge medication was handed to the patient.

In total 84% of all prescriptions and 93% of POD prescriptions were ready at the required time of discharge. In wards 5 and 8 100% of POD prescriptions were ready at the required time of discharge.

For 44% of prescriptions the prescriber had to be contacted for amendment/clarification of the prescription before the prescription could be completed.

When prescriptions were not ready the average waiting time was 75 minutes. Reasons identified for prescriptions being delayed were:

- Time spent bleeping prescribers to clarify prescription details, in one instance the prescription was written at 11.45 and the doctor bleeped at 11.50, 12.05 and 13.10 contact was made at 13.55 and the prescription dispensed.
- A prescription form was lost on the ward.
- Patient and notes/kardex were out of the ward so the prescription couldn’t be screened by the pharmacist.
- Patient was transferred to the discharge lounge and PODs were mislaid.
- Patient was told of discharge at 11.30am and prescription was not written until 2pm.
- Delay of 3 hours in the clinical pharmacist screening the prescription.
- Clinical pharmacist did not sign the prescription so the technician could not accuracy check it.
- Patient took an irregular discharge.
Findings and lessons learned

• Almost a quarter of all POD prescriptions were completed within 20 minutes and 68% within one hour.
• For the non-POD patients only 57% of prescriptions were completed within two hours.
• Both POD and non-POD prescriptions are completed by pharmacy in order of estimated time of discharge.
• When prescriptions were not ready the average waiting time was 75 minutes.

Measurable outcomes

• The use of patients’ own drugs increases the speed with which discharge medication can be provided.

Future thoughts

Is the change sustainable?
Yes definitely. Decreased patient waiting times.

Further information available from:
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Background
Due to low volume activity in the remote and rural areas of Orkney, the emergency access target has been achieved from the outset. However, concerns around the sustainability of services in Orkney have prompted a detailed review of unscheduled care.

Until recently unscheduled care in Orkney has been managed and run as very different services. Previously these have included:

- GP out-of-hours services (only recently opted out)
- Direct admissions of all unscheduled care onto the acute wards (both GP and emergency ambulance activity)
- A separate minor injury unit

The way these services are configured and managed gives very little opportunity to integrate resources and manage the flow of patients into the hospital.

As part of a major re-design programme all clinical care and process is being examined and evaluated. The purpose of this redesign programme is to look at more sustainable, effective and affordable ways of providing services.

Objectives
- To review the unscheduled care across all the patient flows
- Involve and engage clinical staff in opportunities for service improvement
- Underpin all improvement activity with robust good quality activity data
- Examine opportunities for integrating the different services currently providing unscheduled care (in both primary and acute care settings)
- Reduce and limit in-patient admissions that are not first pre-assessed and triaged
- Improve communication between different services and between primary and secondary care
NHS Orkney is undergoing a major redesign of clinical and non-clinical services under the banner of the Creating Sustainable Service Programme (CSSP). The CSSP is tasked, with reviewing all services to determine the most cost effective, sustainable and safe method of providing health care throughout Orkney.

Part of this programme of work includes a workstream to look at unscheduled care throughout Orkney. This is underpinned by a robust project structure and process that is co-ordinated by a project team and supported by a project board. The unscheduled care work has been tasked with examining the activity, patient flows and costs of providing the current services. Workshops and staff consultation were planned and used to generate options for developing a more sustainable and integrated service for the future.

In addition to the above an external group of clinical experts from around Scotland was formed and used to provide advice, support and different perspectives to the project team.

Findings and lessons learned
The main findings and actions arising from the unscheduled care workstream are as follows:

- Direct admissions of emergency and GP cases need to be appropriately managed in order to be efficient
- There is duplication in the GP out-of-hours service and the minor injury unit that could be avoided with improved integration
- A co-located facility that provided treatment and triage for all unscheduled care (including minor injuries, acute receiving of minor injuries and out of hours GP services) would be the most efficient and sustainable model for the future
- The “Adastra” GP out-of-hours software could be used by the minor injuries staff. This would improve communication with primary care

What would you do differently next time?
We would perhaps involve staff from other areas throughout Scotland earlier to stimulate discussion in Orkney.

Measurable outcomes
- A reduction in unscheduled care admissions to the acute wards
- Pre-assessment and investigations of unscheduled care admissions prior to admission to the acute wards
- A reduction in minor injuries and ailments requiring GP input
- Efficiency savings arising from a more integrated service

Future thoughts
What are the plans to spread the change?
The changes required, identified from this project, are now part of an implementation plan. Implementation will be supported and co-ordinated by a project team to ensure adoption of the change.

Is the change sustainable?
The changes required to unscheduled care in Orkney have been identified by staff involvement, analysis of past and predicted activity and from examining the patient flow; therefore with supported implementation the changes should be sustainable.

Further information available from:
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OVERVIEW FLOW

NHS AYRSHIRE & ARRAN
MAKING IT BETTER – PAEDIATRICS STREAMING AT CROSSHOUSE HOSPITAL

Background

- Following the decision by NHS Ayrshire & Arran to centralise in-patient paediatrics at Crosshouse Hospital from July 2006, the A&E directorate was asked to consider the implications for the provision of Paediatric services on both sites
- The Ayr site was expected to provide an effective Paediatric minor injuries service whilst retaining the capacity to deal with seriously ill or injured children (Level 2 Action Framework for Children 2006)
- The Crosshouse site was expected to provide a full service to the paediatric population (Level 3 Action Framework for Children). The majority of paediatric cases receive their emergency care within the Emergency Department (ED).

A&E activity 2004

- 25% of cases presenting are age 16 or under
- 10% of such cases are subsequently admitted for in-patient care
- 6% present between midnight and 9am
- 50% present between 9am and 5pm
- 44% present between 5pm and midnight

Objectives

- To provide a safe, patient and carer centred paediatric service for the children of Ayrshire
- To reduce waits for young patients with minor injuries who historically had been a lower priority than trolley cases
- To provide a safe, child and parent friendly care environment which was audiovisually separate from the adult waiting and treatment areas.
- To provide access to appropriately trained nursing and medical staff for paediatric patients
- To ensure rapid transfer to the paediatric Assessment Unit for those patients who required a period of observation or admission
- To improve patient and carer experience of the emergency care episode.

Approach

Funding was secured to commence a capital project to provide a dedicated Paediatric area within the ED. Care is provided by a trained paediatric nurse together with an ED nurse, and input from Emergency Nurse Practitioners, one of whom has predominantly paediatric experience. Medical staffing is provided by an ED middle grade doctor, with supervised input from ED junior doctors when appropriate. Access agreements were reached with paediatric staff, allowing rapid admission of patients direct to the Paediatric Assessment area when a period of observation or admission is required, after an assessment by the ED doctor. Specialist paediatric medical input is quickly available when required.

The stream operates 12 hours per day, 9am-9pm. This provides the best match with current attendance profiles.

Findings and lessons learned

The Paediatrics stream provides a rapid service for paediatric patients. 99% of patients in the stream are seen and admitted or discharged within 4 hours.

Carers express a high degree of satisfaction with the service and staff are pleased with the improvement.

The stream provides a much more child and parent centred environment, and is a more pleasant environment for staff to work with the children.
Measurable outcomes
See charts below.

- 15,453 patients were treated in the stream over 1 year.
- Only 1% of that number breached the 4-hour target.

Future thoughts
What are the plans to spread the change?
Experience of developing the stream has been shared at National UCC events.

Is the change sustainable?
The paediatric stream has been adopted into a permanent feature of the functioning of the ED, and its performance is closely audited and monitored.

Further information available from:
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OVERVIEW FLOW
NHS BORDERS
‘BED BUSTERS’: ENSURING TIMELY DISCHARGE

Background
During the Diagnostic Phase of the Unscheduled Care Collaborative Programme in NHS Borders it was identified through process mapping and shadowing that there were two issues that caused significant delay to patient movement. One was the delay in getting a patient ready for transfer/discharge once identified, and the other was the delay in portering staff to move the patients. After attending a Learning Workshop the Junior Sister in A&E came up with the idea of ‘Bed Busters’.

Objectives
• To move patients in a timely manner
• To provide assistance to ward staff to get patients ready for discharge/transfer
• To prepare bed space once patients have moved on for the next patient
• To eliminate the use of ward staff for portering duties

Approach
It was identified that due to the mix of duties involved that the ‘Bed Buster’ role would best be filled by an auxiliary nurse and a porter. Funding was released to pilot this for a three month period. Line management of the porter lay with General Services, and the auxiliary was managed through the Discharge Liaison Team. The work of these two individuals was to be directed by the Bed Manager, and she would prioritise their work and which wards to target first.

The pilot was successful and recurrent funds for these posts have been allocated. The Bed Busters work as part of a team that ensures the timely movement of in-patients and patients ready for discharge. The Bed Busters cover between 9am to 7pm Monday to Friday.

Findings and lessons learned
1. It is important that the work of the Bed Busters is prioritised by one individual. This was initially thought to be the Bed Manager, but during the pilot it was decided that the work of Bed Busters was best directed by the Discharge Lounge nurse who liaised with the Bed Manager.
2. Porters were concerned that once the Bed Busters were in place they would no longer have a role in patient movement. It was clarified that Bed Busters were there to assist patient movement and not take on the whole responsibility for this.
3. The Bed Buster initiative has largely been welcomed by ward staff.
**Measurable outcomes**

1. Patients move on in a timely manner from wards.
2. Bed Busters work with Bed Managers and Discharge Lounge to make efficient use of in-patient capacity.
3. The Bed Busters are one of many initiatives that have in combination meant that for the past six months our medical admissions do not wait in A&E for more than 4 hours. Flow 3 (medical admissions) has achieved 100% of their patients meeting the 4-hour target during the last two months.

“The Bed Busters, provide a friendly, helpful service to patients who are about to be discharged from hospital. Their presence in the wards allows the empty, acute bed to quickly be made ready for the next admission.”

Bed Manager

“The Bed Busters make a huge difference. As far as the patient is concerned it’s less disjointed than previous processes.”

Assessment Unit Sister

**Future thoughts**

**What are the plans to spread the change?**

This has been presented at a National Learning Workshop for spread of good practice nationally.

**Is the change sustainable?**

Recurring funding has been allocated to this initiative, as the pilot has proved so successful.

**Further information available from:**

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NHS Borders
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Background

Minor injury and illness represents 65% of the total patient activity flowing through the three Accident and Emergency Departments, it is essential that this flow stream achieves 100% performance in a sustainable way.

One of the key innovations in improving the experience of patients presenting to emergency departments with less serious illness and injury has been the concept of “See and Treat”.

Early work in the collaborative programme through process mapping, identified triage for minor patients as a non value added step and each of our three A&E departments set about re-designing the minor’s process in order to incorporate the key principles of See and Treat.

Using collaborative methodology, PDSA (Plan, Do, Study, Act) a variety of models were tested on each site until the optimal model was achieved.

Nursing staff have embraced the opportunity to directly influence and manage patient care by acquiring additional knowledge and skills via the MINTS (Minor Injury/Illness Nurse Treatment Service) programme. Additional nursing to support the delivery of See and Treat during core hours have been a key factor in its success.

Improving patient experience is the single biggest driver of the Collaborative Programme and following implementation NHS Lanarkshire sought the opinions of patients using the See and Treat service. A patient opinion questionnaire compared nurse and doctor patient satisfaction, measured key outcomes such as time first assessed, pain management, information given about condition and overall correlation of waiting times and satisfaction.

Objectives

- Reduce variation in performance in the minors flow
- Ensure performance is sustained at 100% for flow group one
- Remove the need to triage by introducing streaming at the point of reception
- Provided dedicated facilities in order to ensure See and Treat is protected even if activity within other flow groups are high
- Provide learning opportunity to enable MINTS nurses to develop as skilled, competent, confident practitioners
- Seek feedback from patients on the introduction of new service
- Improving patient experience
Approach

- Process map patient journey for minors flow in order to identify bottlenecks and non-value added steps
- Redesign patient journey in order to remove non-value added steps, ensuring that the lean principles are applied (reducing walking for staff, ensure minimal, however essential, equipment is available)
- Introduce streaming at the point of reception and therefore reduce the need to triage minors flow
- Create a routing tool for patients who could be triaged to See and Treat (used in the first instance to support reception staff)
- Identify a suitable dedicated area to run the See and Treat service using demand analysis in order to predict what the operational capacity required
- Analyse demand by hour of day in order to identify staff requirements
- Using PDSA methodology test staffing models, combinations of doctors and nurses in order to establish optimal model

- Work with primary care to ensure patients are routed to the right clinician first time
- Seek patient opinion of new service

Findings and lessons learned

Reduction in time to first clinical assessment in minors flow from an average of 98 minutes to 41 minutes.

