The Planned Care Improvement Programme

Improvement Stories
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Foreword

The Improvement and Support Team (IST) was formed in September 06 bringing together the people and resources of the former Centre for Change and Innovation. The Improvement and Support Team is an integral component of the Health Delivery Directorate with clarity of purpose – to apply improvement science to performance challenges.

NHSScotland is on a journey to minimise waiting for patients. The next major step on this journey will be an 18 Week Referral to Treatment target by 2011. The case studies and improvement stories contained within this publication describe how important foundations have been laid by the work of the Planned Care Improvement Programme. Together with the Cancer Performance Support Programme, Cataract and Eye Care Redesign Programme, Diagnostics and Unscheduled Care Collaboratives, these programmes have promoted a view of healthcare that is based on explicit, reliable and safe patient pathways. This view of healthcare, informed by full clinical engagement, patient experience and lean principles is fundamental to the next steps of our improvement journey.

I would like to thank all those who have been involved in the Planned Care Improvement Programme at a local, regional and national level for their contribution to this programme.

Important foundations have been laid; the challenge now is to hold the gains and manage the transition of this knowledge and new ways of working into local and national efforts to deliver service transformation for 18 weeks.

Stephen Gallagher
Deputy Director Health Delivery
(Head of Improvement and Support Team)
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Clinicians’ Reflections

The Planned Care Improvement Programme was launched in September 06 with the aim of improving patient flow by reducing complexities of our healthcare systems which are at times perceived by patients and healthcare professional as overly complex and at times fragmented, even in relation to scheduled episodes of care.

As with all the improvement programmes sponsored by the Scottish Government, the approach has been one of collaboration. This has been a truly inclusive approach that has involved patients, specialists, users and carers in developing clinical models for each specialty.

It has been a pleasure to be involved in this work both locally and nationally and we have both been gratified to see so many colleagues leave the security of their own areas of expertise to rediscover the common purpose that lies in providing timeous, high quality, patient centred care. Too often we focus on the needs of our own components of delivering the service, without fully appreciating the impact we may be having on our colleagues’ ability to also achieve the same high standards. We have all either been patients or helped family and friends to navigate around these complexities and the common sense approach that we would bring to their assistance has now been brought to the redesign of streamlined patient pathways.

The programme has focussed on five simple changes:

- Treat day surgery as the norm for planned procedures
- Improve referral and diagnostic pathways
- Actively manage admissions to hospital
- Actively manage discharge and length of stay
- Actively manage follow up

It is important not only to recognise the contributions that so many of you have made to this improvement work, but to capture and share learning to inform future improvement programmes. In the following pages, you will see examples of how different groups have achieved or are working towards making changes in each of these areas.

One of the strengths of the Planned Care Improvement Programme is that is has not required commitment to achieve prescribed targets. Rather, it has allowed each NHS board area to identify the bottlenecks and constraints of existing patient journeys to inform development of improved clinical models as they relate to their own services. There are examples of groups who have identified opportunities for role development to expand the knowledge, skills and competencies of staff within their organisations, particularly in relation to pre-admission assessment and one-stop clinics. There are also examples of groups who have established information systems and performance measures against which services can be monitored and evaluated in the future. It is gratifying to note that there is continuing development of an effective interface between primary and secondary care that benefits the patient.

There is strong emphasis on the achievements in increasing day surgery rates and the work of the British Association of Day Surgery (BADS) has been central to this. We owe particular thanks to Dr Ian Jackson as the President of BADS in working with us to produce the Frequently Asked Questions document which was published in October 07, which has helped many to move towards the aspirational targets which have been achieved by the pioneers in this area.
Those of you who have been involved with the work of the Programme are also responsible for operational delivery of the service and we have seen many examples of where the work of other groups has been incorporated into local improvement plans. The work of the National Theatres Implementation Group is one area where the need for central reporting of performance had fed back into the work of the local work streams to improve patient flow. As we have approached the conclusion of this project, we have also heard of ideas to incorporate some of the aims of the recently launched Scottish Patient Safety Programme. Clearly the work that is being done by all of you is continuing to evolve and that it is clear recognition from all of you that it has relevance to the ways in which you provide your care within the NHS in Scotland. The programme has given organisations and individuals time to understand how their processes of care function and to reflect on how to make them truly ‘whole system’.

The Planned Care Improvement Programme has left us all well placed to understand where, as individual organisations, we need to concentrate our efforts for continuing improvement. This Programme may be drawing to a close but the work goes on and much if not all of it will continue as we now work to achieve the challenging target of 18 weeks from referral to treatment within NHSScotland.

Once again, we would like to thank you all for your participation and acknowledge your achievements and we look forward to continuing to work with you.

Tracey Gillies  
National Clinical Lead

Jane Burns  
National Clinical Lead
Chapter 1

Introduction
This publication is a compendium of the improvement work undertaken by local teams from across NHSScotland under the auspices of the Planned Care Improvement Programme (PCIP). These case studies and improvement stories represent a huge amount of work and effort, and we would like to take this opportunity to thank those that undertook to deliver these valuable improvements to the healthcare system in Scotland.

The programme was tasked with supporting local teams to deliver improvements in line with the five high impact changes noted below. These changes provide the bedrock on which an 18 week referral to treatment target will have to be built upon. Much of the work that is contained within this document is in the very early stages and will continue after March, providing the basis for improvement towards 18 weeks.

The five high impact changes are:

1. Treat day surgery (rather than inpatient surgery) as the norm for planned procedures;
2. Improve referral and diagnostic pathways;
3. Actively manage admissions to hospital;
4. Actively manage discharge and length of stay;
5. Actively manage follow up.

These represent each stage of a patient’s journey along the elective care pathway and provide a focus for improvement work. Some NHS Boards have chosen to take a single specialty and progress changes for all or some of the changes, others have taken pressure points in isolation from a number of specialties.

**Change 1: Treat day surgery (rather than inpatient surgery) as the norm for planned procedures**

For a number of years it has been recognised that converting clinically appropriate procedures from an inpatient to a day case or outpatient setting is good practice. Evidence from across the UK demonstrates that this shift generates numerous benefits for the overall system, clinical outcomes and for patient experience.

**Improvement Focus**

- Hospital systems should be organised on the basis that day surgery is the norm for the majority of elective procedures;
- Adopt a day case strategy and address operational issues such as the admission of patients the night before or patients being kept in overnight for non-clinical reasons;
- Ensure that patients are coded correctly and inpatients with a zero length of stay are recorded as day surgery patients;
- Ensure evidence based patient focussed pathways are in place;
- Aim to raise performance to the best through benchmarking performance and sharing good practice with other NHS Boards.
**Change 2: Improve referral and diagnostic pathways**

Referral from GP practices to secondary care represents the patient’s first step along their acute care journey. In process terms this is one of the most complicated steps and one that is undergoing the greatest evolution. Patients can be referred through numerous channels and mediums and need to be sorted so the patient is booked to see the most appropriate clinician with the shortest waiting times.

Evidence shows that there are benefits for both patients and the system if referral routes can be standardised and a common process put in place.

**Improvement Focus**

- Creation of standardised protocols and pathways between primary and secondary care;
- Establish referral protocols to clearly identify how and where patients are managed;
- Feedback to GPs information on referral and admission rates;
- Introduce Patient Focussed Booking and referral management systems to ensure that the patient gets choice and certainty of appointment date and time.

**Change 3: Actively manage admissions to hospital**

Pre-assessment is key to the reliable admission of patients for surgery, and the balancing of the emergency and planned flow is key to ensuring good utilisation of hospital resources. Much of the work looking at the balancing of emergency and planned flows was undertaken by the Unscheduled Care Collaborative.

**Improvement Focus**

- Put in place nurse led pre-admission services for surgery with support from anaesthetic services, ensuring the process is ‘decide to admit’ not ‘admit to decide’;
- Measure and analyse elective and emergency demand by day of the week and hour of the day;
- Utilise referral management and booking services to provide co-ordinated centralised admissions services;
- Eliminate the non-clinical cancellation of operations.

**Change 4: Actively manage discharge and length of stay**

Traditionally it has been assumed that the relationship between planned and emergency admission patterns caused the greatest variation in patient journeys. However, on closer analysis, it is the discharge process. It is therefore important to start the planning of a patient’s date of discharge as early on in the process as possible.

Benchmarking exercises have demonstrated significant differences in the length of time that patients with similar clinical requirements stay in hospital. Patients who are admitted on a Friday will often spend longer in hospital than those admitted on a Tuesday.

**Improvement Focus**

- Analyse inpatient stays to identify where improvements will have the greatest impact;
- Ensure seven day working applies to admissions and discharges;
- Plan day of discharge at admission or pre-admission;
- Ensure that the most appropriate healthcare professional is able to discharge patients;
- Benchmark against other NHS Boards and raise the standards to the best.
Change 5: Actively manage follow-ups

Return outpatient appointments represent a huge amount of the activity undertaken by the NHS. Traditionally patients have been routinely given appointments rather than it being based on either clinical need or patient request. Consultants often undertake these clinics, where as evidence shows, that in many cases these can be led by a nurse or an Allied Health Professional (AHP). By offering return appointments to only those patients with a clinical need or whom have requested it, and making sure that the most appropriate healthcare professional undertakes the assessment, we are able to free up resource to treat more new patients, reducing overall waiting times for patients and improving efficiency.

Improvement Focus

• Make sure follow ups are planned at the front end of the patient journey and are offered for a specific clinical or patient led reason;
• Redesign so all relevant tests are planned and booked to occur in one visit;
• Redesign services to provide patients with the most appropriate healthcare professional for their condition;
• Train clinical nurse specialists to handle appropriate follow-up appointments;
• Introduce non face-to-face follow-up where clinically appropriate.
Chapter 2
Treat Day Surgery as the Norm
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NHS Ayrshire & Arran
Smoothing the flow of patients through the day surgery unit

What was the problem?
The day surgery unit at Crosshouse Hospital receives patients that have been transferred from inpatient wards due to lack of beds at short notice. Additionally, a number of patients are placed on the day surgery list but their procedure is carried out in the main theatre. These pathways have several disadvantages:

• Patient experience is not positive as a bed is often not available for them and they are asked to wait in the admissions lounge for long periods until the normal daily activity has subsided;
• The day surgery unit is put under additional pressure as it receives unplanned patients who have not been wholly pre-assessed;
• Patients being cancelled on the day of surgery as they had not been formally pre-assessed prior to surgical admission;
• Patients are wrongly coded as inpatients making capacity planning more difficult as activity of the unit is not accurately recorded.

How was this identified?
Experienced nurses from the day surgery unit reviewed case notes for patients in surgical wards to identify those who were suitable for day surgery. Two patient case studies were conducted and data was collected on a daily basis to track patient journeys.

What were the implemented improvements (tools/techniques)?
Work was undertaken with consultant secretary colleagues to ensure that the correct procedures were identified as being suitable for day surgery. The day surgery unit now admits and discharges all day surgery patients so if patients are transferred to the main theatre for their surgery they are still recorded as a day case.