Numbers of patients managed by nursing staff rose from 1100 per month to 2600 per month.

Patient opinion study demonstrated that despite concerns from senior clinicians that we were rushing patients through the system, 89% of patients surveyed said they had enough time. 60% of patients rated care as excellent, with a further 22% rated care as very good and 11% as good.

Lessons learned

1. Facilities must be dedicated to see and treat to ensure efficiency
2. Dedicated nursing and medical staff rostered to See and Treat – this must be monitored by senior staff
3. Keep testing various staffing models using PDSAs in order to get optimal model, particularly for the out-of-hours period
4. Do not under estimate the level of competence or confidence required for nursing staff to see, treat and discharge patients
What would you do differently next time?
Review and start implementation process earlier within the programme in order to get maximum gain.

Future thoughts
What are the plans to spread the change?
See and Treat is now in operation across all three acute sites.

Is the change sustainable?
Yes. Some of the principles have been applied to the redesigning of other flow groups.

Further information available from:
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Measurable outcomes
• Measure performance against the 4-hour emergency access target for minors flow
  – Improved performance overall for the 4-hour target 86% in June 2006 to 96% in June 2007
• Monitor time to first assessment for minors flow
  – Improved performance against the 4-hour target for minors flow 93% in June 2006 to 99% in June 2007
• Analyse breach data in order to identify common themes and ensure actions taken to resolve
• Monitor numbers of patients managed by MINTS nurses
• Review demand on a regular basis in order to ensure there is sufficient capacity
• Monitor patient types within Flow group 1 in relation to primary type presentations
• Seek patient opinion
To manage the flow of minor injury patients into a more efficient stream

**Background**
Prior to See and Treat at the Royal Alexandra Hospital (RAH), patients with minor injuries were assessed in triage and waited as a low priority secondary to those with greater clinical needs. The introduction of a dedicated minors service enabled patients to be seen in an equivalent stream to those who were more unwell.

**Objectives**
It was identified that many of the patients in the minor injuries stream did not require a full assessment in triage. A high percentage of these patients waited longer for triage than they would have waited for a See and Treat service.

Dedicating staff to the area also meant that patients were not subject to lengthy delays awaiting review by clinicians who were dealing with more complex cases.

**Methodology**
See and Treat was a natural progression following the introduction of the Minor Injuries area at the RAH. Staff in A&E were briefed in small groups where there was opportunity for comment and discussion. They agreed upon criteria for patients who were appropriate for the See and Treat category. Additionally, protocols for these patients were already in place as part of the existing daytime ENP service. Close initial monitoring of the service by clinical staff enabled any problems to be highlighted and overcome without delay.
Impact

Royal Alexandra Hospital
Percentage of minors discharged in 4 hours

Future thoughts

Spread
Following the initial implementation of See and Treat, which was on weekdays between 9am-6pm, the service was further extended to 9am-9pm. Recently at the RAH, a re-structuring of the Middle Grade rota has enabled minors streaming and See and Treat to be in place during the day over the weekends.

Future
The future of the plan is to extend the See and Treat service to the other Accident and Emergency unit within Clyde at Inverclyde Royal Hospital. At present, staff are attempting to develop a robust ENP service in this department in order for this to happen.

Sustainability
At present See and Treat is part of normal working practice at the RAH site. Extension further into out of hours working could be of significant benefit; however it is limited by resource constraints to the service.

There is measurable evidence to suggest that See and Treat has directly improved patient flow in this group. Overall flow through the whole system is better and there is anecdotal evidence of increased satisfaction from both patients and frontline clinical staff.

Further information available from:
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John Gomez, UCCP Information Manager, NHS Greater Glasgow & Clyde John.Gomez@achb.scot.nhs.uk
Background
During the early stages of the Unscheduled Care Collaborative Programme in NHS Borders it was identified that the majority of breaches were patients with minor injury and illness. Process mapping demonstrated that the pathway for minor injury/illness patients was smooth, but the nursing and medical staff were distracted by other priorities resulting in a very long patient journey for this patient cohort.

Objectives
- To establish a model for ‘streaming’ suitable for a small District General Hospital
- To protect the minor injury/illness stream

Approach
It was decided by examining times of presentation of Flow 1 patients, and availability of staff to treat them to establish an Emergency Nurse Practitioner (ENP) service. The service was to be available between 1pm to 9pm Monday to Friday and 9am to 9pm Saturday and Sundays. It was discussed with the senior nurses that if A&E required more nursing support that the ENPs were not to be the first source for this, but other areas were approached.

A room was set aside for the ENP service. The ENP service was established at the end of September 2006.

It had also been identified that there was insufficient medical cover in A&E to manage the demand. In February 2007 a GP shift was introduced to A&E. There is now a GP in the department for eight hours every day. The time of this shift is currently being changed using the PDSA approach to find the best time for this shift. There are PDSA ongoing around the patient cohorts that GPs see. GPs during their shift see up to 25% of attendances.

Findings and lessons learned
- The ENP service has to be explicitly protected otherwise they are utilised for nursing duties.
- Significant numbers of A&E attenders are appropriately seen by a GP.
- Streaming of minors contributes significantly to maintaining flows of all patients attending A&E.

Measurable outcomes
- Flow 1 now has consistently operated above 95% since the introduction of the ENP service.
- For the last three months Flow 1 has operated at 99-100%.
Flow 1 Presentations 1 to 15 June 2007

Flow 1 as demonstrated in the Statistical Process Control Chart below is now 100% capable of achieving the 4-hour target

The process is 100% capable of achieving the 240-minute target

Source data: EDIS

Future thoughts

What are the plans to spread the change?
Other similar sized sites are visiting to share experiences.

Is the change sustainable?
Yes, these changes are both embedded and continuously reviewed and improved.

Further information available from:
June Nelson, Sister A&E, Borders General Hospital
NHS Borders
June.nelson@borders.scot.nhs.uk

Laura Ryan, Clinical Lead, Borders Emergency Care Services
NHS Borders
Laura.ryan@borders.scot.nhs.uk
Developing the Nurse Directed Team at the Royal Infirmary of Edinburgh (RIE)

**Background**

The RIE Emergency Department is split into two functional areas: ‘Minors patients’ and ‘patients who require assessment/observation’. The minor injuries flow, runs between 08:00-20:00.

Minors performance has been previously characterised by high variation in compliance and breaches.

**Objectives**

- To introduce a dedicated nurse directed exam team
- To improve the flow of minor injury and illness patients
- To reduce the number of breaches in the minor injury and illness patient flow
- To match staffing capacity to demand to achieve a consistent service

**Approach**

A dedicated team was created by reconfiguring the existing staffing model. Capacity/demand analysis was undertaken to look at maximum, minimum and average workload.

Nursing staff are allocated on a 5-week basis, mapped to activity and available staffing levels. The team is led by the Emergency Nurse Practitioner with input from the Consultant in charge that day. The dedicated team is a nurse directed stream of care that provides a consistent high quality service to patients.

The team were empowered to deliver the service, and increased responsibility was given to the practitioners to manage the 4-hour patient journey.

Workforce capacity was reviewed and identified the need to increase training and provide support to allow practitioners to work to existing skills and competencies. Guidelines were also further developed. All of the above were achieved through local training and workshops which also supported the development of clinical support workers.
Findings and lessons learned

Queue Management
Managing the queue is an essential task: the queue starts when there is just one patient. Actions taken to manage the queue included:

• Having a staff meeting at the start of each shift
• Streamlining staff breaks
• Planning work to reduce repeated handovers
• Keeping the team informed when demand or acuity is building up
• Keeping patients informed

Measurable outcomes

• The team have been able to deliver a significant and sustained improvement in overall journey times and 4-hour compliance.
• Periodically, waiting times may increase as a result of staffing shortages, and some of the clinical spaces may be used as overflow for the busy trolley area.

Future thoughts

What are the plans to spread the change?
A modified local process has been adopted at the other A&E unit which has now streamed Flow 1.

Is the change sustainable?
The graphs demonstrate that the increase in Flow 1 has been sustained since the implementation in April.

Further information available from:

Suzie Robinson, Nurse Consultant, RIE
NHS Lothian
suzie.robinson@luht.scot.nhs.uk
Background

Driver for Change

4-hour emergency access target applies to emergency care in minor injury units or areas of assessment where trolleys are used.

There was a need to gather baseline data to understand the current waiting time within our own MIIU to ensure the patients were seen in a timely manner.

Objectives

- Gather baseline information about length of time to be seen in Minor Injury & Illness Units (MIIUs) across Tayside
- Ensure performance target of 98%, where patients are seen within 4 hours
- 90% of patients will be seen, treated and discharged or transferred within 60 minutes

Graph 1

Graph 2
**Approach**

**Initial Target Investigation**

During a 3-month period (December 2005 – February 2006) Minor Injury & Illness Units (MIIUs) across Tayside were asked to monitor their overall journey time against the 4-hour patient journey to gather timed attendance data.

Data gathered confirmed that the average time from arrival at an MIIU to discharge was 35 minutes.

**One week period w/c 30 Jan 2006 (5 MIIUs):**
- 142 attendances achieved 87%
- 19 breaches 13%
- Average time in department - 35 minutes
- Range of wait: 5 minutes - 3 hours 10 minutes

Following consultation with MIIU Managers and senior nurses, it was agreed to trial a 1-hour target for three months in these units.

**3-month period (May - July 2006):**
- Data from 4 MIIUs
- 5238 attendances achieved: 94%
- 292 breaches 6% - of 1-hour target

The reason for agreeing a 90% target was due to patients being referred from NHS24 to be seen by a GP. NHS24 allocated a time band in which patients require to be seen and it is currently not possible to reprioritise.

MIIU Managers are notified of breaches, for investigation and action on a monthly basis.
% of Patients Within 1-Hour Target (2006)

Reason for Breaches (July - Sept 2006)

- Ambulance transfer
- Department busy
- Waiting for doctor to attend
- Extensive treatment
- Telephone advice
- Waiting for transport home
- X Ray department closed
Findings and lessons learned

Achievement of 98% patients seen within 1 hour.

Data gathered confirmed that the average time from arrival at an MIIU to discharge was 35 minutes.

The 4-hour target was found not to be challenging enough, so following consultation with MIIU Managers and senior nurses, it was agreed to trial a 1-hour target for three months.

Ensure involvement of managers at earliest point to achieve buy in.

Crucial to have clear guidelines.

Gathering of activity and time date helps to support appropriate staffing levels at all times of the day.

Measurable outcomes

- Performance against the 4-hour emergency access target
- Performance against the 1-hour local target
- Analysis of breach data carried out weekly to identify common themes and information fed back to CHPs to ensure actions taken to resolve where possible, using collaborative methodology
- Monitor time to first contact and where necessary medical assessment

Future thoughts

What are the plans to spread the change?

Agreement was reached in May 2006 that all MIIUs in Tayside would adopt the 1 hour target as standard. Data are collected and forwarded to the Unscheduled Care Office on a weekly basis.

Further information available from:
Carol Goodman, Head of Capacity and Flow
NHS Tayside
Tel. 01382 660111
carolgoodman@nhs.net
SECTION 3: FLOW 2
Background

There was a general consensus for the need to both improve and standardise the assessment, monitoring and active management of the acutely ill patient.

Over recent years a number of individuals and groups had looked at this area of concern, exploring a number of approaches and systems, but had failed to secure agreement on the preferred methodology/system.

Objectives

With the support of senior clinical and managerial colleagues the Unscheduled Care Programme Manager was asked to look at the feasibility of introducing some form of ‘early warning system’ or standardised assessment.

Approach

Utilising the networks established through the UCCP and the Strategic Clinical Leadership Programme ‘Delivering the Future’, we were able to rapidly identify the systems in use, gain practical insights into the advantages and disadvantages of each system/approach and potential barriers for implementation.

With the support of a number of key clinical staff it was decided to undertake a rapid change process (PDSA) and introduce the Scottish Early Warning System developed by NHS Lothian, but utilise the modified form developed by NHS Highland, which included a number of other commonly used assessment systems all within the same form.

The principal of a rapid change was supported by Ward Managers, Clinical Support Nurses, Consultants and Senior Managers. The document was circulated electronically and we undertook a specific email discussion process to modify the decision/action flow chart to reflect the local circumstances.

From initial networking, identification of preferred system and tailoring of decision/action flow chart to implementation took just five weeks. The new system was introduced on 25 December 2006 in the A&E Department, across six general wards and all medical and surgical specialties. This included: High Dependency Unit, General Surgery, Orthopaedics, Gynaecology, General Medicine, Care of the Elderly, Rehabilitation, Stroke Unit, Intermediate Care and Care of the Elderly with mental illness and the A&E Department. Obstetrics and Paediatrics were excluded.

SEWS Assessment Form
Findings and lessons learned

• Make the best use of expertise around you
• Team work, co-operation and the readiness to be flexible
• Rapid change can be daunting but seeing rapid success is highly rewarding

Outcomes
The introduction of this assessment and monitoring system has already had a significant impact, specifically in respect of:

• Improved clinical practice (clear evidence of more thorough assessment and monitoring)
• Improved understanding of the need for monitoring and standardisation of approach
• Improved decision making (evidenced through feedback from clinical staff and individual case studies)
• Removal of duplication and potential for errors (at least four separate assessment forms are now obsolete, all staff can see latest status in one comprehensive and highly visible, easily readable form kept at the patients bed side)

Improved confidence in securing appropriate clinical response and clinical decision making.

Future thoughts
What are the plans to spread the change?
To remove all obsolete forms from wards and departments and move from the temporary system of colour photocopying forms to having the form commercially printed.

To explore the potential for introducing the SEWS form into other clinical documentation, e.g. Surgical Post Operative Monitoring Sheets.

Building upon this experience, to explore with clinical colleagues the potential for further rapid change exercises.

Further information available from:
Stephen Moore, Programme Manager
Unscheduled Care and Planned Care
NHS Western Isles
Mobile: 07900697059
stephen.moore@wihb.scot.nhs.uk
Background

Some of patient delays in A&E department were as a consequence of awaiting results from the laboratory.

Following early diagnostic phase in Lorn & Isles District General Hospital (LIDGH), it was identified that for the month of September 40% of the patient delays in the A&E Department were as a consequence of awaiting results from the laboratory. Staff were new to the Collaborative. It was agreed that this would be a good opportunity to involve and introduce them to the approach being taken to make improvements.

Process mapping was undertaken between A&E and Labs Department and various PDSA cycles carried out.

Objectives

- Reduction in length of time for bloods from A&E being analysed
- Reduction in length of time for A&E staff to receive blood results
- Increased knowledge of A&E staff for expected analysis waits
- Improved communication between lab and A&E staff
- Development of knowledge regarding the use of PDSAs to support improvements across the departments

Approach

- Process was mapped noting action and time for each step from the taking of a blood sample through to the result being obtained.
- Process was presented as a picture storyboard and staff asked to comment where they felt improvements could be made.
- Picture storyboard used to bring some life/reality into a process and also to introduce the effectiveness of such a tool to the staff.
- PDSA cycles used as a way of encouraging staff to try out new ideas
- Following change staff were asked to provide feedback
Findings and lessons learned

Dealing with this process has enabled staff to experience that small changes to improve a process can reduce delays and bring about improvements for patients as well as joint working.

- The issue was mainly focussed just across two internal departments.
- Initially ringing the bell created some extra work for staff.
- Identifying urgent bloods from A&E allowed these to be prioritised.
- Changes implemented commencing 8th January, improvements still being monitored.

Challenges

- Communicating proposed changes across all staff
- Recruitment of new staff
- Rotation of hospital doctors
- Staff pressures within the laboratory
- Small volume of patients requiring bloods at time of process mapping
- Staff training to use computer based systems to access blood results

Measurable outcomes

- With improved communication systems can be made more efficient
- For changes to be sustainable they need to be formalised within the organisation eg. doctors induction information will now include advice on marking bloods in A&E as ‘urgent’
- Dealing with this process has enabled staff to experience that small changes to improve process can reduce delays and bring about improvements for patients as well as joint working
- Staff now able to access blood results electronically
- Staff now have an idea when a blood result should be available for checking
- Staff across labs and A&E have used PDSAs to implement change
- Regular fortnightly staff meetings now established in A&E department

Future thoughts

What are the plans to spread the change?

Review process across all A&E sites across Argyll and Bute.

Service Improvement Manager to continue to monitor:

- Reduction in telephone calls requesting for results from A&E
- Impact on staff of bell ringing
- Marking of A&E bloods as urgent to ensure that these are prioritised
- Information leaflet developed for blood analysis timings

Is the change sustainable?

Yes, as long as the following are in place:

- Staff training to ensure competency/confidence using IT system for accessing blood results
- Reminders also entered into staff communication book
- IT training to be included in new staff orientation policy

Further information available from:

Clare Hiles, Service Improvement Manager
Aros, Lochgilphead
NHS Highland
Tel. 07760327324
c.hiles@nhs.net
Background

Detailed analysis of Flow 2 data showed that a significant factor in failing to achieve 4-hour target for Flow 2 patients was a wait for diagnostics in general and X-ray plain films in particular with a wait for X-ray of 2 hours not unusual. The overall 4-hour performance for Flow 2 had remained static at 91-92%.

The overall development plans for A&E and Radiology department include a dedicated X-ray facility in A&E to service A&E and orthopaedic out-patient requirements. In the overall plan the facility would deliver the same number of X-ray rooms as currently available.

Objectives

- A decision was taken to test the hypothesis that the planned facility for A&E would improve the patient flow by dedicating one of the current X-ray rooms over to A&E and orthopaedic out-patient stream.

Approach

Information regarding the detailed analysis and outcomes were presented to the Radiography department and options for improvement were discussed.

The Radiography department was operating a single queue basis within the department with a mix of patients from A&E, wards, out-patients, dental and GP referrals with some triage of urgency being undertaken by a senior radiographer for the day and otherwise the next patient being taken to the next available facility for X-ray.

The queue consisted of patients of differing complexities and the department was being overwhelmed by GP referrals attending without appointment in the morning period resulting in a backlog of patients from mid-morning.

Upon discussion it was agreed that the majority of X-rays from A&E were fairly straightforward but there was insufficient activity to develop an A&E stream through X-ray alone so it was decided to test a dedicated stream of A&E and orthopaedic out-patients (as was planned for the future development within A&E).

Results

Dumfries and Galloway Royal Infirmary – Flow 2
Average Length of Stay in A&E Department, 6/11/06 to 25/01/07

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X-Ray streaming

Average Time in A&E Department (mins)
Findings and lessons learned

- Concerns from staff were expressed about feasibility of proposal working.
- Demonstrated queue theory, single queue is deemed to be most efficient.

Measurable outcomes

Data was extracted from the local A&E database from 06/11/2006 to 25/10/2007 for all Flow 2 attendances. This provided 12 weeks comparative data and 6 weeks data during the PDSA. The mean time in the A&E department and the percentage of patients within the 4-hour target was calculated on a daily basis. Run charts were produced to demonstrate whether a dedicated A&E stream in X-ray has had an impact on Flow 2. Mean time in the A&E Department for Flow 2 patients has reduced from 123 mins to 108 mins and the above chart demonstrates that there is slightly less variation from day to day from 92% to 95.5% during the period of the PDSA.

Future thoughts

What are the plans to spread the change?
The dedicated A&E stream within X-ray will continue and dedicated GP appointment flow has been established.

Further information available from:
Joan Pollard, Acting Programme Manager/Service Improvement Manager
NHS Dumfries and Galloway
j.pollard@nhs.net
FLOW 2
NHS TAYSIDE – PROACTIVE RAPID ASSESSMENT OCCUPATIONAL THERAPY (OT): IMPROVING PATIENT FLOW AT PERTH ROYAL INFIRMARY (PRI)

Background
- To evaluate the benefits of a rapid assessment OT service to A&E/medical admissions
- Historically no rapid assessment OT
- NHS Quality Improvement Scotland (QIS) standards/Unscheduled Care Collaborative Programme

Objectives
- Prevention of admission
- Proactively facilitating earlier discharge
- Improving quality of discharge
- Multidisciplinary team approach
- Accessing home support
- Patient focus/public involvement
- Measuring benefits

Home Support Services Utilised for Discharge Home and A&E
- CRT
- S/W Home Care
- Falls Clinic
- None
- ESD
- S/WOT

60 CRT
6% S/W Home Care
6% Falls Clinic
12% None
24% ESD
12% S/WOT
40%
Approach

• 2 Phase approach: 1st Phase = 4-month pilot project, 2nd Phase = 5-month pilot
• 0.5 Senior I OT
• Screened patients in A&E/Medical Surgical Admissions Unit
• OT assessments completed
• Relevant risk factors identified
• Recommendations made for transfer/discharge
• Support services and/or further rehab needs identified and activated seamlessly
• Seek feedback on patient satisfaction
• Seek feedback on carer satisfaction

Findings and lessons learned

• Initial findings clearly demonstrated the impact of the role, with the average length of stay for patients being seen by an OT reduced from 13 days in 2004/2005 to 8 days in 2006/07
• 23 patients were discharged directly from A&E
• 171 patients were discharged directly from Medical/Surgical Admissions Unit
• High patient, carer and staff satisfaction with service
• Direct access now available from OT to home care services

Measurable outcomes

• 100% patient satisfaction
• 100% carer satisfaction
• 90% MDT satisfaction
• OT direct access to home care
• Reduced ALOS for patient requiring OT input
• Increased number of patients discharged directly from A&E

Future thoughts

Is the change sustainable?

Yes. As a consequence of 1st and 2nd Phase findings, service re-design has enabled a permanent and sustainable post for Medical/Surgical Assessment Unit and A&E at Perth Royal Infirmary.

Further information available from:

Crispin Oakley
Community Liaison/Occupational Therapist
NHS Tayside
crispinoakley@nhs.net
Background

The Clinical Decisions Unit (CDU) at Crosshouse Hospital commenced operation on 28 November, 2006. Selected medical emergency patients are managed on Clinical Care Pathways by Emergency Department (ED) staff, by a combination of short-stay in-patient and ambulatory care. Initially, 5 pathways were in operation. This has now expanded to 6, with a further pathway in development.

The Unit provides a firm basis for further development of ambulatory care.

Current pathways are:

- Non-Traumatic Chest Pain (NTCP)
- Hypoglycaemia (HYPO)
- Cellulitis
- Suspected Pulmonary Thromboembolism (PE)
- Suspected Deep Venous Thrombosis (DVT)
- Minor Upper Gastrointestinal Haemorrhage

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<td>0.13</td>
<td>53.5</td>
<td>3.76 hrs</td>
<td>5.8 days</td>
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Table 1 - length of stay per pathway

Objectives

- to manage strictly selected patients with low clinical risk in a way that identifies those who require subsequent medical in-patient care
- allow access to rapid senior clinical decision-making
- rule-in or rule-out a diagnosis
- make best use of resources
- reduce length of stay
- employ evidence-based management

The focus is to maintain rapid turnaround of essential investigations, thus leading to speedy diagnosis and discharge or referral as necessary. This reduces the pressure on Acute Medical Admissions Unit (AMAU) beds. Unified multidisciplinary documentation reduces duplication, and inclusion of a unit pharmacist, pharmacy technician, and enhanced role nursing staff in the team adds value for the patient.
**Approach**

Clinical Care Pathways were drawn up by multidisciplinary teams, each headed by a Medical Consultant from the relevant specialty. Teams included Emergency Department Consultants and Staff Grade Doctor, senior nursing staff, Clinical Care Pathways Facilitator, and representatives from labs, radiology, cardiology technicians, etc. Pathways were based on best available evidence.

A six-bedded area with space for ambulatory care accommodation was converted from a former endoscopy suite. Enhanced role nursing staff are employed to manage the pathways, with 4 times daily decision-making rounds by the ED Consultant and support from a Staff Grade Doctor. Focussed diagnostics were made available by discussion with relevant departments when the multidisciplinary teams drew up the Clinical Care Pathways. Referral to medical consultants is available should this be required.

A dedicated pharmacist and pharmacy technician are available to dispense drugs and participate in the decision-making round. Patients Own Drugs (PODs) is also being piloted on this site.

**Findings and lessons learned**

Emergency care has effectively been realigned for this group of patients.