What is the situation now?
Daily monitoring of day surgery admissions is still in progress to ensure that changes have been effective. Initial data demonstrates that very few patients are unplanned which has had a positive impact on patient care, staff satisfaction and day case unit efficiency.

How is the change sustainable?
• Consultant secretaries now list day surgery patients correctly and ongoing communication will ensure that changes in clinical practice are reflected in booking arrangements;
• Improved patient and staff experience of the new process has ensured enthusiasm for the changes made within the unit;
• Continued monitoring to ensure that patients are correctly admitted for their day surgery.

What are the patient benefits?
• A smoother patient journey with fewer delays and potentially a shorter stay in hospital;
• A reduced chance of surgery being cancelled on the day of admission.
What are the staff benefits?

- Less pressure on day surgery unit staff as the workload is predetermined;
- Staff feel that they are providing a better standard of care.

What are the organisational benefits?

- Improved theatre utilisation as day surgery and main theatres are used in conjunction and fewer patients cancelled on day of surgery;
- Provision of a high standard of care for all patients going through day surgery therefore better patient satisfaction results;
- Freeing up of inpatient beds allowing space for major cases;
- Reduction of day surgery waiting lists and times by putting day surgery patients on main theatre lists;
- Increased day surgery rates.

What are the lessons learnt and what would you do differently next time?

At the start of the project we did not realise the impact that the different routes of admission into the day surgery unit had on the day surgery staff.

This has been a learning curve not only for the project lead but also all the staff within day surgery in the provision of an excellent standard of care for each patient.

What plans are there to spread the improvement?

Continue to monitor day surgery to identify other areas to smooth the patient pathway.

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NHS Forth Valley
Undertaking a Rapid Improvement Event for Theatres

What was the problem?

The theatres at Stirling Royal Infirmary were identified as having a number of problems that were affecting patient care and strategic planning. The theatres themselves had high cancellation rates 24 hours before surgery and were under utilised. The admissions and discharge lounge was inadequate for both staff and patients and discharge processes were ineffective. There was also poor communication and information for patients.

How was this identified?

Data was gathered and analysed from a number of sources including:

- Theatre utilisation and capacity data;
- National theatres project data;
- Data analysis of pre-operative service and reasons for cancellations/number of did not attends (DNAs);
- Data analysis of patients admitted to Day Surgery Unit (DSU).

What were the implemented improvements (tools/techniques)?

Several improvement tools and techniques were undertaken:

- Rapid Improvement Event (RIE);
- Process mapping pre-operative service and DSU;
- Review of demand, capacity and activity data for theatres, pre-operative department and DSU.

What is the situation now?

The weeklong RIE, held in November 07, involved both clinical and non-clinical staff from across the trust. The aim of an RIE is to reduce the number of steps in the process, removing as much activity as possible from the process that does not directly benefit patients. This improves the flow of information along the pathway and provides a high quality service for the patient. At the end of the week an action plan was drawn up that covers pre-operative assessment, day surgery, the admissions lounge and theatre. Colleagues are now undertaking actions to improve the service.

How is the change sustainable?

This change is sustainable because it improves the service for patients, staff and the organisation. Key staff have been involved in the change process with engagement of clinical leaders across the organisation. Improvements to the process allow the service to continually monitor performance ensuring that a great service is delivered for all patients. NHS Forth Valley has a good history of embracing change and the improvements fit with the organisational strategic and corporate objectives.

Measurable outcome

This project is at an early stage and as such has no measurable benefits to date.
What are the patient benefits?

- The service is now patient centric with more emphasis on the individual;
- Fewer surgical cancellations;
- Patients are well informed about their surgical procedures and post-operative arrangements;
- Improved admissions and discharge facilities.

What are the staff benefits?

- Less stress and frustration;
- Improved satisfaction through the delivery of better care for patients;
- Fewer distractions from taking telephone calls;
- Improved working life.

What are the organisational benefits?

- Reduced number of DNAs and late cancellations;
- Improved theatre utilisation;
- More predictable flow and improved clinical systems;
- Fewer patient complaints;
- Building blocks in place for 18 week referral to treatment patient pathway.

What are the lessons learnt and what would you do differently next time?

- Allow a longer period of time to plan event;
- Service redesign should be an integral part of all job descriptions/plans.

What plans are there to spread the improvement?

Follow through with actions arising from the RIE.

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NHS Forth Valley
Redesigning the admissions and discharge lounge

What was the problem?
The day surgery unit admissions and discharge lounge did not have standardised processes which caused the following issues:

• No standardised patient pathway resulting in delays, inefficiencies and confusion;
• Patients who could have been treated as a day case were booked as an inpatient;
• Long delays in the discharge procedure;
• Demand and capacity were not adequately matched;
• Two admissions times within the unit (08:00 and 12:00) for surgery caused capacity issues within the unit;
• No reception staff to greet patients on arrival and ensure medical records available for clinical staff.

How was this identified?
Poor day surgery rates 68% to 71%.

What were the implemented improvements (tools/techniques)?
The team made a number of improvements as noted below identified through process mapping, value stream mapping and patient and staff interviews:

• Introduced a staffed reception area during admissions times;
• Reconfigured the ward to provide single sex pre-theatre areas, changing facilities and pre-theatre lounge areas, 1st stage recovery after theatre and 2nd stage recovery lounge area;
• Refurbished unused areas of the unit to provide four to five new consultation rooms, allowing greater patient privacy when required;
• During pre-assessment the patient is offered the opportunity to walk to theatre;
• Three specialties have increased the number of procedures that are listed as day surgery improving inpatient bed utilisation;
• Nurse led discharge.

What is the situation now?
This new model commenced in October 07 with the new pathway established and working well. The unit is now operating nurse led discharge for all patients, eradicating delays. The 23 hour day surgery unit commenced in December 07 and we should see an increase in day surgery rates. A patient survey is currently being conducted.

How is the change sustainable?
• Key staff within the unit and the senior executive and clinical support received will ensure that changes are maintained;
• Improving day surgery rates fits with the strategic objectives of NHS Forth Valley;
• Measurement and dissemination of benefits will encourage staff further.
Measurable outcome

- Reduction in the use of inpatient beds from 40 to 33 on average per day;
- All patients are discharged by nursing staff.

What are the patient benefits?

- Patient interviews demonstrated that they prefer to walk to surgery as they felt in control with no loss of dignity;
- Increased privacy for patients;
- Fewer delays in admission and discharge procedures as care is streamlined and organised.

What are the staff benefits?

- Increased job satisfaction as staff have taken ownership of the changes and see the improved service delivery;
- Better use of clinical skills through nurse led discharge;
- Calmer working environment.

What are the organisational benefits?

- Increase in day surgery rates;
- More efficient use of beds;
- Increase in theatre utilisation;
- Reduced waiting times for procedures.

What are the lessons learnt and what would you do differently next time?

Involve staff much earlier in process of change.

What plans are there to spread the improvement?

This new model shall be transferred to our new day surgery unit in Larbert in 2009.

Key Contact

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NHS Golden Jubilee
Increasing general surgery same day care rates

What was the problem?
The Golden Jubilee registered a same day care rate of 55% in December 06. Evidence would suggest that this could be increased for the benefit of patients and staff.

How was this identified?
A benchmarking measurement exercise of same day care rates was undertaken across the Golden Jubilee. General surgery was chosen as the specialty that would deliver the greatest benefits over the timescale of the project.

What were the implemented improvements (tools/techniques)?
To improve the same day care rate the team:

- Ensured default coding as day case rather than inpatient for appropriate procedures;
- Identified high volume/minor day case procedures through benchmarking and targeted improvements at these to maximise benefits;
- Altered bed allocation to reflect an accurate picture of bed occupancy;
- Worked with clinical colleagues to ensure that the correct procedures were being targeted for improvement and to ensure full clinical buy in.

What is the situation now?

Case Study – General Surgery Daycase Rate

[Graph showing the improvement in the Golden Jubilee Daycase Rate – General Surgery from December 06 to October 07]
How is the change sustainable?

- Embedded approach to managing day surgery patients at ward level with support from ward staff;
- Focussed discussions with the wide pool of sessional general surgeons who undertake procedures at the Golden Jubilee, to ensure that the shift to day surgery is undertaken by all clinical staff;
- Exploration of the opportunities for the safe and effective use of the Beardmore Hotel to facilitate discharge for patients who have travelled from across Scotland;
- Continued monitoring of same day care rates.

What are the patient benefits?

The benefits of day surgery for patients are well documented and include:

- Reduced length of stay in hospital with minimum disruption;
- Quicker recovery from surgery;
- Reduced risk of exposure to hospital acquired infections (NB the Golden Jubilee has had no incident of hospital acquired MRSA or C Diff for the past two years);
- Lower risk of hospital cancellations;
- Reduced waiting times for procedures.

What are the staff benefits?

- Better use of clinical skills through the work to develop discharge protocols and nurse led discharge;
- More day surgery means that there is less disruption to shift patterns, thereby boosting staff morale, when they are not required to cover as much night duty.

What are the organisational benefits?

- More efficient use of beds;
- Reduction in patient care related costs, e.g. catering, energy and overnight stay;
- Reduction in waiting times and cancellations.

What are the lessons learnt and what would you do differently next time?

Early engagement with clinicians enables greater benefits to be realised.

What plans are there to spread the improvement?

- Internally: planned care bulletin, presentations to senior management team and department heads;
- Externally: updates at regional and national networking events.

Key Contact

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NHS Grampian
Baseline measurement of day surgery

What was the problem?
NHS Grampian day case rates were below average compared with other NHS Boards.

How was this identified?
A comprehensive dataset compiled by the health intelligence department highlighted administrative and clinical areas for improvement.

What were the implemented improvements (tools/techniques)?

• Addressing clinical practice, e.g. admissions night before surgery, extended post-operative stays, variation of same day surgery rates between hospital sites and clinicians for established day surgery procedures;
• There were three elements to improving data recording. First, setting up systems to capture relevant activity within primary care. Secondly, identifying and setting up systems to code relevant outpatient activity and thirdly identification of inaccurate recording onto the patient administration system as an inpatient, working with secretaries to address this. A Plan Do Study Action approach ensured that ideas were tested out in particular areas and lessons learnt were reflected in the improvement cycles;
• Value stream mapping of the patient journey through theatres was undertaken. This resulted in further audits of patients to look at length of stay. Data on the BADS dataset and other high volume procedures was discussed between clinical leads and the director of day surgery;
• Audits of patient flow through theatre identified bottlenecks.

What is the situation now?
• Improvements in data recording have been achieved in part. There is an outstanding area of work that is currently being implemented;
• Increasing day of surgery admission is largely dependent on good preadmission assessment. In addition, a focus on high volume pathways (e.g. laparoscopic cholecystectomy) should also help;
• Various actions to address theatre utilisation and patient flow are being implemented;
• Proposal for change to physical layout of the short stay unit on one site has been submitted to architects with a view to making structural changes to improve patient flow.

How is the change sustainable?
The project manager has been working closely with the director for short stay surgery and the unit operational manager and their team. While the work plan has been developed with support from the planned care team, the implementation of the work plan sits with the operational management team. Additionally, systems have been set up to ensure monthly information on improvement is provided for clinicians and managers.
What are the patient benefits?