ED staff have enjoyed the challenge of expanding their scope of care to a new patient group.

Inclusion of pharmacy staff in the team has been invaluable from the point of view of safer prescribing and patient counselling for medications, as well as lifestyle advice and telephone follow-up of patients who have been prescribed new medications.

**Measurable outcomes**

Results 28/11/05-27/11/06 (1 year)

1. Number of admissions to CDU 1555
2. Number of out-patient reviews 2000
3. Number of patients admitted to medical unit from CDU 206
4. CDU patients as seen as a percentage of medical take over for the year – 14%
5. The percentage of CDU patients admitted to beds from the Unit – 13%

Patient satisfaction is high, as evidenced from patient experience questionnaires.

**Future thoughts**

What are the plans to spread the change?

Experience and data from CDU set-up have been shared extensively with staff from other boards to allow the innovation to spread. Many NHS Boards across Scotland have sent teams to visit the Unit to see the change in action. Presentations on the activity and outcomes of the Unit have been made at national and international meetings.

Is the change sustainable?

CDU is now established as part of the Emergency Department core workload.

A further pathway for renal colic is nearing completion. Plans for further pathways are in development.

**Further information available from:**

Dr Veronica Devlin, Crosshouse Hospital
NHS Ayrshire & Arran
Veronica.Devlin@aaahsc.scot.nhs.uk
BACKGROUND

From the evaluation of the PDSA around Flow Coordination in A&E, issues had arisen around patients being held in A&E when no beds were available in the Acute Medical Admissions/Assessment Unit (AMAU). This delayed assessment and caused congestion in the system. It was decided to introduce a four bedded triage/assessment bay in AMAU that supported the continuous flow of patients that required acute medical assessment and an early senior clinical decision in terms of ongoing treatment.

OBJECTIVES

- Reduced waiting times in A&E for Flow 3 patients awaiting admission
- Improved patient pathway for initial assessment
- Patients arrive in a phased and controlled manner to AMAU

APPROACH

The triage bay was opened 9 a.m. – 5 p.m. Monday to Friday and the flow/clinical coordinators facilitated the immediate patient transfer to this area on arrival to either acute admission or A&E. Data was collected around the length of wait in A&E for a bed to establish the baseline for measuring any improvement. A nurse practitioner for acute medicine was put in place to work within the triage bay and to commence the assessment process and arrange preliminary diagnostics to assist medical staff in early clinical decision making in terms of admission/transfer to the appropriate specialist area or discharge.
**Findings and lessons learned**

- The pilot has improved the patient journey and ensures patient admissions are fast-tracked.
- The bay has reduced the number of patients in A&E who are at risk of breaching the 4-hour target.
- Working relationships between A&E and AMAU have improved significantly as a result.
- Further evaluation is necessary but early indications are that earlier senior clinical assessment improves decision making, patient outcomes and reduces length of stay.

**What would you do differently next time?**

- Consider varying opening times
- Review location and closer clinical adjacency to A&E

**Measurable outcomes**

- Reduction in Flow 3 breaches
- Reduction in overall breaches relating to “wait for bed”
- Improved flow
- Rapid assessment and early clinical decision making
- Increased discharges from AMAU

**Future thoughts**

*What are the plans to spread the change?*

It is anticipated that we will utilise an area in AMAU on QMH site to enhance model of care and stream patients in a similar way. In addition, encourage specialist areas to assess and diagnose patients in an effective and timeous manner by identifying areas in wards that can be used for this purpose to avoid patients being automatically admitted without initial senior clinical assessment.

**Is the change sustainable?**

Additional resource is required to support this model. The pilot has incurred additional expenditure for nurse practitioner input and would be required on a permanent basis to sustain this model of care.

**Further information available from:**

Andrea Fyfe, Directorate Manager Medicine
NHS Fife
Tel. 01383 623623 Ext 8149
Andrea.Fyfe@faht.scot.nhs.uk
Background

The introduction of the 4-hour emergency access target was the catalyst for looking at the current arrangements for the streaming and processing of acute medical admissions through the Emergency Department (ED). Prior to this date 2 referral paths existed for medical patients:

- Direct GP referrals were accepted by the Medical SHO
- Self presentation at ED, where a decision to admit/discharge was made

Patients who self presented were seen and treated by ED staff initially and where the ED doctor considered admission to be necessary, the patient was referred to the medical SHO who performed a second assessment prior to admission – this assessment was not related to bed availability. The decision to introduce a new system for medical patients aimed to reduce this duplication of work. A previously published study conducted within the GRI had demonstrated that ED doctors were equivalent to their medical counterparts, in terms of appropriateness in deciding to admit medical patients.

Objective

Introduction in August 2005 of a Common Medical Pile for medical admissions at GRI to facilitate reduction in time taken to decide to admit patients.

Approach

A ‘one patient, one doctor system’ was introduced in August 2005. All patients are assessed at triage and the medical presentations, whether GP or self-referred, are queued for assessment/treatment based on their triage score in a “common medical pile”.

One medical SHO is based in the department and works with the ED doctors to see patients from the common medical pile. When it is decided by either a medical or ED doctor to admit a patient, a referral is made to the second on SHO who is based in the Acute Medical Receiving Unit (AMRU). They act as gatekeeper and arrange for transfer to the ward where they continue management – they do not review patients in the ED.

- Audit of the effects of the changes implemented undertaken late 2005
- Bed availability assessed using the numbers of medical boarders in each month as an index of demand
- A hand search of the ED notes for all attendances was undertaken
- Medical patients were selected based on triage assessment and notes checked for the relevant data
Findings and lessons learned
• Unnecessary layer of medical assessment has been removed from process
• The patient journey has improved
• More even use of medical resources
• Improved integrated working

Measurable outcomes
• Reduction in length of waits for all medical patients

Further information available from:
Dr T Kelliher, Specialist Registrar
Emergency Department, Glasgow Royal Infirmary

Dr A Ireland, Clinical Director
Emergency Department, Glasgow Royal Infirmary
Background
Pharmacy staff have been engaged in many improvement projects across all 5 flow groups, across both sites. Over the first year of the Collaborative, pharmacy staff felt that there was a need for a subgroup into which all the other flows could feed, rather than the other way round. This would reduce duplication of effort, and allow a focus on improving pharmacy processes specifically. Work from this group could then be owned by pharmacy staff, rather than having suggestions for improvement coming from several external groups. A pharmacy subgroup was therefore developed from Flow 3, but having a remit across all flows where there were prescribing issues to address. The focus would be on improving discharge processes to increase achievement of morning discharge throughout the organisation.

Objectives
• To better understand pharmacy systems on both sites
• To streamline the interaction between pharmacy, wards and the discharge lounge
• To achieve more timely discharge prescriptions to enable Estimated Dates of Discharge (EDD) to be met, and morning discharge achieved
• To work to improve pharmacy support for junior doctors to improve accuracy and safety of prescribing
• To address bottlenecks within the pharmacy process itself and modify working practice to improve turnaround times

Approach
The group looked at the interface with the discharge lounges on both sites to identify where systems could be improved. High level process mapping was carried out for discharge prescriptions on both sites, to better understand the system. Tracking of real time discharges was carried out on both sites to identify potential bottlenecks.

As a result, a better understanding of systems has emerged, with a will to improve and streamline processes. Several areas of training requirement were identified, as well as several communication issues which required to be addressed.

Further training in how to use the electronic prescribing system (JAC) at Ayr was needed for staff on wards and in the discharge lounge.

All general medical and surgical ward areas were visited on both sites, and issues such as lack of awareness of last pick-up times for pharmacy porters, were highlighted. The need for photocopiers on wards at Crosshouse was identified, as this is a vital part of speeding the process of discharge dispensing. A copy of the in-patient medicine chart makes the pharmacy process quicker.

Ward compliance with EDD, and use of the discharge lounge was also scrutinised as part of this work, and the opportunity was taken to highlight suitability of patients for the discharge lounge with ward staff.

Training needs for junior medical staff were identified, with regard to prioritisation of discharge, and accuracy and timeliness of prescription writing.
Findings and lessons learned

- Discharge processes, and pharmacy processes differ on both sites.
- Scope for greater pharmacy involvement in support of junior doctors with prescribing in general, and discharge prescribing in particular.
- Attention to internal pharmacy systems may allow streamlining of processes and a reduction in turnaround time.
- Prescription writing is not a core competency for continuous workplace assessment for junior doctors. Further work and support in this area is required.
- Streaming of work within the dispensary at Ayr may enable faster turnaround of discharges if out-patient workload can be carried on in a separate stream.

What would you do differently next time?

Start out with a specific pharmacy subgroup from the start of the programme.

Measurable outcomes

- End-to-end process mapping for discharge prescriptions has been performed on both sites
- Photocopiers are being supplied for ward areas at Crosshouse
- Focussed training for FY1 and FY2 doctors has been developed in conjunction with pharmacy, to improve understanding of discharge processes, improve accuracy of prescribing and reduce rework in pharmacy
- JAC system training needs have been addressed
- Ward areas have updated notices with pharmacy porter pick-up times
- Together with the Postgraduate Tutor at Crosshouse, a working group is being established to address individual prescribing performance with junior doctors and provide support and feedback where necessary as part of a larger patient safety initiative

Future thoughts

What are the plans to spread the change?

Ongoing education programmes for junior doctors performed jointly with medical staff and pharmacists will continue as part of dedicated teaching programmes.

Is the change sustainable?

Work in this group is ongoing, and as this is owned by the staff of pharmacy, the likelihood of continuous improvement is increased.

Further information available from:

Dr. Veronica Devlin, Crosshouse Hospital
NHS Ayrshire & Arran
Veronica.Devlin@aaaht.scot.nhs.uk
FLOW 3
NHS GREATER GLASGOW & CLYDE – DEVELOPING FOCUS FROM A MEDICAL RECEIVING WARD TO AN ACUTE ASSESSMENT UNIT (AAU) USING A MULTI-DISCIPLINARY APPROACH

Background
With increasing numbers of attenders at the A&E Department and a consequent increase in emergency medical admissions there was a need to change the ethos of the unit to reduce patient length of stay and increase throughput whilst maintaining the highest standard of clinical care.

Objectives
- Develop the focus from a medical receiving ward to an Acute Assessment Unit using a multi-disciplinary approach

Approach
The change implemented took place at differing levels. Discussions with the staff in AAU had a twofold effect:

a) it confirmed their desire and commitment to improve the receiving process
b) they highlighted many areas that were bottlenecks in the system. This was not a formal mapping procedure but a more informal discussion from which the greatest issues were refined, defined and targeted.

Each of the issues identified were discussed with the relevant multi-disciplinary functions to agree the way forward.

From these meetings small scale pilots were set up and taken forward by the individuals who had highlighted the issues. Those that worked were progressed and modified where needed. Those that didn’t were either modified and adapted or scrapped.

As changes began to impact positively this in turn had a positive impact on morale and the support from within the unit for the process.

Evidence – sickness levels returning to normal

Turnover of patients – it was agreed with the bed management team that available beds would be highlighted to the unit between 0730 and 0830 each morning.

Patients who had been reviewed during the previous evening ward round were organised to be transferred rather than be reviewed again.

This required flexibility and responsibility on behalf of the nursing staff whose role became ever more valuable in the decision making process of patient care.

Portering – In conjunction with this, following discussion with Support Services, a dedicated portering service for the unit was introduced at identified peak periods of transfers. As transfers began to occur earlier in the day the start time of the portering service changed with it. These ring fenced porters ensured that patient transfers were performed as soon as they were organised and patients were not batched.

Bed management – Bed management were encouraged to take a more active role within the unit.

This involved identifying beds for the unit as early as possible and helping to overcome issues that arose e.g. staff in the unit being told by ward staff beds were not ready or available when the information from the bed manager stated they were.

This also involved actively taking patient details to wards who were unable to take details as they were too busy.

Floor Controller – designated nurse role to co-ordinate admissions and discharges through the ward in conjunction with bed management and multi-disciplinary teams.
Specialist Teams – The input of specialist teams was also reviewed and from this a number of initiatives were started:

a) DOME (Department of Medicine for Elderly) triage: recognising the importance of early intervention linked with the availability of medical staff a new DOME triage protocol was devised in conjunction with DOME. This brought medical DOME triage earlier and more definitively during the day and also recognised the role of the nursing staff as they participated and supported DOME by taking on the triage role outwith the times that medical staff were available.

b) Cardiology: There already existed a North Glasgow University Hospitals Division (NGUHD) troponin service which was organised and run by cardiology nurse practitioners. The troponin service was reviewed in conjunction with haematology which led to a more lean and understandable service for all disciplines within the AAU.

c) Angiography: the angiography service was reviewed as it was found that many cases were being cancelled late in the day with the result that patients were being kept in the unit for angiography the next day who in turn were being cancelled again.

d) Haematology/DVT: all outpatient DVT returns are reviewed in a central area in Ward 43 where previously different groups were in different areas. We are now progressing the development of a specific clinical area for this group of patients and develop a more nurse-led comprehensive service.

Findings and lessons learned

- Positive impact on morale of staff within the unit
- Patients appropriately discharged at the right time
- Improved use of beds within the unit
- Improvement on patient transfers to appropriate beds at appropriate time
- Development of nursing role
- Improved service for DVT patients

Challenges faced

- Changing patterned behaviour
- Communicating concept and purpose of unscheduled care to relevant stakeholders
- Securing the commitment to the proposed changes of the relevant staff groups

Measurable outcomes

- Improvement in sickness levels and reduction in turnover of staff
- Reduction in length of waits for beds within A&E
- Reduction in length of stay for patients who required angiography

Further information available from:

Derek Nelson, Lead Nurse, A&E
NHS Greater Glasgow & Clyde
Derek.Nelson@northglasgow.scot.nhs.uk

Sarah Murray, Ward Manager, Acute Medicine Emergency Medicine, Glasgow Royal Infirmary
NHS Greater Glasgow & Clyde
Re-designing the system of Discharge Planning at St John’s Hospital (SJH).

**Background**

The model of discharge planning in medical wards was felt to be short lived and unsustainable. It relied too heavily on the discharge facilitator and wards did not seem to take ownership of the discharge planning process.

Could the model be altered to focus on Ward based staff?

**Objectives**

Support the spread and sustainability of three key aspects of Discharge Planning:

- Estimated Date of Discharge (EDD)
- Criteria Led Discharge (CLD)
- Discharge Traffic Lights.

**Approach**

A scoping exercise was undertaken with the Charge Nurses across the Medical Directorate.

Training and development for 6 Charge Nurses (CN) and 13 Staff Nurses comprising of 3 core study days with 2 additional study days for the staff nurses to complete four identified projects; PDSA, Patient Story, Observation of Care and a shadowing opportunity.

The study days focused on the following themes; UCCP and the 4-hour target, Estimated Date of Discharge, Criteria Led Discharge, Discharge Traffic Lights, Roles of the Multidisciplinary team, Team Building, Attitudes and Patient stories.

Speakers from various disciplines including Social Work, District Nurse Liaison, Moving into Health, Pharmacy, Supported Discharge and Re-enablement Team were invited to present on their role and responsibilities in the patient journey from admission to discharge. These presentations were invaluable in developing and maintaining effective relationships within the multidisciplinary team and other agencies.

All of the CN’s had already completed the RCN Clinical Leadership Programme, which provided the skills to lead and support the developments.

Members of the team undertook at least one set of PDSA cycles. Some CNs also initiated PDSA’s within their own clinical area. PDSA’s carried out included: Review timing of ward rounds, Prioritisation of patients on rounds, Discharge checklists, EDD documentation, Results reporting, Discharge prescriptions, Discharge Lounge usage, Implementation of a ward Co-ordinator.
Findings and lessons learned

- Change management is a slow process even with a high level of enthusiasm
- One of the barriers to change included the number of recent changes in the department and the reporting of “change fatigue”
- The bottom up approach of engagement of the clinical leaders was a fundamental key component of the success of the project with empowerment and development of staff to realise that they can impact upon patient, client care and services
- Engagement of the whole team, especially medical staff is crucial if discharge planning is to be successful

Measurable outcomes

- Increased understanding and a change in clinical practice
- Increased uptake in completion and accuracy of EDD and CLD

Future thoughts

What are the plans to spread the change?

- The system and process have been successfully implemented at the 2 other adult sites in Lothian – Royal Infirmary of Edinburgh (RIE) and Western General Hospital (WGH).
- The team have presented at the Lothian hosted UCC Regional Networking event to spread the methodology to other Health Board areas.

Is the change sustainable?

- The Charge Nurses have taken responsibility/ownership of the project which has had a significant positive impact upon its sustainability.

Further information available from:

Linda Conway, Discharge Facilitator, SJH NHS Lothian
Linda.Conway@wlt.scot.nhs.uk

Lynn Struthers, Service Improvement Manager, SJH NHS Lothian
Lynn.Struthers@wlt.scot.nhs.uk

<table>
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<th></th>
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<th>CLD Completed and Signed (%)</th>
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<td>50</td>
<td>70</td>
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<tr>
<td>Feb 07</td>
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To be able to predict when and how many patients are likely to be discharged from hospital.

**Background**

Prior to Estimated Discharge Dates (EDD) being introduced, medical wards within the Clyde area had no means of formally gauging when patients were likely to leave hospital in advance of their discharge. This made the overall collective management of beds very reactionary, as well as the individual discharges being more difficult to plan for.

**Objectives**

- A mechanism to be able to accurately future plan for discharge was necessary in order to reduce “fire fighting” against bed pressures
- To enable a smoother process of discharge for patients and relatives.

**Discharge Checklist**

```
DISCHARGE CHECKLIST
Date of Admission to Ward: ____________
Expected date of discharge: ____________ Date set: ____________
Relatives/carer/friends informed? Yes □ No □
Transport arranged: Own □ Booked □ Expected time of arrival: ____________
Ambulance Booked □ Expected time of arrival: ____________
Medication: Own □ New medicines and medication list □
Transfer Letter □
Social Services □ Referral date: ____________ Assessment date: ____________
OT □ Referral date: ____________ Assessment date: ____________
Physiotherapy □ Referral date: ____________ Assessment date: ____________
Other □ (please specify) Referral date: ____________ Assessment date: ____________
Actual date of discharge: ____________
Transfer to discharge lounge: Yes □ No □ Time: ____________
Reasons for difference in expected date of discharge and actual date of discharge (please tick as applicable)
Diagnostic capacity – delays due to lack of services (eg MRI/CT scan) ____________
Waiting for test results ____________
Waiting for medical review for discharge ____________
Medical consultant delay ____________
Allied health delay (referral too late/unable to respond to request) ____________
Referral to community provider/s made too late ____________
Patient waiting for supply of: Consumables/equipment ____________
Medication ____________
Transport ____________
Other health facilities (no bed available) ____________
Palliative care/hospice ____________
Rehabilitation ____________
Care nursing home (high care) ____________
```
**Methodology:**
An EDD pilot was introduced by the consultant and charge nurse in one of the medical wards at the RAH. The checklist (as pictured) was kept at the front of the patient’s notes and the EDD was also prominent next to the patient’s name on the ward plan. The assigned consultant would fill in the EDD. The checklists were updated by ward staff and collated at the end of a set timeframe. In time, we were able to use information regarding predicted admissions and the numbers of likely discharges to provide the bed management team with an accurate picture of when beds would be under pressure ahead of time.

The pilot was rolled out to the other Medical wards at the Royal Alexandra Hospital (RAH) with agreement from senior clinicians and nurses involved before becoming adopted as normal working practice.

**Impact:**
The impact of implementing the EDD and all the processes that go hand in hand with it, can also be seen to have had a positive effect on bed availability and bed turnaround.

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**Graph 1**

Royal Alexandra Hospital
Percentage of medical patients admitted within 4 hours of arrival at A&E

[Graph showing percentage of patients admitted within 4 hours of arrival at A&E with dates and days of the week marked.]
Graph 2

Royal Alexandra Hospital
Percentage of medical admitted to a bed within 30 mins of ready for discharge from A&E

Day

Percentage of patients

0.0 20.0 40.0 60.0 80.0 100.0 120.0

EDD rolled out across General Medicine
Future thoughts

**Spread:** Following the initial pilot at the RAH the EDD was rolled out to the other acute sites within Clyde-Inverclyde Royal Hospital and the Vale of Leven Hospital. The plan underwent minor local adjustments and was again piloted then adopted as policy at each site. The predicted status of each site within Clyde can now be used to create cross-site earlier management of bed pressures.

**Future:** EDD will soon be adopted in some surgical areas where there are no other systems of predicted discharge in place. Also, the introduction of comparative length of stay data is hoped to further impact on how inpatient activity and flow through our hospitals is managed. Some work surrounding patient and relative information is being developed in order to include time of day discharge information and responsibilities regarding transport home.

**Sustainability:** At present the process of setting and displaying EDD in medical wards is becoming part of normal working practice at all three sites. It has not been without its critics; however, its success has been particularly noted in areas where clinicians have gained confidence in its use. There is measurable evidence to suggest that it has improved patient flow, significantly reduced bed occupancy levels and there is anecdotal evidence of increased satisfaction from patients and both frontline and managerial staff.

Further information available from:

Dan Anderton, UCCP Programme Manager
NHS Greater Glasgow and Clyde
Tel. 0141 314 7102
Daniel.Anderton@rah.scot.nhs.uk

John Gomez, UCCP Information Manager
NHS Greater Glasgow and Clyde
John.Gomez@achb.scot.nhs.uk
Background
Each month in 2006 breach analysis of Flow 3 (Medical Admissions) patients at Ayr Hospital revealed ‘Wait for a Bed’ to be the top cause of breach. This was also the second cause of breach for Crosshouse Hospital medical admissions.

The existing method of managing bed wait issues was for the General Manager for Medicine to meet fortnightly with bed managers, surgical general management and any other interested parties to discuss what the bed problems had been over the preceding two weeks.

Capacity and demand analysis had not been undertaken and no forecasting of future demand was attempted.

Real-time Bed Occupancy System

Objectives
- To identify and address mismatches between peak times/days of admission and discharges
- To make bed occupancy information real-time giving an accurate picture of hospital capacity
- To plan for peaks in activity and take pre-emptive action
- To change the focus of the organisation to one that starts discharge planning from time of admission

Predictor model
The Predictor marries planned admissions with predicted emergencies and forecast discharges to provide a picture of potential bed capacity problems. This in turn triggers the escalation policy.

As each patient approaches their Estimated Date of Discharge their name turns from Green, to Amber and finally Red if they miss their EDD
Approach

A piece of work was initiated to look at the time of arrival patterns and volumes of patients arriving and admitted through A&E. Simultaneously an audit of all wards (surgical and medical) on both main sites (Ayr and Crosshouse) was conducted detailing times of discharge, and if appropriate, any reasons for discharge after midday.

This work showed that the peak of attendances took place on a Monday, usually around 12 – 1pm; however all but 15-20% of discharges took place after midday and often into the evening, and rarely on a weekend.

Following a particularly awful Monday the UCCP team sought support from the Director of Hospital Services to form a Strategic Bed Management Group to look at making some fundamental changes to bed management practice to address these issues amongst others.

This group has now been instrumental in launching:

- A real-time Bed Occupancy System showing which beds are occupied and upcoming estimated dates of discharge
- Estimated Date of Discharge as an organisational requirement across all wards on both sites
- A Predictor Model showing likely attendances at A&E together with Medical and Surgical admissions expected over the week ahead. This is now being refined into a ‘Total Predictor’ which will pull together the predicted emergencies with the know electives and expected discharges to form a complete picture of likely bed capacity
- A draft Escalation Plan for adoption when bed shortages are highlighted
- Pro-active Patient Flow meetings each week that look at not only the current position but also at the forecast for the weeks ahead and plan pre-emptive actions, e.g. additional ward rounds, diversion of patients to community rehabilitation and additional staffing/changes to skill-mix on wards and in A&E.

A lot of time and effort has gone into communicating the benefits and need for compliance with all staff groups. This ranged from presenting at Consultant Specialty meetings to Directorate Management meetings and drop-in sessions for all staff. Targeted training sessions for staff using the Bed Occupancy System were also put in place.
Findings and lessons learned

Although EDD has been implemented, there remains a need to reinforce and revisit this to ensure that dates are kept as realistic as possible. The benefits of the visibility of EDD on the Bed Occupancy System at Ayr are clear, as the implementation of EDD has stumbled at Crosshouse where there is no Bed Occupancy System as yet. A system that will integrate with the Patient Administration System (PAS) will, however, be piloted shortly at Crosshouse.