• More patients will be admitted on the day of surgery and have a minimum disruption to their lives;
• Improved flow through the unit to reduce waiting on the day of surgery.

What are the staff benefits?

• Staff satisfaction increases and frustration decreases;
• Clarity of role and purpose within the team leads to improved team working between departments and disciplines.

What are the organisational benefits?

• Improved use of resources minimising unnecessary bed use;
• Reduction in waiting times.

What are the lessons learnt and what would you do differently next time?

• Focus in on key procedures (‘runners’) for clinical discussions may have proved more productive;
• Value stream mapping should have been undertaken at the beginning of the project, not half way through.

What plans are there to spread the improvement?

A work programme for the data recording, clinical practice and theatre utilisation is covered in an action plan document which is being monitored on a six week basis by the associate medical director and the general manager (acute sector) for NHS Grampian.

Key Contact

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NHS Greater Glasgow and Clyde
Increasing the same day care rate for hernia repair

What was the problem?
NHS Greater Glasgow and Clyde identified that only 21% of patients were having their hernia repaired as a day case.

How was this identified?
BADS benchmarking identified that the day case rate for hernia repair within North Glasgow for 2006 was 21%. An audit of all patients admitted for hernia repair in 2006 identified that 83% could have been treated as day case patients.

What were the implemented improvements (tools/techniques)?
• Development of patient pathway for patients referred for hernia repair;
• Establishment of a pooled waiting list for all patients awaiting hernia repair;
• Lead surgeon identified to manage patients.

What is the situation now?
• Pooled waiting lists for hernia referrals;
• One stop clinic in place for patients;
• Dedicated theatre list identified to manage hernia patients.

How is the change sustainable?
This change is sustainable due to the clinical and senior leadership involved within the project. We have been able to clearly show the improvement in flow of patients and identified the reduction in waste. This change is within the organisational strategic aims and we are developing a sustainable process that can be adapted for other specialties and will help with the transition into the ambulatory care hospitals.

Measurable outcome
• An audit of the new pathway is underway and patient narratives are being recorded;
• There has been an increase in the day case rate from 21% to 65% in November 07. The full redesign of this service did not take place until December 07 therefore further improvements in the day case rate are anticipated.

What are the patient benefits?
• Improved flow through the service;
• Reduced waiting time for outpatient clinic and surgery;
• A one stop clinic, reducing the number of hospital visits required.
What are the staff benefits?

As this change has only been in place for several weeks, there is no qualitative data available however; staff have commented, “the new service allows them to treat patients in the appropriate setting as there are fewer day case patients being admitted to the wards”.

What are the organisational benefits?

- Increase in the day case rate;
- Increased availability of beds;
- Increased utilisation of outpatient clinics and theatres;
- Reduced length of stay.

What plans are there to spread the improvement?

This model of service delivery will translate across procedures and specialties, assisting in the transition into the ambulatory care hospitals across the city.

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NHS Greater Glasgow and Clyde
Changing inpatient shoulder surgery to day surgery

What was the problem?
Patients waiting for shoulder surgery were placed on an inpatient list increasing their waiting time for surgery and their length of stay in hospital.

How was this identified?
Waiting list data showed that the waiting time for inpatient surgery was longer than for day surgery.

What were the implemented improvements (tools/techniques)?
A new structure of day surgery shoulder care was planned, if the patient met the criteria at the pre-assessment service. A liaison nurse was employed for six months to deliver home care on these patients’ first post operative day.

What is the situation now?
We are in the preliminary stages of auditing the patients’ post operative progress and their perception of qualitative aspects within the service.

How is the change sustainable?
The key sustainability factors that are crucial in ensuring that this change is sustainable are:

• Senior and clinical leadership helping to deliver this change;
• Clearly identified benefits to patients and staff;
• Good evidence to support the change in practice;
• Detailed audit to evaluate the impact of the change;
• The change to practice also contributes to the organisational aims by improving the day surgery rates and reducing the waiting time for the procedure.

Measurable outcome
A measurable outcome has not yet been achieved. However, we are auditing every patient undergoing shoulder day surgery incorporating; post operative morbidity, analgesia efficacy, wound healing and quality in relation to the provision of service. Provisional data from the audit indicates:

• A high level of patient satisfaction with the service;
• Good pain control is being achieved;
• No patients have required admission for overnight stay;
• No patients have developed infection.

There will be a full audit report available on completion of the pilot in March 08.
What are the patient benefits?

- Choice of care setting with discharge support;
- Excludes post operative overnight stay;
- Less domestic turmoil while a family member is hospitalised, and ultimately economically cheaper for their financial budget;
- Decrease in the possibility of hospital acquired infection.

What are the staff benefits?

- Professional satisfaction in managing the change in practice of surgical procedures which were historically deemed inpatient;
- Audit data highlighting patient satisfaction and praising the service, as rewarding to staff.

What are the organisational benefits?

- Alleviating pressure on inpatient beds;
- Financial saving on overnight care and hotel costs.

What plans are there to spread the improvement?

This current pilot has been a catalyst for orthopaedic surgeons to analyse their current practice and other developments are being explored to support and facilitate patient care in their own home, within 24 hours of discharge from day surgery.

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NHS Lanarkshire
Improving the utilisation of day surgery lists

What was the problem?

There is a low rate of utilisation of day surgery lists within the Monklands Hospital day surgery unit (50%). Insufficient number of patients are listed, leading to a high number of lists being cancelled from a number of specialities.

How was this identified?

A multi-disciplinary steering group was established to review theatre utilisation. The day surgery unit at Monklands Hospital was identified as a key target for improvement based on the information provided in the routine monthly utilisation statistics. It was agreed to review the performance of each speciality in the unit.

What were the implemented improvements (tools/techniques)?

The day surgery manager has been given the remit to review the number of booked patients on each list and identify any unfilled slots a minimum of two weeks prior to the date of the session. The manager and the session holder will identify and agree additional patients to be added to the list. A method of maintaining a short notice waiting list for each specialty is also being considered between each specialty and the appropriate pre-admission assessment staff.

What is the situation now?

Individual meetings are being arranged with each specialty to discuss the current theatre utilisation reports and to review the existing arrangements for preparation of lists, reasons for cancellations, late starts and increasing the range of procedures suitable for day surgery. A representative from each specialty has been invited to assist with this project - including a surgeon, anaesthetist, day surgery nurse and administrative staff as appropriate.

In the first instance, it has been agreed to review the following specialties:

- Ear, nose & throat
- General surgery (general anaesthetic and local anaesthetic lists)
- Orthopaedics
- Gynaecology
- Urology

How is the change sustainable?

- The booking of day surgery theatre lists is now made directly by staff in the day surgery unit as opposed to secretarial staff within each speciality;
- Positive engagement of both clinical and managerial colleagues in the change.

Measurable outcome

The project is in its early stages but it is hoped that a significant improvement in theatre utilisation and day surgery rates will be evidenced at Monklands Hospital for the specialties concerned.
What are the patient benefits?

• Shorter waiting times for day surgery procedures;
• Decrease in the number of patients who’s surgery is re-arranged.

What are the staff benefits?

• Better use of staff time, resources and facilities.

What are the organisational benefits?

• Improved theatre utilisation;
• Improved management of waiting lists;
• Reduced demand on the main theatre;
• Ability to meet waiting time targets.

What plans are there to spread the improvement?

Once the first phase of the project has been completed, it is proposed to conduct a similar review of the remaining users of the day surgery unit at Monklands Hospital:

• Oral surgery
• Plastic surgery
• Dental
• Renal

In addition, it is planned that a similar piece of work be undertaken to look at ophthalmology theatre utilisation in Hairmyres Hospital and orthopaedic utilisation (elective & trauma) at Wishaw General.

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NHS Lanarkshire
Introducing a 23 hour unit in Lanarkshire

What was the problem?
A review of activity data in Lanarkshire identified that patients with a zero length of stay were actually planned as a day case procedure, but admitted via an inpatient ward and discharged within a 24 hour timescale or were having procedures managed in the same time frames after being admitted as an inpatient.

It was felt therefore, that an increased number of patients could be managed via a 23-hour stay unit without any change in clinical management and a further group of patients within the one or two day length of stay category could also be managed in this way.

How was this identified?
The nationally recognised framework of the BADS Information System (BIS) provided a template to benchmark performance against the 23 hour target. The system allowed us to identify the number of patients classified as inpatients with a zero length of stay.

What were the implemented improvements (tools/techniques)?
A multi-disciplinary group was formed to consider the options for providing a 23 hour short stay unit within Lanarkshire and a toolkit from New South Wales provided guidance around its implementation.

All consultants were requested to complete a template indicating suitable procedures for day and 23 hour/short stay surgery. They were also asked to determine the minimum length of stay for inpatient procedures. The BADS Information System was applied to the top 20 most common procedures within each specialty. Patient episodes and average length of stay were reviewed to calculate potential savings in inpatient bed days and improvement in day surgery rates.

Activity within these diagnostic codes represents only part of the total activity referred to the acute division in Lanarkshire. A significant percentage of cases are referred to either the Golden Jubilee National Hospital or to the independent sector for treatment making it difficult to achieve the 18 week maximum wait. Analysing the data further identified a number of cases which could have been managed within Lanarkshire.

A snapshot taken in December 07 of procedures placed on the waiting list for inpatient and day case treatment provided data which was converted into likely annual activity (assuming this represents what is collected over 18 weeks). This further strengthens a case for identifying dedicated facilities to manage day surgery or 23 hour stay patients within NHS Lanarkshire.
What is the situation now?

Options for the location of a 23 hour unit have been considered and a proposal for the establishment of a 23 hour unit within Lanarkshire has been drafted. Admission and discharge criteria for patients being admitted to a 23 hour unit are being drafted and next steps to consider are:

- How many beds/slots a 23 hour unit would need and what the staffing requirements are likely to be;
- Further analysis of costs and anticipated throughput for a unit.

How is the change sustainable?

- Increasing clinical buy in as consultants see the benefit to them of reduced administrative workload and also the ability to protect elective activity;
- Support from ward staff who can now be given more time to manage true inpatients;
- Support from the clinical management structure as a way to facilitate waiting times management;
- Support from clinical governance structure to ensure appropriate care for patients and effective communication with patients and primary care.

Measurable outcome

- Reduced length of stay by procedure;
- Increased day surgery rates (safety net);
- Increased scope of procedures through day surgery unit (encourage boundaries to be stretched);
- Reduced length of stay for short stay procedures (pushing some 48 to 72 hour stays to 23 hour);
- Improved patient satisfaction.

What are the patient benefits?

The majority of surgical care can be administered within a 24 hour period in a non-ward environment. Patients can be admitted, prepared for their surgical procedure, then monitored and provided with appropriate pain relief post-surgery before protocol based discharge occurs within 24 hours. Other benefits include:

- Earlier discharge home with good post-operative instructions and information for GP/community nurse;
- Reduced length of stay for patients for the majority of planned surgical procedures;
- Reduced incidence of healthcare acquired infection.