In order to address the particular problem of Monday morning peaks of attendance against a backdrop of afternoon discharges, initiatives are now underway using Nursing Auxiliaries to do all the preparatory work for patients on a Sunday to allow early discharge on Monday. Simultaneously the challenge has been set to ward staff to achieve Sunday discharge where the discharge is simple and no complex home care arrangements are required.

The impact of all this activity has been to significantly reduce the number and percentage of breaches that occur due to ‘Wait for a Bed’.

What would you do differently next time?

Despite intensive communication and education sessions on the use of EDD, accuracy and uptake remains variable, particularly at Crosshouse Hospital. With hindsight it should have been made clear from the outset that this was an organisational objective and would be subject to performance management. This has now been addressed.

Future thoughts

What are the plans to spread the change?

Engaging staff from the Director of Hospital Services to ward clerks, nursing staff, AHPs and beyond on the drivers for change and the benefits of the change proposed, has hopefully resulted in greater understanding by all.

To ensure sustainability an operational hospital group has now taken on responsibility for identifying areas where EDD or morning discharge are proving difficult and working through solutions with all concerned.

Is the change sustainable?

By taking a single system approach (both sites, all specialties) to bed management issues, this avoids the potential to solve issues in one area while causing problems in another.

Further information available from:

Contacts:
Ms Joan McGhee, UCCP Programme Manager
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joan.mcghee@aaaht.scot.nhs.uk
Background

The hospital bed state was managed with a crisis management approach. This led to unpredictability with a lack of any accurate information on beds, predicted discharges or emergency admissions and a lack of any clear message for capacity and demand management. This resulted in a lack of co-ordinated response when bed shortages occurred.

Objectives

- To produce accurate figures for predicted emergency admissions.
- To show the hospital bed state in a clear and consistent manner for ease of understanding.
- To ensure the bed state was communicated to all stakeholders with an action plan to manage demand on a daily basis.
- To collate and distribute other information which would be of help in managing ARI bed state in all clinical areas.

Approach

All stakeholders were involved in the approach – this was seen as key to success that everyone was involved from the outset.

- Operational Support team
- All Unit Operational Managers and Unit Nurse Managers
- Community Hospital Liaison and liaison for elderly care
- Operational Management Team.

First step was to enlist the help of the National Unscheduled Care team to help set up a system for predicting emergency admissions. This was done and adapted for ARI by the Operational Support team. Operational Support then worked with wards to improve the quality and accuracy of information they were providing on availability of beds. Using this we went on to develop a formula which predicted a bed state at 9am in the morning for end of day. Operational Support re-instated the 9am and 1.30pm meetings and with the support of the site managers and Operational Management Team increased attendance at these meetings. All units had representation at these meetings along with community liaison, elderly care liaison and any other stakeholders. This allowed the demand and capacity to be managed pro-actively throughout the day. The capacity and demand is co-ordinated by operational support but with the co-operation of all stakeholders. After some weeks it was apparent that there was a great improvement and that the figures produced were reliable. The 4-hour target in A&E showed significant improvement and more discharges moved to earlier in day. At this point it became apparent that a greater circulation of these numbers would further help in raising awareness and solving capacity issues so a Hospital Situation Report was devised. This gives all bed information community hospital availability, transport availability, the hospital escalation status and any actions for that day. The hospital situation report is produced twice a day and is available to everybody with access to the ARI intranet.
ARI began looking at gaining control of its bed management in April 2007. This was achieved initially through support visits from the national team, increased and better communications and use of a predictor tool. As you can see from the chart below, across all the flows, and in particular flows 2-4, progress was made locally after gaining control of the situation, taking performance in flow 3 from 79% in April 2007 to over 90% by August 2007. For flow 4 performance went from 87% to 94.7%.

Improved performance was apparent within the culture shift in the hospital as well as in the figures themselves over the previous 4 months, with the figures themselves as below:

- Flow 2: 96% to 99%
- Flow 3: 79% to 90%
- Flow 4: 87% to 96%

Graph 1

Aberdeen Royal Infirmary: Weekly reporting by flow group

4 hour compliance (%)

Week ending

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Findings and lessons learned

• Engaging the unit operational managers to work in a consistent way around capacity and demand issues
• Producing predicted figures for emergency admissions and demonstrating their accuracy
• Improving attendance at daily bed meetings
• Improving the accuracy of information provided by wards around capacity and demand

Measurable outcomes

• Accurate predictions of emergency admission to ARI becoming more accurate with experience and time
• Clear action plan for days when there is a lack of capacity in the system
• Much more co-ordinated approach by all stakeholders to capacity management on a daily basis
• Much more accurate information being provided by wards twice a day on their bed states
• Hospital Situation Report being posted on intranet twice a day (Mon-Fri)
• Central point for communication of any bed blocking issues at 1.30pm meeting with all stakeholders present

Further information available from:
Irene Jessiman
Operational Support Manager
NHS Grampian
Tel. 01224 552229
ljessiman@nhs.net
SECTION 5: FLOW 4
A new pathway for patients presenting with an Orthopaedic Condition to the Emergency Department (ED) of Royal Infirmary of Edinburgh (RIE)

Background
Analysis of patients who breached the 4-hour target revealed a high number of orthopaedic patients.

No agreed clinical pathway existing for patients in the Emergency department (ED) requiring an orthopaedic referral.

Objectives
Improve the orthopaedic patient waiting time against 4-hour target.

Improved Clinical Pathway for referrals from A&E to the orthopaedic service.

Approach
Clinical and Management Teams from orthopaedics and the ED met to review the current pathways and agree new referral pathways for different presentations to the ED.

These were agreed as:
- Self-referrals: review by ED, refer to Orthopaedics, 50/50 split of 4-hour journey in ED.
- Patients with GP letter to ED: Review by ED, refer to orthopaedics, 50/50 split of 4-hour journey in ED.
- Patients self-referring with Orthopaedic condition (not trauma). Review ED; refer to Orthopaedics, 50/50 split 4-hour journey in ED.
- Direct orthopaedic Registrar referral by GP. Orthopaedic Registrar to arrange review/assessment/investigations in ED, within 2 hours of admission to department.

The ED and orthopaedic teams were reminded to enter times for assessment and referral on to Medtrak in real-time.

Data from ED on Orthopaedic breaches were sent to the orthopaedic Clinical Management Team daily for review. These were reviewed by the Clinical Director and feedback was provided to teams. This allowed the team to identify reasons for breach/delay in attendance at ED and re-design their ED cover arrangements to reduce the delay.

A new pathway for minor fracture patients was also agreed. The existing system resulted in patients returning to the fracture clinic unnecessarily for further review. This frequently occurred on a Monday with the fracture clinic becoming overloaded. The new system allows direct booking of patients into an appropriate fracture clinic based on clinical need. This is reducing the peaks in demand at the fracture clinic and freeing up staff to respond to the ED.

Findings and lessons learned
- The provision of breach information and the monitoring of the patient pathways opened up a new communication system between the ED and Orthopaedic teams
- Monthly meetings with ED with the Orthopaedic team, to monitor/review issues between departments ensured resolution of problems
Measurable outcomes

- All Orthopaedic breaches reviewed daily, and feedback given to teams.
- Improvement in the number of orthopaedic patients meeting 4-hour target.

Future thoughts

What are the plans to spread the change?

- The new pathway has been shared with other health board areas.
- The next step to improve the service is to allow NHS24 direct booking into the clinic for minor fractures under clinical protocol.

Is the change sustainable?

- The system is now moving to reporting delays in orthopaedic patients waiting beyond 3 hours as we move to deliver the 4-hour target.
- The pathways will need continual review and updating to ensure all new staff are aware – this will be part of the ED regular system of pathway updates.

Further information available from:

Jan Lumley, Chief Nurse, MSK
NHS Lothian
Jan.Lumley@luht.scot.nhs.uk
Background
Experienced nurses were not empowered to arrange diagnostic tests or initiate IV fluid replacement even when clinical indicators were strong. Patients, often having travelled long distances in discomfort, experienced excessive delays before a management plan was initiated. Desired changes were to allow earlier intervention by experienced A&E nurses, to order diagnostic tests, start fluid replacement to expedite the patient journey.

Objectives
Reduction of excessive delays for patients with suspected fractured hips with an ensuing reduction of possible increased risks e.g. pressure sores, dehydration.

Approach
Prior to the introduction of the ENP service, all but the initial assessment and treatment of every patient was delegated to the SHO, who is ward based and often unavailable because of theatre/clinic commitments. All requests for diagnostic tests and fluid prescribing were made by SHOs.

Patients whose history and clinical assessment suggested a fractured hip were required to await an SHO for diagnosis to be confirmed.

All such patients are now assessed and referred for X-ray by the ENP. If a fracture is easily confirmed the ENP will continue with all the requirements of the SIGN guideline for such patients, with the exception of prescribing opiates for pain relief, while awaiting the SHO. This reduces the patient’s waiting time in A&E and allows earlier management planning.

Who did we involve?
Patients and relatives who provided feedback.
A&E nurses who were already well equipped to assess and initiate treatment in many cases, to agree of protocols.
Senior managers in the organisation who were able to support an initiative to ensure better value for patients, better use of human resources and the budget to ensure the training was possible.
Senior nurses with experience of protocol design.
Education providers with training courses validated by NES.
Nurses, medical and radiography staff to agree changes to referral pathways.
Findings and lessons learned

Resistance to change from colleagues in other disciplines, who had concerns about appropriateness of nurses encroaching on what is perceived as traditional medical territory, e.g. ordering X-rays and interpreting results.

Maintaining normal services while staff are undergoing long periods of intensive study.

Extra costs involved in accessing study due to location.

Measurable outcomes

An improvement in the patient journey to good health by mobilising the required resources early.

A harmonious collaborative approach between departments to improve patient care.

Improvement in admission times for such patients.

Requirement to create Patient Group Directive (PGD) for opiates to be prescribed by nurses in specific situations.

Further information available from:

Agnes Munro A&E Manager
A&E Dept, Western Isles Hospital
NHS Western Isles
Agnes.munro@wihb.scot.nhs.uk
Background

Within NHS Lanarkshire, Flow 4 (Surgical Admissions) has proven to be a significant challenge in relation to the 4-hour emergency access target.

Early work carried out through a process mapping exercise, highlighted bottlenecks in wait for specialist review. This problem within one of the Acute sites (Wishaw) manifested itself predominately within the orthopaedic specialty.

Following detailed analysis of the patient journey, working practices of junior medical staff, breaches, capacity and demand, the decision was taken by the surgical directorate to introduce a Trauma Co-ordinator post in April 2007. The key purpose of this role is to provide co-ordination and support for all hip fracture and trauma patients, through the whole patient journey.

Performance within the surgical flow (Flow 4) for the Wishaw site has improved from 56% (June 2006) to 84% (June 2007). Prior to introducing this role, on average 55% of patients reached a bed within 4 hours, this has significantly improved and is now 100%.

Objectives

- To co-ordinate all hip fracture/trauma patients through A&E within 4 hours
- To fast-track hip fracture patients directly to Trauma Ward
- To work in partnership with Bed Managers to ensure that predicted bed numbers for trauma patients are available on the trauma ward
- To raise awareness within all disciplines on the new processes and fast tracking protocols
- To liaise with junior medical staff to ensure timely review of patients
- To liaise with rehabilitation services to aid discharge planning
- To monitor performance against the 4-hour emergency access target
- To monitor the patient journey via Audit (Hip Fracture National Audit)

Approach

- Carry out detailed analysis of the patient journey using process maps
- Review daily breach analysis identifying key breach reason – wait for specialist review
- Monitor working practices of junior medical staff and review theatre and on call commitments
- Analyse capacity and demand in order to model types and numbers of Trauma and Elective bed requirements
- Identify a suitable candidate for the co-ordination role
- Meet with key stakeholders to establish role purpose and objectives
- Liaise with consultants and other disciplines to make them aware of the post and its purpose
- Locate post-holder near A&E bed co-ordinators
- Start day at 8.00am in Trauma Ward to map out overnight Trauma cases for surgery
- Attend Trauma meeting to assist in prioritisation of patient with consultant
- Contactable by page to allow A&E contact when relevant patients arrive in Unit
- Liaise with on-call consultant and ward to enable fast-track of patient through department
Results

Findings and lessons learned

Principle was very successful.

Trauma patients are being admitted to designated Trauma Ward instead of various wards, which enables them to be nursed by appropriately skilled staff.

Referral to rehabilitation services are carried out in a timely manner.

Post-holder covers 37.5 hours per week (8.00am – 4.00pm).

What would you do differently next time?

It would be beneficial to have hours extended until 7.00pm. Limited cover is available when an individual is on annual leave which is a cost pressure.

Measurable outcomes

- Performance against the 4-hour emergency access target for hip fracture patients has improved from 55% on average to 100% in June 2007
- Performance against the 4-hour emergency access target for orthopaedic flow on the Wishaw site has improve from 43% to 78%
- Monitor numbers of patients treated within the correct environment
- Analyse actual length of stay against predicted
- Monitor referrals to the rehabilitation services

Future thoughts

What are the plans to spread the change?

Plan would be to seek permanent funding in the first place for this post, and to have a second post in the second Trauma Centre in Lanarkshire.

Further information available from:

Margaret Barbour, Senior Nurse and Fiona Baker, Trauma Co-ordinator
NHS Lanarkshire
Fiona.baker@lanarkshire.scot.nhs.uk

Gillian Corbett, Programme Manager UCCP
NHS Lanarkshire
Gillian.Corbett@lanarkshire.scot.nhs.uk
Background
The monthly data collection for Flow 4 in conjunction with various tracking exercises, indicated that patients were waiting in the Department of Emergency medicine for variable lengths of time whilst awaiting review by a surgical specialist. It was often the case that the surgical decision maker would be in theatre and that any information relating to the patient waiting in A&E had to be relayed through a number of individuals, i.e. FY1, SHO and Consultant Surgeon. This often resulted in unnecessary delay and waits in the patients’ journey which were of no added value. Certain groups of patients would be suitable to be assessed in a suitably equipped side room on the Surgical Receiving Ward.

Objectives
• Improve quality of care for patients and carers
• Reduce unnecessary waits in the Department of Emergency Medicine
• Provide patients with an early assessment prior to determining the requirement for possible in-patient care or an appropriate alternative
• Provide patients with relevant information, interventions, treatment and care whilst ensuring that they are involved in the decision making process
• Alleviate the steps of no added value within the patients journey of care
• Reduce avoidable admissions to in-patient beds for certain conditions
• Optimise diagnostic and therapeutic interventions

Approach
The pilot of the Surgical Assessment Unit was a collaborative project which involved Service Director, Senior Nurses, Consultant Surgeons, Consultants, SHOs, Ward Nurses, Information Analyst (UCC) and the Clinical Effectiveness Department. Following several meetings and agreement on the requirement for a Surgical Assessment Unit the process of planning, implementation and communication began.

The Charge Nurse within the receiving area had a key role throughout the planning and implementation process and ensured that the staff within the unit were fully involved in the process of change.

Environment
The Assessment Unit required suitable space in the form of a waiting area and a consulting room which could provide space for an examination couch. It was also imperative that this area was in, or close to, the current Surgical Receiving Unit to accommodate immediate assessment by: the receiving team, the current nursing resource and the need for appropriate facilities/equipment, should they be required.

The day room within the Surgical Receiving Unit was converted to the waiting area and the single room next door, which was being used as a consultant office, was vacated to allow the consulting room to be in close proximity to the waiting area. The necessary equipment was acquired and the two rooms set up to accommodate patients from arrival to decision making.
Patient involvement
An information leaflet for patients was devised to ensure that patients were fully informed of the aim of the unit and what would happen within their journey of care. An explanation of each of the stages was provided and a contact name and number given should they have any further questions.

A patient experience questionnaire was created and given to patients on an anonymous basis. It was hoped that the information provided by patients would help us to improve the service as the pilot progressed.

Findings and lessons learned
The following are a list of key features in making the project a success.

- Securing the appropriate environment
- Ensuring awareness of the unit – communication
- Ensuring involvement of all key stakeholders
- Promoting a change in practice
- Ensuring appropriate use of the unit
- Ensuring that we actioned the comments made by patients on their satisfaction forms
- Sharing the outcomes with all staff

Measurable outcomes
The introduction of the Surgical Assessment Unit has brought about a positive change in the way that emergency surgical patients are assessed.

In the first 14 weeks the unit assessed 12% of all surgical admissions. 62% of the total number of patients assessed were discharged directly from the unit with 38% requiring in patient admission. Follow up ranged from no review, Outpatients, GP and other surgical specialities. The main presenting complaint was perineal abscess.

The response from staff and patients has been extremely positive. Many of the comments provided by patients express satisfaction.

“ A very good and efficient service from admission at A&E to leaving – appreciated.”

Initial qualitative and quantitative measures demonstrate that the Unit has been a success.
Crosshouse Hospital
Flow 4 - Ward 4a Assessment Area Pilot
Discharged or Admitted from Assessment
5 March - 10 June 2007 - 87 Patients

- Admitted from Assessment: 33, 38%
- Discharged from Assessment: 54, 62%

Crosshouse Hospital
Flow 4 - Ward 4a Assessment Area Pilot
Total Patients to 4a from A&E (740 attend)
5 March - 10 June 2007

- Seen by Assessment Area: 87, 12%
- To 4a from A&E: 653, 88%

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Crosshouse Hospital
Flow 4 - Ward 4a Assessment Area Pilot
Weekly Attendance
5 March - 10 June 2007 - 740 Patients

Week Commencing

- 05/03: 12
- 12/03: 10
- 19/03: 12
- 26/03: 13
- 02/04: 13
- 09/04: 12
- 16/04: 12
- 23/04: 13
- 30/04: 12
- 07/05: 13
- 14/05: 12
- 21/05: 12
- 28/05: 12
- 04/06: 13

- Admitted from Assessment: 33, 4%
- Discharged from Assessment: 54, 7%
- Direct Admit from A&E: 653, 89%
Future thoughts
What are the plans to spread the change?
A suitable area in the Surgical Unit at Ayr Hospital has been identified, and plans are in development to convert this area to a Surgical Assessment area similar to that at Crosshouse.

Is the change sustainable?
The Unit has become a useful facility for the surgical receiving staff, and has been adopted as a permanent feature.

Further information available from:
Dr. Veronica Devlin
NHS Ayrshire & Arran
Veronica.Devlin@aaaht.scot.nhs.uk
SECTION 6: FLOW 5
Background

There was anecdotal evidence of inappropriate presentations at the A&E department due to lack of knowledge by the general public on what service to contact for health advice. For instance, a high volume of presentations coupled with a finite nursing resource, places demands on the ability to treat priority patients in a timely manner and to meet the national target of treating every patient within 4 hours of arriving at the hospital.

Objectives

- The A&E team agreed that some form of information system for patients to see whilst waiting to be treated would be a useful starting point.
- An eye catching poster containing easy to read and understand information on the patient pathway, with a local theme, would be helpful.
- The team undertook to develop, finalise and produce a suitable poster within 2 months.

Approach

As is common with other A&E departments, staff are sometimes treating patients who could have been treated effectively using other services. There is ample anecdotal evidence (i.e. especially over weekend periods) that patients could have used their local pharmacy, NHS24 or their GP to deal with their complaint. For those who used A&E, many did not understand the patient pathway and therefore did not understand the assessment, prioritisation and treatment processes that they would experience. When longer than normal waiting times are experienced, some patients leave A&E without advising the staff. Inappropriate presentations and poor information from patients are wasteful of nursing time, causing frustration for the busy teams and in some instances can threaten achievement of compliance with the 4-hour target.

With feedback from staff, a draft poster was prepared which contained information on the A&E facilities, team make up/competencies/other specialist resources, the flow of activities in treating patients, the after-care provided and finally, alternative services and contact details. All this information was collated, checked for accuracy and quality but the visual impact needed an injection of creativity. This was achieved in consultation with project lead, graphics designer, public health department, NHS Highland, who re-arranged the information and submitted various themes for consideration.

The final design was chosen in consultation with the A&E team who might need to explain the process to patients waiting to be seen. With that done, the final article was produced and is on display in the A&E waiting room and has received favourable comments from patients. It has been helpful to patients who have experienced longer than normal waiting times when the department is busy.
Who was involved?

- A&E team at Caithness General Hospital
- A&E Charge Nurse
- Service Improvement Manager
- CGH Patient Council
- Unscheduled Care Programme Manager
- CGH Assistant General Manager

Findings and lessons learned

Simply getting together to discuss the issues, select a way forward and produce the goods. However, there is no recorded evidence of in-appropriate patient presentations and much depended on the opinions of staff who experienced the ebb and flow of patients coming to the department.

Measurable outcomes

In general, the information has been welcomed by the public and the Patients Council were very supportive of the idea as they believed that keeping the public informed was an essential ingredient of the exercise. A patient survey of the A&E department is planned for 13 August and specific feedback will be requested on the value of the information given in the poster at that time. This type of information has been seen as useful by the management team and thoughts are in place to re-create this patient pathway information for other wards in the hospital.
An alternative service for Paediatric patients being admitted to the Royal Hospital for Sick Children, Edinburgh.

**Background**
A number of paediatric medical bed days in the Royal Hospital for Sick Children, Edinburgh (RHSC) were being used for next day review of children with bronchiolitis, febrile illness, acute wheeze, or vomiting +/- diarrhoea.

We wanted to see if we could prevent these admissions and meet the needs of children and parents by providing a pathway to an alternative service.

**Objectives**
To develop care pathways for each of these conditions to facilitate safe and effective referral to, and assessment in their own home by, the Community Children’s Nursing Service (CCN-S) in Edinburgh, East Lothian and Midlothian.

**Approach**
The RHSC Emergency Department (ED) staff and the CCN-S met to agree a referral pathway for patients.

When the service commenced in November 2006, it was agreed to begin with a referral limit per day to gauge demand. Criteria were agreed for directed referral for next day review by the community children’s nursing service as an alternative to hospital admission.

It was agreed that the ED and the admissions unit would provide back up support for the community service if they required any advice on dealing with patients the next day.

The number and type of referral were reviewed on a regular basis to ensure they were appropriate.

There were initial concerns that children who did not require any follow up, would be referred inappropriately, but this did not happen.

When the full capacity of four referrals a day was not used initially, the criteria were reviewed and slowly widened to allow additional referrals.

**Findings and lessons learned**
- The CCN-S were surprised that the full capacity of four a day was not required. The fact that the referrers didn’t use the full capacity reassured the CCN-S that the referrals were being truly assessed to decide which child met the referral criteria.
- The CCN-S were satisfied that they had sufficient support from ED/ARU and were able to contact for advice as necessary. As a result of the pilot it was agreed to continue the service, and to remove the restriction on the number of referrals.
Measurable outcomes

- 29 Referrals from 01 November 2006 - 31 March 2007 (average per day = 0.2 referrals)
- Average length of involvement of CCN-S = 1.6 days
- 2 patients readmitted to RHSC, 27 admission prevented in four months
- 3 only required telephone contact
- 2 inappropriate referral (for support rather than assessment)

Future thoughts

What are the plans to spread the change?

- The system is part of a wider plan to provide alternatives to admission for adult patients as well as paediatric patients in Lothian.
- The team presented at the Lothian hosted UCC Regional Networking event to spread the methodology to other Health Board areas.

Is the change sustainable?

- This initiative continues to provide a safe and acceptable alternative to hospital admission.

Further information available from:

Paul Leonard, Consultant in Paediatric Medicine/ Clinical Lead, RHSC
NHS Lothian
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Rose Byrne, Management Lead, RHSC
NHS Lothian
Rose.Byrne@luht.scot.nhs.uk
Background

Experienced paramedics were not empowered to deal with minor ailments so patients with such conditions were taken to hospital and then experiencing excessive delays, either for treatment or because of low priority. In some cases long distances made it impossible to return the patient’s home particularly the elderly. There was no provision of community nurses out of hours.

Objectives

- To treat such patients at home.
- To provide training for paramedics and introduce an out of hours community nursing service.
- Desired change to allow experienced paramedics to deal with minor complaints in the community.
- Desired change to introduce community nurses Out-of-Hours.

Approach

All patients dialling 999 were taken to hospital and in many instances admitted because there was no means of getting them home. Many of these had relatively minor complaints which did not require hospital input.

Many elderly patients had acute problems which could have been dealt with at home e.g. catheter problems. These patients were often vulnerable and admission to hospital exposed them to greater risks.