What are the staff benefits?

- Development of professional practice - nursing staff have a greater level of autonomy and patient contact, as they are responsible for nurse led discharge;
- Reduced administrative duties for staff on inpatient wards, thereby freeing up nursing time for more dependent patients.
What are the organisational benefits?

- Compulsory screening of all admission notifications by the pre-admission assessment service for procedures suitable for admission to the 23 hour care unit;
- Appropriate patient selection using admission criteria;
- Flexible admission times to stagger patient admission;
- Use of clinical protocols to inform, direct and record the patient’s clinical pathway, admission and discharge;
- Dedicated facilities which protect this planned activity as it is no longer competing with emergency cases for inpatient facilities;
- Improved patient satisfaction;
- Improved waiting times management;
- More efficient theatre utilisation;
- Reduced numbers of unplanned overnight stays of patients admitted for day only procedures;
- Reduced waiting lists for protocol based procedures;
- Improved communication between medical, nursing and administrative staff.

What are the lessons learnt and what would you do differently next time?

Ability to get accurate, timely information regarding current activity by specialty and by consultant.

What plans are there to spread the improvement?

Detailed analysis of the required capacity will indicate whether a 23 hour unit is sustainable at each of the three district general hospital sites or whether only at one site. It will also indicate whether a critical mass can be achieved and sustained. If not, the next step would be to consider integration of a 23 hour facility with a planned short stay (three to four days) facility with ring-fenced beds for a number of specialties.

Key Contact

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NHS Lanarkshire
Optimising Day Surgery Capacity

What was the problem?

Day surgery units throughout Lanarkshire were not being used to optimum capacity. The standalone unit on one site had poor utilisation of theatre facilities as many cases were deemed inappropriate for the facilities.

Main theatres were used for day surgery cases on the other two sites. Although day surgery rates were higher, patient flows were not optimal as patients were waiting varying lengths of time before proceeding to theatre which was hindering capacity in each of the sites.

How was this identified?

The scale of the problem was identified in a number of ways:

- Using the mechanism from the National Theatres Implementation Group (NTIG) for benchmarking utilisation showed clearly the degree of under-utilisation of the standalone day surgery unit theatre;
- Reviewing data on inpatients with a zero length of stay, showed that patients failing day case criteria on one site where being treated and classified on one of the other acute sites as inpatients even though the majority of them were being discharged on the day of surgery;
- Day surgery nursing staff reported that patients were often asked to attend the unit many hours ahead of their operation. This information was supported by the hospital complaints departments.

What were the implemented improvements (tools/techniques)?

Poor utilisation of the day surgery theatre was highlighted to all consultants. From their response it was evident that some were unclear about the kind of cases that were appropriate to be managed as day cases. Through a multi-disciplinary group the pre-admission assessment process was revised with an agreement reached for listing patients as day cases or inpatients.

The physical environment of each of the day surgery units was reviewed which provided an understanding of the capacity issues within each of the units. As a result, a patient tracking exercise of the whole patient journey is being undertaken in the day surgery unit at Hairmyres Hospital in February 08.

The process for patients failing the pre-admission assessment on one site for day case surgery has been revised to ensure that they are treated and classified as day case patients on any of the other sites. This accounts for a high proportion of gynaecology inpatients with a zero length of stay.

What is the situation now?

Admission time for afternoon only theatre patients has been revised to 12.00 noon on day of surgery.
How is the change sustainable?

- Increasing clinical buy in as consultants see the benefit to them of reduced administrative workload and also the ability to protect elective activity;
- Support from ward staff who can now be given more time to manage true inpatients;
- Support from the clinical management structure as a way to facilitate waiting times management.

Measurable outcome

A measurable outcome has not yet been achieved. Day surgery managers have been asked to audit the number of patients who experience a significant delay within the unit. This information will be monitored and issues highlighted to the relevant specialties.

What are the patient benefits?

- Increased patient satisfaction;
- Reduced waiting time in the day surgery unit to go to theatre;
- Earlier discharge home;
- Improved clinical care with a reduction in prolonged fasting times.

What are the staff benefits?

- Reduced bottlenecks in the unit at 8.00am as afternoon only theatre list patients now not admitted until 12.00 noon;
- Fewer complaints due to waiting time to go to theatre.

What are the organisational benefits?

- Improved day surgery rates and utilisation of existing resources;
- Improved waiting times management.

What are the lessons learnt and what would you do differently next time?

Early engagement of clinicians (nursing and medical) with an emphasis on improving clinical care rather than hitting targets has reaped considerable dividends.

What plans are there to spread the improvement?

We are hoping to replicate the patient tracking exercise being undertaken at Hairmyres day surgery unit on the other two sites during 2008.

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NHS Lothian
Using laser technology for surgical prostatectomy

What was the problem?
Within Lothian approximately 500 patients with benign prostatic hyperplasia have a four to five day inpatient stay in hospital for a surgical prostatectomy procedure. The use of laser technology for this procedure means that it can now be carried out as a daycase.

How was this identified?
A urology consultant surgeon had reviewed the use of a greenlight laser in King’s Hospital, London and the success rates using this technique for these patients. He approached the planned care team for support in piloting this laser at the Western General Hospital, Edinburgh.

What were the implemented improvements (tools/techniques)?
Criteria were agreed between the consultant and nurse specialists to identify 50 suitable patients to take part in a pilot scheme and the patients were reviewed at an outpatient clinic. The planned care team resourced the equipment and disposables required to use the laser and the parent company gave free use of the laser during the pilot. Operating theatre time was identified on existing theatre lists. The first operating list took place in December 07.

What is the situation now?
Twelve patients have successfully had the procedure carried out to date. The first few patients stayed in hospital overnight as a precaution but the remaining patients have had their procedures done as daycases, returning the following day to an outpatient setting to have their catheters removed.

A business case has been compiled for the permanent use of this equipment.

How is the change sustainable?
If this pilot is successful and the business case is accepted then this procedure will become the standard treatment for this group of patients.
Measurable outcome

Case Study – TURP Length of Stay

What are the patient benefits?

Patients with this condition are normally treated with drug therapy for anything up to five years and then many of them go on to have a surgical procedure with a four to five day stay in hospital. Suitable patients for this procedure will be able to have the laser therapy as a day case without having long spells of drug therapy and the enduring side effects. Furthermore, this procedure is non-invasive and therefore decreases the risks of complications following open surgery.

A patient satisfaction survey is planned to take place in February 07.

What are the staff benefits?

- Staff will learn a new technique and will see the benefits to patients;
- Workload should be managed more efficiently due to reductions in length of stay for patients.

What are the organisational benefits?

- Reducing length of stay and encouraging daycase as the ‘norm’;
- Reducing the requirement for indwelling catheters;
- Reduced infection risks;
- Reduces the need for blood transfusions;
- Long term financial benefit to the NHS of reduced drug therapy costs.
What are the lessons learnt and what would you do differently next time?

Be realistic about set up time - allow enough lead time to get equipment and operating time secured.

What plans are there to spread the improvement?

If the business case is accepted and the laser is in permanent use, patients from across NHS Lothian can be treated with this procedure at a dedicated centre.

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NHS Orkney
Upgrading the day surgery unit

What was the problem?

Day surgery activity in Orkney comprised 86% of all activity recorded in 2005/06 which exceeds the Scottish average. NHS Orkney provides a limited range of activity locally and a large proportion of major and specialist procedures involve referral to mainland providers.

The majority of day surgery is provided in a dedicated day surgery area within the Balfour Hospital. The area has not been designed with day surgery in mind and its current configuration does not support efficient day surgery operating. This has resulted in a lack of patient changing facilities and wasted space that could be converted to clinical space. There was also a lack of clinical protocols and admission criteria.

How was this identified?

As part of its ongoing strategic development NHS Orkney is reviewing the volume and range of activity referred off the islands with a view to repatriating appropriate procedures.

What were the implemented improvements (tools/techniques)?

• To invest and upgrade day surgical unit to support increasing day surgery rates and have a unit fit for purpose;
• To expand the working day/week to support increase in day case patient activity identified through the BADS report;
• To continue to meet target waiting time for patient journey;
• To employ a third consultant surgeon to allow repatriation of patients routinely referred to mainland providers;
• Piloting of anaesthetic pre-assessment to support increase of day surgery and also increase day of surgery admissions for inpatients;
• Developing admission criteria to unit;
• Expert advice initiated from other day units on how best to utilise this large open plan unit to meet our increasing service needs;
• By increasing day surgery we free up inpatient beds for other care streams and improve hospital flow;
• An audit of NHS Orkney’s day surgery performance against the British Association of Day Surgery recommendations (BADS directory) highlighted opportunities to increase day surgery rates and therefore reduce inpatient bed occupancy;
• Patient audit of facilities through questionnaire;
• Verbal comments from staff and patients;
• Study of ‘day before surgery’ admissions through using patient postcodes, highlighted the need to look at alternative accommodation for remote island patients.

What is the situation now?

As part of the redesign process we are gathering expert advice on layout of day surgery facilities. Planning permission is being sought to improve the day surgery unit. Analysis is underway of procedures undertaken along with waiting list data to estimate weekly demand. This will support the establishment of appropriate staffing complement and operational hours.
How is the change sustainable?

NHS Orkney is in the early stages of initiating change for this area but the development of day surgery and pre-assessment and the repatriation of certain procedures is in line with NHS Orkney’s overall strategic development programme.

What are the patient benefits?

• Patient care and outcomes are improved by effective pre-assessment and reduced time spent in hospital in the appropriate setting;
• Streamlining of patient journey thus reducing unnecessary appointments cancellation of theatre appointment;
• Reduces risk to patient presenting for surgery through effective multidisciplinary team working;
• Patients treated in a safe and appropriate facility and overall experience improved;
• Unit staffed for an extended period to increase daycase surgery ensuring patients have adequate recovery time and are fit for discharge on same day.

What are the staff benefits?

• Pre-assessment ensures patients are fully prepared for treatment and theatre sessions run to time thereby reducing pressure on staff;
• Staff morale improved by working in an environment fit for purpose.

What are the organisational benefits?

• Availability of upgraded facilities, fit for purpose will support flow of activity throughout the hospital;
• Supports ability to reduce and maintain waiting times;
• Addresses accountability and clinical risk management;
• Effective and efficient use of resources.

What are the lessons learnt and what would you do differently next time?

The changes are at an early stage and lessons will emerge as redesign of service is fully implemented.

What plans are there to spread the improvement?

The development of day surgery features as part of the feasibility study for new health care facilities and is in line with NHS Orkney’s long term strategic development plan.

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NHS Tayside
Standardising processes in specialist dermatology services

What was the problem?
Due to the nature of dermatology there are relatively few diagnostic tests that can be performed. Dermatologists report that they have had to perform unnecessary surgery because of the difficulty in differentiating between melanocytic and non-melanocytic lesions and malignant lesions from non-malignant lesions. Different diagnostic techniques were being used across Oral-maxillo Facial (OMF), plastic surgery and dermatology leading to unnecessary surgical intervention. Multiple referral options led to a discrepancy in waiting times across the three specialties.