Since the service change a significant number of people are seen and treated or referred to their GP without attending hospital. Community nurses are available to deal with overnight nursing problems.

We involved all key stakeholders:

- Patients, who provided feedback.
- Community nursing managers, Scottish Ambulance Service managers, Paramedics, GPs, A&E manager, Senior managers with responsibility for professional development.
- Senior managers in the organisation who were able to support an initiative to ensure better value for patients, better use of human resources and the budget to ensure the training was possible.
- Education providers with training courses validated by NES.
Findings and lessons learned

- Make the best use of expertise around you.
- Team work, co-operation and the readiness to be flexible.
- Rapid change can be daunting but seeing rapid success is highly rewarding.
- Need to increase the number of paramedics taking on new role.
- Learned a new approach to managing many acute situations, which is more appropriate for the patient.
- Learned to better identify non value added steps in the patient’s journey.

Outcomes

There has been significant impact.

A paramedic fully trained to assess and treat a range of minor ailments autonomously.

A paramedic based in A&E while on duty rather than waiting at base for incoming calls, thus constantly maintaining and improving skills and supporting A&E staff.

An overnight community nursing service working collaboratively with Out-of-Hours GPs, who are able to provide care for new and existing patients thus allowing people to remain at home.

Future thoughts

What are the plans to spread the change?

Need to expand the community service to other areas.

Need to expand the range of situations dealt with out of hospital, e.g. administration of IV antibiotics.

Is the change sustainable?

Yes, both better for staff and patient care.

Further information available from:

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Unscheduled Care & Planned Care
NHS Western Isles
Mobile: 07900 697059
stephen.moore@wihb.scot.nhs.uk

Agnes Munro, A&E Manager
Western Isles Hospital
NHS Western Isles
Agnes.munro@wihb.scot.nhs.uk
Background

A community-based team provides mental health services in Shetland. A duty system is in operation, during working hours, to provide risk assessment of people presenting as emergencies or to those who have been admitted to the Gilbert Bain Hospital as a place of safety (Acute Medical Ward 3) following deliberate self-harm. Further assessment is available from the consultant psychiatrist if it is felt the person may require psychiatric admission.

It was agreed that the management of patients in the acute settings should be a specific area of the emergency care review. The drivers for this project included: better understanding of what was known to be a complex care pathway, reviewing inter-hospital transfer arrangements and assessing training needs for staff working in acute areas who were required to manage patients with a range of mental health needs.

Objectives

- Undertake a process mapping exercise to review mental health clinical pathways (across primary care, secondary care, ambulance transfer and specialist services).
- Develop an assessment algorithm/flow chart for A&E and medical staff to follow for patients presenting with severe, acute mental health problems.
- Undertake training needs analysis for staff working in A&E and Ward 3 to determine training needs.
- Develop a rolling training programme for nursing staff to support learning needs in relation to mental health care.
- Evaluate impact of training programme at six and twelve months.

Approach

A process mapping exercise was undertaken in April 2006 to describe the current service pathway for patients presenting with acute mental health problems. This outlined a number of issues including how complex the pathway can be for some patients and the time lapse between contacting primary care and reaching specialist services in Aberdeen (if required). It was also noted that further work needed to be undertaken to put in place support for A&E and medical staff involved in the acute management and assessment of mental health patients, in particular in the out-of-hours period.

From this work a number of actions were agreed which include the following:

- The development of the mental health social work service to provide additional support and expertise around the assessment and co-ordination of care for people with mental health problems.
- Develop an assessment pathway (which denotes key staff and how to contact them) for use in the A&E department.
- Finalise the Psychiatric Emergency Plan (PEP) so that there is a comprehensive management plan in place, which spans community and hospital care.
- Undertake training needs analysis for A&E and acute medical ward nursing staff to ascertain learning and development needs.
- Secure funding to develop a rolling programme of training and skills updates.
- Develop a training programme, which reflects acute nursing staff learning needs.

Findings and lessons learned

The monitoring and evaluation of the success of the training programme is iterative and ongoing.
Staff have reported that the development of formal arrangements (key contacts/plans/training) has improved the efficiency and organisation of assessment of mental health care options.

Releasing staff to undertake training has been challenging because of small team sizes (and against the backdrop of maintaining services and covering holidays, absence etc).

Some of the value of the project was not part of the original objectives (e.g. networking, getting to know colleagues working in social care etc).

Some of the variables are not easy to manage (e.g. inter-hospital transfer and delays are outwith NHS Shetland control). Maintaining regular dialogue with specialist services (e.g. Cornhill Hospital Aberdeen) and the Scottish Ambulance Service has contributed to the local review of services through the mental health strategy group and senior management team.

Managing mental health services is part of a wider strategic plan and this project forms an important part of the skills development objectives for mental health assessment capacity and capability.

What would you do differently next time?
Our initial timescales were unrealistic. Project development and organisation took much longer than originally anticipated.

Securing commitment from senior nursing staff from the outset so that training and backfill would be prioritised.

Measurable outcomes
- Monitoring of inter-hospital transfers has been implemented. Critical analysis of each inter-hospital transfer is discussed. Improved links have been established with Cornhill Hospital to review cases and discuss transfer issues (referrals and discharges).

- Training programme is now in place for staff working in acute areas. Staff report that they feel more confident about managing patients with acute mental health needs (qualitative measures include interviews).

- Staff undertaking the local skills update sessions have also enrolled on the on-line mental health act training programme to further develop skills and knowledge.

- An assessment algorithm has been implemented. Staff report that this has reduced time taken to co-ordinate mental health assessment (because key contact details are available). The PEP has been finalised.

- A formal liaison service has been established as a pilot project. Community mental health staff attend A&E/Ward 3 (Monday-Friday) to review patients admitted the day before to expedite assessments, co-ordinate treatment plans and continue to provide ongoing training and support for staff.

- Rolling programme of community mental health team members attending liaison visits at Cornhill Hospital.

Future thoughts
What are the plans to spread the change?
Similar work is being undertaken to review A&E nursing establishment and training needs (using the same methodology).

Is the change sustainable?
Training programme is in place for 18 months and we will review again in March 2008.

Further information available from:
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Background

Anecdotally, it was perceived that patients who were homeless were using A&E as a GP practice and may present to A&E inappropriately. It was identified that staff and patients be made aware of Homeless Health Services to ensure that health needs could be met within Primary Care.

Prior to service provision, patients were not easily identified as being homeless which led to patients being discharged without named accommodation and had no continuity of healthcare which may have led to readmission to hospital.

Objectives

- To ensure that all homeless patients were identified and received advice and information about Homeless Health Services available within Primary Care to prevent inappropriate use of A&E Services.
- To ensure that all homeless patients are discharged to named accommodation and receive continuity of healthcare on discharge from hospital to prevent readmission.

Approach

- Information systems were put in place across all acute sites to identify homeless patients when they presented at A&E.
- Training sessions to raise staff awareness of the issues relating to homelessness and the impact on health take place throughout all wards/departments.
- Information packs containing relevant information about resources available to homeless patients are available on all wards.
- Patient information leaflets are available at A&E departments and wards to inform and signpost patients to Homeless Health Services within Primary Care.
- Immediate response from staff when a homeless patient is identified or referred to the service.
- Referral pathways are in place to ensure continuity of care.
- Discharge Protocols are in place to ensure an effective discharge is in place.
Findings and lessons learned
As a result of Discharge Protocols being in place staff from the Hamish Allan Centre and Community Casework Teams caseworkers outreach to acute sites and carry out a homeless assessment prior to discharge which facilitates a direct discharge from hospital to named accommodation.

Staff are more aware of patients presenting at A&E and admitted to wards and refer to the service promptly.

Measurable outcomes
As a result of patients having named accommodation staff can ensure that patients are referred to Homeless Health Services to ensure continuity of healthcare.

Future thoughts
What are the plans to spread the change?
Initially a service was provided to 3 main sites within acute services. Currently two additional sites are being targeted in order to replicate service provision.

Is the change sustainable?
The service began as a pilot project but has now received recurrent funding until 2008 and sits within the Integrated Discharge Team.

Since the start of the service an additional G grade nurse has been appointed.

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TOP TIPS FOR WRITING A CASE STUDY

Case studies are an extremely effective way of highlighting and demonstrating how a new technique or approach has been used, or a challenge overcome. The following top tips will help you to write case studies that capture all the relevant points.

Sourcing material for your case study
You can approach this in a number of ways:

- Combine/restructure/reword existing written material available internally or on the internet.
- Conduct an email interview, sending a short list of questions to the relevant person at your case study organisation. This method can be good for getting some in-depth answers. Be wary of scaring people off with too many questions, though. And be sure to mention your deadline, to ensure a timely response.
- Carry out a telephone interview. This is particularly useful for interviewing senior people who are short of time. The easiest way to do this is to record the conversation with a Dictaphone and type up your notes afterwards.
- Set up a face-to-face interview. If time permits, this can be a great way of finding out everything that you need.

It's a good idea to ask the interviewee to approve a draft of your article before going to print or posting it online. You should make it clear to the interviewee that this final approval is a courtesy only, to ensure there are no factual inaccuracies, otherwise they may be tempted to make major revisions to your article.

Getting started
It's natural to find business writing a bit tricky. If you're struggling to start your case study, why not try:

- asking someone else for their input
- writing an informal email on the subject to get your mind loosened up

Planning and construction
Sometimes when you're writing, you'll find the information falls into place naturally. More often than not, however, you'll have to decide the order of facts and how to group them. A well-balanced article has a clear beginning, middle and end. For more detailed guidance on the structure for your case study, refer to the Case Study Template.

Handy Hint
If you're finding it difficult to write down the information for your case study, try explaining what you are writing about to a colleague or friend. Chances are you will select the most interesting and important facts automatically.

Ideally you should aim for case studies that can be read in no more than five minutes. That helps you keep to the point, and concentrate on the most important facts.
Engaging the reader

You want to grab your reader’s attention from the start. So try to open your case study with the most interesting facts. It is worth spending time on this part of your article, as an engaged reader will want to read on.

A well-written article will also answer what are known as the five Ws, namely:

- Who?
- What?
- When?
- Where?
- Why?

Try to limit yourself to one idea per paragraph, or one idea per sentence to keep the reader interested.

Interesting headings are another good way to boost reader engagement. They can be used to link your key points, improve the flow of your article and entice the reader to keep going.

Keeping it short and simple

Writing a short, succinct piece takes at least as much time and effort as writing a long one. Here are some suggestions to help you to be brief:

- Think about your audience. Whether you’re writing for senior managers or front line staff, you can be sure of one thing: they’re all short of time and want to absorb your information as easily and quickly as possible.
- Read your work again after a break. You’ll almost always see where sentences can be cut and/or an idea expressed more simply.

Going with the flow

It’s important to keep a good flow of words and sentences. One of the best tests is to be able to read your work aloud without sticking over phrases. Some writers find that flow comes naturally. Others develop deliberate techniques to create a good rhythm in their work. Here are some favourite tricks of the trade:

- Vary the length of sentences. The flow and rhythm of writing is improved by changing the pace every now and then. A short, pithy sentence comes as a relief after a run of longer sentences. Short sentences can also be used to introduce new ideas or accentuate key points.
- Use active verbs — they’re more direct, more concise and make your words move faster and more smoothly. *The dog bit the boy* gets to the point quicker than *The boy was bitten by the dog*.
- Check for unnecessary words. As with brevity, flow can be improved by a little pruning.
- Use quotes where appropriate to bring emphasis to your case study.
- Find your voice. When writing in a business context, it can be tempting to write in a very formal way. Unfortunately, this isn’t always particularly engaging for our readers. To avoid this, try to imagine that you’re writing for someone you know well – thinking of it as a conversation may help.
The end

It’s important to make sure that your opening ideas have been achieved in your conclusion. That said, it doesn’t always have to be the last word – it can be used to spur the reader into finding out more for themselves.

Thought of everything?

Before you finally submit your case study, it’s a good idea to give it one last check to make sure you’ve covered everything. The following steps can help you do this:

• Give your article breathing space
• Move things around if you’re still not happy
• Read it aloud (or in your head)
• Watch out for repeated words at the start of paragraphs.
• Check for repeated ideas (you may have said the same thing twice but in slightly different ways)
• Is it still too long? Chop it!
• Does it pass the ‘so what?’ test, i.e. has it told the reader what they want/need to know?

Further information available from:
www.goodpractice.net