How was this identified?
This was identified as a shortfall by the consultant dermatologists and also as part of the skins rapid improvement event.

What were the implemented improvements (tools/techniques)?
Dermoscopes are useful tools used by dermatologists to help with examining the skin. A dermoscope is a hand held optical device, much like a magnifying glass, with a light source attached. The dermatologist places the optical eyepiece over the area of skin of interest and using the built in light he/she can view the skin in great detail. This clear view of the skin can help with diagnosing skin cancers, particularly melanomas and differentiating melanoma skin cancer from moles or more benign pigmented nevi.

What is the situation now?
All three specialties are now using the same diagnostic techniques.

How is the change sustainable?
• OMF, dermatology and plastic surgery now have the equipment to perform the same diagnostic tests;
• Communication has improved as a result of the rapid improvement event;
• Multi-disciplinary training has been provided for staff involved in the change.

Measurable outcome
Dermatology waiting time has been reduced from 26 weeks to 17 weeks.

What are the patient benefits?
• Patients can be reassured that they have been fully examined;
• Patients spend less time waiting for the results of tests;
• Higher patient satisfaction.

What are the staff benefits?
Dermoscopy can be used to justify a case for surgical excision, if this is required.
What are the organisational benefits?

- A reduction in unnecessary surgery leads to reduced costs;
- Theatre utilisation optimised;
- Standard patient journey for skin lesions.

What plans are there to spread the improvement?

All sites now using the same techniques.

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Chapter 3

Improve Referral and Diagnostics Pathways
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NHS Dumfries & Galloway
Primary referral to occupational therapy for carpal tunnel patients

What was the problem?

The carpal tunnel patient group is not triaged to Occupational Therapy (OT) but go directly on to an orthopaedic consultant clinic which can lead to a long wait. Patients are often then referred on to OT services to be managed through a recognised pathway for treatment. This delay in treatment can have a direct impact on the symptoms, quality of life and work capacity of this patient group.

How was this identified?

Staff interviews highlighted that OT are aware of patients being referred from multiple sources e.g. orthopaedics, direct from GP, rheumatology at varying times and stages of symptom presentation. They noted that there are significant differences in patient management as a result.

What were the implemented improvements (tools/techniques)?

The lead occupational therapist spoke to the lead orthopaedic consultant and agreed to develop a protocol based on current evidence. The current referral pathway was mapped by the team and research was undertaken of current clinical practice elsewhere.

What is the situation now?

A protocol has now been put in place to ensure that the patient is seen by an occupational therapist. The occupational therapist takes the referral from the triage box and the patient is examined for carpal tunnel syndrome. The diagnosis is either confirmed or an alternative diagnosis is given and the patient then follows the appropriate pathway relevant to their condition.

How is the change sustainable?

The carpal tunnel protocol for referral and treatment of patients is now part of departmental practice. Expertise and skills already in the organisation are now being fully utilised.

Measurable outcome

There has been a reduction in waiting times for patients from a minimum of 16 weeks wait for an outpatient appointment with a consultant and an appointment with an occupational therapist to a four to six week wait to see an occupational therapist in first instance with immediate implementation of treatment pathway.
What are the patient benefits?

- Patient sees the most appropriate professional in a timely manner and appropriate treatment is implemented;
- Patient is discharged from surgery quicker, due to the implementation of a locally enhanced service for early discharge from orthopaedic follow-up. A specialist occupational therapist acts as first point of contact for GPs should the patient experience difficulties post operatively;
- Earlier diagnostic testing with implementation of newly established ultrasound clinic (previously patients waited approximately 18 months for nerve conduction studies out with region);
- Occupational therapist refers direct to an ultrasound clinic.

What are the staff benefits?

- Better utilisation of occupational therapist skills and appointments;
- Allowing occupational therapist to use extended skills effectively;
- Opportunity to discuss direct listing of patients by occupational therapist for surgery in future.

What are the organisational benefits?

- Reduction in waiting times for carpal tunnel patients;
- Increased consultant outpatient clinic capacity;
- Utilisation and development of occupational therapist specialist skills to deliver more timely and appropriate patient care.

What are the lessons learnt and what would you do differently next time?

Relatively small changes have had a significant impact which benefits this patient group and the service as a whole. Other diagnostic groups could be managed in a similar way.

What plans are there to spread the improvement?

- Link with rheumatology department to implement carpal tunnel protocol to ensure uniformity of patient care;
- Educate GPs on new pathway to ensure patients referred on to most appropriate pathway;
- Investigate the possibility of developing a one-stop carpal tunnel/ultrasound clinic with an occupational therapist and an orthopaedic consultant.

Key Contacts

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NHS Fife
Reducing did not attend rates for return ophthalmology patients

What was the problem?
‘Did not attend’ rates are too high at ophthalmology outpatient clinics. They currently stand on average at 16% for return patients.

How was this identified?
Routine audit statistics were used to identify this problem.

What were the implemented improvements (tools/techniques)?
Text messaging all review patients two weeks and, if they do not respond, one week prior to the appointment. In order to seek permission to text return patients and obtain their mobile telephone number, patients were also asked whether they would prefer to be contacted by mobile or landline. It was also determined that only patients whose follow-up appointments are more than one month hence would need to be contacted.

What is the situation now?
All follow-up patients in one clinic are reminded by text of their future appointment and can reply either by text or by telephone message. So far of the 34 patients who have received a reminder since the system commenced only two did not attend, a rate of just under 6%.

How is the change sustainable?
- Staff involvement and training;
- Clinical leadership and engagement.

Measurable outcome
Only a small number of patients have been reminded by text so a full statistical analysis is not yet possible. Of the 34 patients who have been reminded in this way only 6% did not attend their appointment.

What are the patient benefits?
Patients are reminded of appointments in an unobtrusive way and are more likely to attend their clinical appointment.

What are the staff benefits?
Reduction in non-attendance at clinics resulting in maximisation of the use of staff time.

What are the organisational benefits?
Clinic slots fully utilised, less rework, i.e. in terms of rebooking.
What are the lessons learnt and what would you do differently next time?
Process to be more formal and communications about the service improved.

What plans are there to spread the improvement?
Investigating pilots in two other areas and trying to implement a process which could also be used for new appointments. Meanwhile the current system is being rolled out to other ophthalmology clinics.

Key Contacts

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NHS Fife
Modelling an orthopaedic service

What was the problem?
Patients were waiting too long in the orthopaedic clinic.

How was this identified?
A computer simulation was used to test out what might be changed in order to improve the orthopaedic clinic experience for both staff and patients. This allowed changes to be simulated in a risk free setting. If the change improved the clinic experience then there is an 80% confidence factor that this will work if changed in the real situation.

What were the implemented improvements (tools/techniques)?
General process mapping techniques were applied, following which patient tracking took place. 750 patients were tracked and the data was analysed. Both the process mapping and patient tracking data were used to build a computer simulation of the orthopaedic outpatient clinic. This facilitated the demonstration of the impact of small, incremental changes to the clinic without risk. On being shown this simulation, the clinical director moved small fracture appointment slots away from the start of the orthopaedic clinic and negotiated all of the small tissue patients to be reviewed in A&E where they had previously been followed up. The model had shown that this would have a beneficial impact on waiting time in the orthopaedic outpatient clinic.

What is the situation now?
There has been a definite improvement in the general clinic situation, less busy and less fractious. Anecdotally, patients would appear to be waiting significantly less time to be seen.

How is the change sustainable?
- Credibility of evidence;
- Adaptability to improved process;
- Clinical leadership and engagement.

Measurable outcome
A further patient tracking exercise will be undertaken in the New Year in order to quantify the impact as far as possible.

What are the patient benefits?
Further audit is required to assess patient benefits.

What are the staff benefits?
The general feeling of staff is that the clinic situation is much improved and less chaotic.
What are the organisational benefits?

Fewer complaints. Staff can reflect on practice using these tools and, using the simulation, can see the potential benefits which may be realised for both patients and staff.

What are the lessons learnt and what would you do differently next time?

Not to front load clinics with unscheduled activity. Also need to be mindful of the impact of people arriving and having to leave en masse (i.e. patient transport).

What plans are there to spread the improvement?

It is anticipated that process mapping, patient tracking and the building of the simulation will be carried out wherever necessary and will be used to reflect on practice and simulate small changes. A user interface for the simulation has been created in-house to facilitate wide use of this methodology.

Key Contacts

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NHS Forth Valley
Centralising the referrals of an orthopaedic service

What was the problem?
The referral process into the orthopaedic service was inefficient and inequitable.

How was this identified?
Waiting times for orthopaedics was wide ranging and in many cases over 26 weeks. Referral into service took place over two sites in Forth Valley and each consultant held a waiting list.

What were the implemented improvements (tools/techniques)?
- Process mapping of orthopaedic referrals;
- Detailed analysis of the orthopaedic waiting list;
- Best practice in referral management.

What is the situation now?
- All orthopaedic waiting lists merged on one site with single point of access and triage;
- Working to pool lists and referrals to the service rather than individual consultant;
- Patient Focussed Booking (PFB) implemented for new orthopaedic referrals;
- Electronic referral form in draft to enable triage into most suitable service (orthopaedics, back pain, physiotherapy);
- Close working between appointing, PFB and extended scope physiotherapists who triage referrals.

How is the change sustainable?
This change is sustainable because it offers improvement across process, staff and the organisation. It has benefits beyond helping patients; the system has the ability to provide a credible evidence base for improvement. Staff have been involved in the change process with engagement of clinical leaders. NHS Forth Valley has a good history of embracing change and this improvement fits with organisational strategic/corporate objectives.

Measurable outcome
This project is in its early stages and as such has no measurable outcomes to date.

What are the patient benefits?
- Reduced waiting times for outpatient appointment;
- Patient seen by most appropriate practitioner;
- Patient has choice of time and date of appointment.
What are the staff benefits?

- Improved job satisfaction;
- Happier working environment.

“When you know that the patients are not waiting so long for treatment, it makes our job much more satisfying” – Physiotherapist

“Being able to offer patients choice for their appointment is good” – PFB Clerk

What are the organisational benefits?

- Achievement of waiting times for outpatient appointments;
- Implementation of PFB for new patient appointments;
- Reduction in did not attends (DNAs) and cancellations;
- Fewer patient complaints to organisation.

What are the lessons learnt and what would you do differently next time?

Earlier consultation with staff as changing culture and mindsets takes time.

What plans are there to spread the improvement?

- The work has been taken forward in Forth Valley into a referral framework document outlining best practice;
- Patient pathway for orthopaedic backs is in draft which is in line with the 18 week referral to treatment programme (out for consultation);
- Electronic referral form in draft to enable triage into most suitable service (orthopaedics, back pain, physiotherapy).

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NHS Grampian
Practice based referral management

What was the problem?

NHS Grampian sought improvement in practice based referral management. The initial question posed was – “given good quality information can GPs manage their own referrals”. Initially the pilot looked at the influence of peer review on referral behaviour at gross level without reference to quality of referral. This element was introduced to improve the appropriateness of the referral and continue to encourage peer review.

How was this identified?

An analysis of referral data extracted from Vision and EMIS systems, of 16 pilot GP practices, revealed variation in referral rates at both GP and practice level.

What were the implemented improvements (tools/techniques)?

- Agreed clinical pathways were developed for high volume referrals: knee pain, post menopausal bleeding, rhinosinusitis and lower GI endoscopy;
- Groups of GPs met with secondary care clinicians to agree pathways based on national guidelines, promoting active discussion between primary and secondary care;
- Process mapping was undertaken to establish the current pathways. New local pathways were developed and shared with all the practices in the pilot.

What is the situation now?

A consultant and an independent GP are assessing the referrals of two of the pathways against the agreed criteria. A meeting will take place in February 08 for the two pathways to look at the reviewers findings.

How is the change sustainable?

Subject to the evaluation of the two pathways, pathways will be developed for other high volume services along the same lines and introduced to all NHS Grampian practices.

Measurable outcome

The pilot study is currently being independently assessed however, the initial analysis demonstrated that the strength of the practice in referral terms depends largely on individual GP skills and if they are balanced across the practice, referral to secondary care is reduced.

What are the patient benefits?

Patients will be seen and investigated timeously by the most appropriate clinician at the most appropriate location.
What are the staff benefits?

- Increased discussion of referrals within GP practices;
- Greater use of individual GP skills;
- GPs better equipped to provide quality information when referring;
- Improved quality of referrals to secondary care.

What are the organisational benefits?

- Improved understanding and monitoring of demand allows the service to plan secondary care capacity with greater accuracy;
- Improved communication between primary and secondary care.

What are the lessons learnt and what would you do differently next time?

- Must involve both primary and secondary care in the development and agreement of pathways;
- Use practices as reference groups of GPs;
- Introduce pathways to pilot practices before distributing widely;
- Look upon the pathways as evolving. You will get lots of comments both for and against implementation but at least will have generated interest;
- Make sure your pathways will link to an electronic referral process.

What plans are there to spread the improvement?

Results and full project evaluation will be presented in March/April 08 for consideration of roll out across all GP practices in NHS Grampian.

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NHS Grampian
GP led ultrasound service

What was the problem?
Inadequate local access to diagnostic and treatment services (ultrasound) within GP practices in Aberdeenshire.

How was this identified?
A capacity and demand exercise was undertaken to identify key locations and key areas of demand. We reviewed alternative models of providing services, including benchmarking an existing local practice based service.

What were the implemented improvements (tools/techniques)?
Improve diagnostic pathways – specifically to train GPs with Special Interests (GPwSI) in general abdominal and transabdominal pelvic ultrasound scanning across Aberdeenshire.

- Following a competency based training and accreditation programme, we have established general abdominal and pelvic ultrasound scanning clinics, run by GPwSI. These clinics take place in a variety of locations in North, Central and South Aberdeenshire;
- A total of 17 GPwSI have undergone/are undergoing training in scanning;
- Since September 06, 12 GPwSI have been running full services locally;
- An additional two GPwSI have been accredited and are currently underway with in-practice scanning, prior to taking on other practice referrals in early 08 (south locations);
- Three GPwSI currently in training (Central and South);
- A total of 1637 scans completed as at the end of December 07.

What is the situation now?
There is a range of locally based ultrasound scanning services up and running in all areas within Aberdeenshire. These services will be fully implemented during 2008.

How is the change sustainable?
Funded GPwSI contract (sessional and salaried).

Measurable outcome
- 50% of the Aberdeenshire practice population now has direct access to a local GPwSI ultrasound scanning service within their practice. A further 11% can also refer to a service in their local area;
- A total of 1637 scans completed as at end of December 07;
- Quicker access; GPwSI waiting time target of two weeks, average wait of 11 days as at November 07.
What are the patient benefits?

- Reduced waiting times;
- Reduced travel times;
- Reduced patient anxiety – immediate results from own GP;
- More streamlined journey of care.

What are the staff benefits?

- Staff satisfaction;
- Enhanced skills (as per Modernising Medical Careers);
- Extending role of general practice.

What are the organisational benefits?

- Meets national strategic direction (delivering care closer to home) and delivers on the NHS Grampian ‘Change and Innovation Plan’ to provide more local access to services;
- Acute sector and primary care jointly progressing the intermediate care agenda;
- Increased local access to diagnostics – 10 clinical sessions per week available now across variety of locations with Aberdeenshire;
- Contribute to meeting system-wide waiting times targets;
- More appropriate referrals – better targeted;
- Changing working arrangements in primary care.

What are the lessons learnt and what would you do differently next time?

- More specific baseline audit to track patient pathway;
- Earlier planning of administrative processes around referral processes and reporting.

What plans are there to spread the improvement?

- Complete in-practice training and service roll out for remaining GPwSIs;
- Progress next phase of testicular and transvaginal scanning by GPwSI (identify funding streams and plan roll out).

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NHS Highland
Physiotherapy led standardisation of orthopaedic referrals

What was the problem?
Increasing referral rate to orthopedics and non-compliance with agreed referral pathways.

How was this identified?
Review audit of the orthopaedic referrals 16 months after the implementation of a local project to introduce the new pathways.

What is the situation now?
A pilot project involving three GP practices in the Easter Ross area is in the process of being established. The pilot will involve all routine adult orthopaedic referrals going through a triage process led by an extended scope physiotherapist then onto the most appropriate service for treatment.

Musculoskeletal Referral Management Scheme in East Highland Locality

How is the change sustainable?
As this is a pilot project and funded on a non-recurrent basis, it will be robustly measured to identify if it has been successful, and in particular what elements have made a difference. Once identified, bids for recurring resource will be made.

What are the patient benefits?
- Reduction in overall waiting times and distance travelled to clinic for patients;
- Reduction of variation in physiotherapy waiting times.
What are the staff benefits?
• Opportunities for GPs and AHPs to gain additional skills.

What are the organisational benefits?
• Development of a multi-disciplinary team approach.

What plans are there to spread the improvement?
A robust evaluation process is being developed which will demonstrate which elements of the pilot have been successful.

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NHS Lanarkshire
Implementing a referral management service

What was the problem?
There were significantly different waiting times within the same specialties across the three sites in NHS Lanarkshire resulting in an inequitable service for patients.

How was this identified?
Through routinely collected waiting times data.

What were the implemented improvements (tools/techniques)?
A Referral Management Service (RMS) was established in April 2007 with a multidisciplinary project team to oversee the implementation and development of the RMS. The RMS was introduced to:

- Streamline and rationalise the vetting process for referrals;
- Rationalise the administration and allocation of waiting lists;
- Support the processes required to improve pre-attendance/pre-admission assessment screening and testing;
- Develop and expand the use of electronically generated and distributed referrals;
- Put in place systems that support central management of ‘direct to test’ referrals.

The RMS provides a number of services (detailed below) and a phased approach is being taken to developing the service and implementing changes:

- Receipt and management of outpatient referrals to consultant clinics;
- Management, scheduling and booking of urgent appointments working closely with cancer trackers.

What is the situation now?
The RMS has been operational since April 07. An analysis of the first quarter’s experience has been undertaken to review progress and highlight any issues which require to be addressed, which include:

- E-vetting;
- Allied health professional centralised referrals;
- Clinic cancellations;
- Urgent referrals;
- Refinement of admin processes;
- Linkages with cancer trackers.

How is the change sustainable?
The introduction of the RMS has been a major help in delivering the current 18 week outpatient target and will continue to assist in bring waiting times down further. The processes transferred to the RMS are day to day operational functions and it is recognised that to return to the previous processes would be a backwards step. In addition, a review of the RMS including a wider review of outpatients in general is currently being scoped to consider processes and procedures and the interface with the service. It is anticipated that this review will take place early in 2008.
Measurable outcome

• 60,000 referrals processed and appointments booked;
• Answered 42,000 telephone calls with an average queue time of 4 minutes, made 10,000 phone calls to patients and sent approximately 150,000 letters;
• Cancelled over 2000 clinics;
• Standardised clinic cancellation and clinic template process with increased management input;
• Assisting in delivery of 18 week target - circa 500 waiting list initiative clinics built and filled and moved patients to hospitals with spare capacity;
• Capacity and demand information extracted from Patient Management System (PMS);
• Linkages with cancer trackers to deliver 62 day wait.

What are the patient benefits?

• Wider access to Patient Focussed Booking services beyond core business hours;
• Patients are better informed due to the standardised, efficient and effective service.

What are the staff benefits?

• Targeted knowledge and skills;
• Improved working conditions;
• Improved work/life balance through introduction of longer working days/shorter working weeks;
• Reduced stress as staff know where patients are within the system, can access patient details easily and answer queries in a more efficient manner.

What are the organisational benefits?

• A fast and efficient referral service that streamlines administrative processes;
• Ability to proactively fill capacity across all three sites in NHS Lanarkshire;
• Planned protocols and pathways for patients entry systems;
• Heightened ability to track patients.

What are the lessons learnt and what would you do differently next time?

• Phased approach to implementation, i.e. one hospital at a time;
• Staff training to support across Lanarkshire role;
• Awareness sessions for medical secretaries, ward clerks, complaints officers, GP practices;
• Contact centre training for managers, i.e. balancing number of staff on phones against demand and waiting time for patients on phone;
• Clear understanding of roles and responsibilities for all those involved in management of outpatient clinics and waiting times;
• Some patients have been incorrectly appointed – numbers are very small but cannot ignore impact on patients and staff.
What plans are there to spread the improvement?

- Expand project group to encompass more clinical input;
- Carry out detailed work with primary care and each acute care specialty to understand current referral patterns and reasons for them;
- Link with whole systems clinical modelling work to establish best referral pathways;
- Establish clear accountability framework;
- Review systems/processes within RMS and improve links with the clinical divisions.
- Develop a number of standards including, among others:
  - A vetting turn around period of no more than 72 hours from receipt of referral;
  - All urgent referrals seen within five working days;
  - Routine Referrals booked or acknowledged within 10 working days;
  - Centralisation of all outpatient waiting lists;
  - Increased use of referral protocols and eReferrals.

Key Contacts

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NHS Lothian
Streamlining referrals through an improvement event

What was the problem?
There is significant variability in processes from referral to appointing patients for outpatient/test attendance.

How was this identified?
This variation was identified by:
- Tracking of timescales of processes for patients from referral to appointment;
- Pre work – observation of processes prior to ‘Lean in Lothian’ Kaizen improvement event;
- Patient complaints.

What were the implemented improvements (tools/techniques)?
Streamlining of processes following process mapping and value stream mapping. Three and a half day Kaizen improvement event run in collaboration with NHS Lothian modernisation team and planned care team. The aim of an RIE is to reduce the number of steps in the process, removing as much activity as possible from the process that does not directly benefit patients. This improves the flow of information along the pathway and provides a high quality service for the patient.

What is the situation now?
- Increase to daily triage in two services, increase to twice weekly in one service;
- Change to booking processes and clearing of all referrals received when triaged;
- Dedicated triage room;
- Identification of role of administration and clerical member of staff to assist the triaging clinician and action triaging in real time;
- Construction of triage forms to enable clear instructions for onward management of patient;
- Improvement in answering of telephone for patients.

How is the change sustainable?
- Roles and responsibilities within the department identified as part of the ‘Kaizen’ process;
- New ways of working implemented from the outcomes of the event;
- Clinical management team has responsibility to maintain changes and improvements;
- Process owners identified and changes reported to executive management team.
Measurable outcome

**OPD4/1 – Registration, Triage and Booking Process**

What are the patient benefits?
Patient comment received following Kaizen event, “great improvement in outpatient department 4 appointments handling”.

What are the staff benefits?
- Changes well accepted by staff;
- Increased morale;
- Improved work environment following reorganisation.

What are the organisational benefits?
- Clarity on roles and responsibilities for all staff – clinical and non-clinical in relation to triage processes;
- Clear instructions with use of triage forms, which can also be audited.

What are the lessons learnt and what would you do differently next time?
Where there are multiple services working from one department it is important to acknowledge this and not to deal with one service in isolation, as changes to one area alone would impact on the other services accommodated in that area. It is also important to ensure that timescales are realistic for project work to be carried out.

What plans are there to spread the improvement?
Following implementation and reporting of the action plan it is anticipated that improvements could be disseminated to other outpatient departments and clinical management teams.

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NHS Lothian
Improving referrals into the Urology Service

What was the problem?
There were variable cycle times from receipt of referral to appointment within the urology service.

How was this identified?
- Tracking of a random sample of referrals;
- Process and value stream mapping;
- Analysis of data on referrals and triage outcome from February 07;
- Patient discovery interviews.

What were the implemented improvements (tools/techniques)?
- Streamlining processes and the pathway from referral to triage to appointing;
- Pathway workshop attended by multidisciplinary team and action plan drawn up;
- Process mapping and brainstorming of problems and solutions.

What is the situation now?
- New process currently being trialled, which incorporates timescales to be adhered to for improvement in cycle times;
- New role identified of referrals co-ordinator to support triage and manage the processes to ensure optimum booking of patients;
- ‘Non referrals’ which previously were included in triage process are actioned by co-ordinator and dealt with appropriately, e.g. a referral may be received which is giving information such as results for a patient already referred which require actioning but not triage.

How is the change sustainable?
Changes to working practices and location of key stakeholders to allow effective communication to take place. Changed roles and responsibilities.
Measurable outcome

Case Study – Urology referral to first appointment offered

What are the patient benefits?

Patient discovery interviews prior to improvements had a theme of positive comments on care but waiting times too long from GP referral. Further patient discovery interviews will be carried out towards the end of the project.

What are the staff benefits?

Referral co-ordinator enjoying new role. Consultant responsible for triaging has noticed benefit of reduction in ‘non referrals’ taking up unnecessary triage time.

What are the organisational benefits?

Change to working practices with clarity on roles and responsibilities in relation to referral management. Change to how information given to cancer tracking team improves timescales whilst maintaining robust information flow.

What are the lessons learnt and what would you do differently next time?

Ensure timescales are realistic for project work to be carried out. Work with a complex and high volume service requires significant preparation work.
What plans are there to spread the improvement?

Improvements realised can be communicated to other clinical management teams via managers.

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NHS Orkney
Triaging referrals prior to seeing an orthopaedic consultant

What was the problem?

Patients that require orthopaedic interventions are currently referred by GPs to either a visiting bi-monthly consultant service or to our local surgical services. In 2005/06, 250 new cases were seen by the visiting service, an unsustainable level of activity without substantially increasing the number of visiting clinics or treating patients in an alternative way. There is also a need to ensure that the clinic time is maximised, by for example ensuring diagnostic tests are done prior to clinic appointment when possible.

How was this identified?

NHS Board activity data was used to identify the problem. Some of the increased activity could be explained by the demographic changes in Orkney, but there was also a perception from clinicians that not all referrals required the input from the orthopaedic surgical service.

What were the implemented improvements (tools/techniques)?

- Introducing a physiotherapy-led triage system, which has already been successfully implemented in NHS Highland;
- Identifying appropriate patients for physiotherapy input and treatment.

What is the situation now?

A physiotherapist has been employed and the development of referral protocols are underway. Additional orthopaedic clinics have been negotiated to ensure waiting times remain within target until impact of physiotherapy trial is fully realised.

How is the change sustainable?

The full impact of change will not be clear until the triage service has been fully operational for approximately six months. If the pilot is successful it is anticipated that this redesign will release sufficient resource to maintain the triage service.

Measurable outcome

This is not available at the moment as the project is in its early stages.

What are the patient benefits?

- Identify and fast track patients most likely to benefit from physiotherapy to this service;
- Remove patients not requiring orthopaedic interventions and provide alternative interventions (i.e. advice, life style modifications and physiotherapy);
- Co-ordinate investigations for the patients that require to be seen by the consultant orthopaedic service;
- Identify patients that require more urgent consultant orthopaedic assessment.
What are the staff benefits?

• Best practice in managing patient flows suggest that triage is a recognised method of improving efficiency and effectiveness in a service;
• Staff will experience increased job satisfaction and reduced pressure as the services are streamlined.

What are the organisational benefits?

• Potential cost benefit in relation to visiting consultant service;
• Closer working links with other NHS organisations;
• Maintenance of waiting time targets;
• Project will inform the design of proposed new hospital facilities.

What are the lessons learnt and what would you do differently next time?

The trial is at an early phase and audit of the service will identify the need for any further changes. Lessons will emerge as the process evolves.

What plans are there to spread the improvement?

Outcomes to be shared throughout organisation, and to executive management team.

Key Contact

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NHS Tayside
Improving access to having a Carotid Endarterectomy

What was the problem?

According to SIGN guidelines, patients should have Carotid Endarterectomy (CEA) within 14 days of onset of Transient Ischaemic Attack (TIA). In Tayside, Patients presenting through the Angus fast track TIA clinic have waits over 40 days from onset of TIA to having their CEA.

Delays in pathway -

- From onset of TIA to being referred by GP to Angus fast track clinic;
- From referral to being first seen at fast track clinic;
- If borderline result, patient would require repeat duplex which results in a further seven days added on to pathway before referral to vascular;
- Time taken from stroke team referring on to vascular team, admin process taking between 15 to 30 days;
- Booked on theatre list for CEA as elective admission, waiting over seven days from being seen by vascular to operation being carried out.

How was this identified?

- East of Scotland Vascular Network meeting in November 07, involving all key stakeholders;
- Analysis of stroke audit data;
- Applying Lean thinking;
- Process mapping.

What were the implemented improvements (tools/techniques)?

- Patient seen at fast track TIA clinic, duplex scan carried out and if positive/borderline result refer to vascular;
- Stroke physician will phone/fax vascular secretary;
- Vascular secretary will bleep on call vascular surgeon;
- Patient will be seen in vascular lab and duplex scan can be repeated if borderline result;
- Patient given date for operation to happen in next few days.

All of the above steps will happen in one day.

What is the situation now?

These improvements are to start with immediate affect from January 08. Numbers of patients presenting through Angus fast track TIA clinic who go on to have CEA are small, with just five in 2007. Awaiting patient to pass through new pathway to test improvement.

How is the change sustainable?

- Monitor performance at regular intervals and continually seek ways to improve;
- Strong clinical leadership.
**Measurable outcome**

Waiting time from onset of TIA to CEA greatly reduced and meeting the 14 day SIGN guideline. Numbers are small, but run chart could be used to show performance.

**What are the patient benefits?**

- Reducing waiting times for diagnosis and surgery;
- Improved access for patients;
- Risk of stroke can be reduced the quicker the operation is carried out.

**What are the staff benefits?**

- Will not increase their workload;
- Staff empowered as helping to make a difference;
- Increased collaboration between stroke team and vascular team.

**What are the organisational benefits?**

- No need for additional resources;
- Achieving the 14 day SIGN guidelines;
- Greater efficiency and reduced waste;
- Improving flow between departments.

**What are the lessons learnt and what would you do differently next time?**

- Good communication is needed at all times;
- Need shared vision on what the problems are and what improvements to implement from all the stakeholders involved;
- How useful Lean thinking is in helping to pinpoint where the problems lie;
- How small adjustments to an existing process can lead to huge improvements;
- Team work is vital.

**What plans are there to spread the improvement?**

Plan is to spread to Perth fast track TIA clinic.

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NHS Tayside
Direct GP referral for hernia patients

What was the problem?
Patients often find it difficult to attend outpatient and pre-admission assessment appointments before being admitted for surgery, if they are of working age. Over the past year, a general surgeon has run a trial of the direct referral of patients from the GP to hernia surgery. It was decided that this model should be rolled out further to all GPs in Angus.

How was this identified?
This was identified by the surgeon involved in the pathway development.

What were the implemented improvements (tools/techniques)?
A pathway has been developed that allows the GP to refer hernia patients directly to surgery in Angus providing they fit specified criteria. This has been tested over the passed 12 months using small cycle change methodology.

What is the situation now?
The GP will diagnose and ensure the patient fits specified criteria before referring patients directly to hernia surgery. Those patients appropriate for the pathway are given an information leaflet which gives clear information for the patient around primary repair of inguinal hernia and is intended to replicate the information given at their outpatient appointment. The referral is then made stating they are suitable for this pathway and there is clear information within the hernia leaflet given by the GP about the need to be pre-assessed.

How is the change sustainable?
This type of direct referral pathway fits in with the current drive to reduce patient referral to treatment times to 18 weeks. Strong clinical leadership is in place as this change is being driven by the surgeon involved and being rolled out to further associate specialists.
Measurable outcome

Case Study – Hernia Waiting Times

What are the patient benefits?
- Patients are required to attend fewer outpatient appointments prior to being admitted for surgery;
- Patients have to take less time off work;
- Referral to treatment time is greatly reduced by negating the need for a first outpatient consultation.

What are the staff benefits?
- GPs can ensure that patients are seen and treated quickly;
- Patients that do not need an outpatient appointment before surgery and are not seen in clinic prior to surgery, reducing the number of hospital visits.

What are the organisational benefits?
- Reduction in waiting times;
- Freeing up of outpatient appointments for more appropriate patients.

What are the lessons learnt and what would you do differently next time?
One patient that was referred straight to treatment as part of the trial did not have a hernia. In the roll out phase an emphasis has been placed on the referral criteria that the GPs are provided with.
What plans are there to spread the improvement?
This piece of work is currently in a roll out phase.

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NHS Tayside
Using a Rapid Improvement Event to improve referrals for urology and general surgery

What was the problem?
- Time taken for referrals to get from GP to secondary care;
- Standard of information supplied in referral letters variable;
- Duplication of effort;
- Referral screening delays;
- Patient information not readily available for each stage of the pathway;
- No process of onward referral for positive results;
- IT links not able to provide timely information in particular to GPs;
- Challenge to meet 62 day cancer targets.

How was this identified?
A Rapid Improvement Event held in November 07, involving a multi-disciplinary core team from Tayside and North-East Fife involving both primary and secondary care. The aim of an RIE is to reduce the number of steps in the process, removing as much activity as possible from the process that does not directly benefit patients. This improves the flow of information along the pathway and provides a high quality service for the patient.

What were the implemented improvements (tools/techniques)?
The proposed improvements for implementation are:
- Electronic protocol based referral with key information provided;
- Daily online screening provided by Gastroenterology;
- Improved information for both patients and GPs at all stages of the journey;
- Onward referral for positive/sinister findings;
- Standardised outpatient department clinic letter.

What is the situation now?
The process is currently underway to achieve the following:
- Continual development of IT to allow progress;
- Ensure all stakeholders are kept up to date with progress;
- Develop and agree minimum dataset for referral between primary and secondary care;
- Develop algorithms for pathway;
- Aim for live date in April 08.

How is the change sustainable?
- Strong clinical leadership;
- Empowered staff;
- Regular monitoring and feedback regarding performance;
- Fits with the strategic aims of the organisation.
What are the patient benefits?

- Reduced waiting times;
- Better informed;
- See right person, right time and right place;
- Reduced risk.

What are the staff benefits?

- Improved communication;
- Tests done at the right time/sequence;
- Reduced delays.

What are the organisational benefits?

- Achieving 62 day targets for cancer patients;
- Greater efficiency;
- Reduced risk;
- Empowered staff;
- Improved communication.

What are the lessons learnt and what would you do differently next time?

- Without the key stakeholders’ involvement the process will fail;
- Perseverance is required to introduce change.

What plans are there to spread the improvement?

This process will be replicated across the organisation when protocol based electronic referrals are developed and fits in with the strategic aims.

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NHS Tayside
Reducing waits for patients with Intermittent Claudication

What was the problem?
Patients with intermittent claudication are seen in NHS Tayside in Ninewells Hospital and Perth Royal Infirmary. Waiting times in Ninewells Hospital were nine weeks for a first outpatient appointment in comparison with Perth where waiting times were between 14 and 22 weeks. The service in Ninewells is nurse led whereas the Perth patients are seen at a vascular clinic by the vascular consultant.

How was this identified?
• To ensure equity of service and guarantee waits of no longer than 18 weeks by December 07, a request was made by the vascular service to commence a capacity and demand study and map the patient journey;
• Waiting times data for both vascular clinics and intermittent claudication clinics;
• Tracking of referrals showed variations of between two and 28 days for referral screening with one referral waiting for six weeks on the Perth site until the referral was screened by a consultant;
• Process map of patient journey;
• Liaison with multi-disciplinary team.

What were the implemented improvements (tools/techniques)?
• Capacity and demand figures to model new service in Perth;
• Observation study;
• Nurse led intermittent claudication commenced in Perth in July 07.

What is the situation now?
The first intermittent claudication patient through the new service from GP referral to appointment was 48 days (seven weeks), a reduction of 52 days. This waiting time is currently being closely maintained. Vascular patients waiting in Perth have an average wait of 14 weeks now for first appointment and the clinic assessment template has been improved with up to date patient information leaflets now available.

The journey time from GP referral to screening has not been reduced dramatically and there is now agreement that all vascular surgical referrals should go to a central point for screening, preferably in the electronic format.

How is the change sustainable?
• Strong clinical leadership to sustain change;
• Continual monitoring and feedback regarding performance.
Measurable outcome

Case Study – Nurse led claudication clinic at Perth

What are the patient benefits?
- Equity of waiting times for patients across NHS Tayside;
- Service provided locally;
- Appointment more structured to allow time for assessment and patient education;
- Better patient information;
- Reduced risk.

What are the staff benefits?
- Role development opportunity for senior nursing staff;
- More capacity in vascular clinic to help reduce overall waiting times to less than 18 weeks;
- Team working;
- Improved communication;
- More time to spend with patients.

What are the organisational benefits?
- Meeting 18 week outpatient target by December 07;
- Staff empowerment;
- Efficiency;
- Reduced risk.
What are the lessons learnt and what would you do differently next time?

- There are always more people involved in the process than initially identified;
- Working with enthusiasts is wonderful, but the real challenge is working with those who are not yet enthusiasts.

What plans are there to spread the improvement?


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**NHS Tayside**  
**Reviewing the provision of Minor ops ‘see and do’ clinics**

**What was the problem?**

This project reviewed the provision of minor ops ‘see and do’ clinics in Dundee, Stracathro and Arbroath and identified:

- A difference of 14 weeks in waiting times between sites;
- No consistent administration or process across the three sites;
- Did not attend (DNA) rates as high as 20%;
- Maximum wait of more than 26 weeks in Dundee.

**How was this identified?**

Statistics provided weekly by NHS Tayside showed that patients waiting for the ‘see and do’ service were very often waiting 18 weeks or more for their procedures. Process mapping and a capacity and demand study based over 42 weeks highlighted further areas for improvement. Data analysis by the information manager demonstrated the high DNA rates for the service.

**What were the implemented improvements (tools/techniques)?**

The project team used a variety of improvement techniques including process mapping, capacity and demand studies, patient tracking and analysis and remodelling to identify the following improvements to the process:

- Pooled all patients on to a single list;
- Extra lists to reduce waiting list prior to change;
- Introduced a patient telephone confirmation service and offered choice of location;
- Reduced the number of sessions required by having a set rota;
- Redesigned patient communications.

**What is the situation now?**

- The majority of patients are now confirming their attendance or making contact to change appointments;
- Pilot information leaflet now gone to print following patient and clinical input;
- Clinical staff feel empowered as they are more involved in the service both clinically and with the administrative side;
- Secretarial staff working jointly to provide a patient focussed service;
- Waiting times on both sites now between 10 and 14 weeks;
- Data shows significant decline in patient appointments being cancelled or moved by hospital, a 50% reduction;
- This piece of work has also raised awareness of the need to reduce the time it takes for referrals to come from the GP to screening process. Online screening of electronic referrals is now imminent for general surgery referrals in North Angus;
- The DNA rates have yet to show a significant decline.
How is the change sustainable?

- The clinics must run as planned;
- Continual monitoring and re-evaluation will be necessary;
- Strong clinical leadership;
- Empowered staff.

**Measurable outcome**

**Case Study – ‘See and Do’ Clinics**

![Dundee & Angus Minor Ops clinics maximum wait (ex AS codes) Period October 06 to December 07](image)

**What are the patient benefits?**

- Reduced waiting times;
- Improved patient information;
- Clear contact details for patients.

**What are the staff benefits?**

- Better communication between all disciplines;
- Ownership of the service;
- Role development.
What are the organisational benefits?

• Achieving 18 week target;
• Empowered staff;
• Increased efficiency.

What are the lessons learnt and what would you do differently next time?

• Ensure all key stakeholders are involved from the beginning, share the workload;
• Do not underestimate the amount of people involved;
• Communicate with everyone yourself, especially the lead people;
• Keep an action plan and share it with all the stakeholders;
• Keep primary care informed and involved.

What plans are there to spread the improvement?

This service is also provided in Perth Royal Infirmary. Perth have now pooled their local anaesthetic lists onto one list managed by one secretary instead of five. Early indications are that this has reduced the waiting time from 18 weeks to 14 weeks.

There is also consultation with the clinicians at present around adopting the improved patient information leaflets.

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Actively Manage Admissions
CHAPTE R 4 — ACTIVELY MANAGE ADMISSIONS

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NHS Ayrshire & Arran
Expanding occupational therapy cover

What was the problem?

Occupational Therapy (OT) has one session allocated to pre-operative assessment where they assess joint replacement patients. This is manageable as the three orthopaedic clinics are on fixed days. However, from the beginning of January, orthopaedic patients requiring pre-operative assessment will be coming straight from their outpatient appointment. This means that orthopaedic patients will be assessed daily instead of three times per week. In order for OT to facilitate this change in practice, they would need to leave the ward areas where they are dealing with the clinical needs of the inpatients which is not possible.

How was this identified?

Staff comments.

What were the implemented improvements (tools/techniques)?

A three month pilot would evaluate the success of appointing a part-time OT technical instructor to undertake one session per week. This time would be used to visit patients pre-operatively at home where they would carry out an assessment and provide essential equipment prior to surgery.

What is the situation now?

This pilot was approved on 14th January and the pilot is expected to start on 21st January 08.

How is the change sustainable?

OT services are being reviewed at present and an assistant post is vacant and monies would be used to fund this post, if the pilot is successful.

Measurable outcome

- Will carry out patient satisfaction questionnaire;
- Numbers seen at home;
- Through discussions with OT service.

What are the patient benefits?

- All orthopaedic patients requiring input from the OT will be seen pre-operatively;
- Length of time at pre-operative clinic would be reduced as the OT assessment is taking place at home;
- Speed up discharges from orthopaedic wards because there is not a need to carry out a home assessment post-operatively;
- Currently patients who could have been discharged home at the weekend have to wait to be seen on the Monday by the OT. If this service was in place patients could be discharged home over the weekend.
What are the staff benefits?
Streamline the service, more rewarding and more responsibility for technical instructor.

What are the organisational benefits?
Patient spends less time at clinic and sees one less professional.

What plans are there to spread the improvement?
If successful will review service at Ayr Hospital.

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NHS Ayrshire & Arran
Piloting an appointment confirmation system for return paediatric patients

What was the problem?
The did not attend (DNA) rate for paediatrics was identified as being significantly higher than other specialties, around 22-25%.

How was this identified?
DNA statistics gathered as a matter of routine and information circulated to managers and routine checking by general manager, women and children's services, highlighted the extent of the problem within paediatrics.

What were the implemented improvements (tools/techniques)?
A module was developed within TOPAS that facilitated an appointments confirmation system which generated reminder letters for all return paediatric outpatients.

The reminder letter was issued three weeks prior to the date of the clinic, along with a proforma. The proforma was designed to enable parents and carers to advise us whether they planned to attend the clinic with their child, whether they wished to cancel the appointment or have it re-scheduled. Re-scheduling could either be done by us and a new appointment posted out or by the patient contacting us by telephone using the number provided on the proforma.

A pre-paid business reply envelope was also enclosed in order to encourage parents or carers to reply and also to make it easier for them to do so. The proforma also asked parents or carers to help us maintain up to date contact information by confirming the address was accurate and provide up to date telephone contact details.

One week before the date of the clinic, a list is made of the parents or carers who have not replied and attempts are made to contact them by telephone. A record is kept of the outcomes received via the proformas and also the outcomes via telephone contact.

What is the situation now?
The pilot has been running for all return paediatric out-patients attending clinics at Ayrshire Central Hospital, Crosshouse Hospital, Davidson Hospital, Girvan and Arran Memorial Hospital since October 07. The pilot covers approximately 34 clinics per month with around 540 return patient appointments booked.

It is anticipated that the information collected manually will be transferred to an electronic database by the end of January 08. This will allow us to analyse the data and identify whether significant improvements are being achieved.
How is the change sustainable?

This will be determined once we have analysed the data collected during the pilot. It is hoped this will provide some indication as to whether the pilot is proving successful in reducing the number of paediatric return DNAs thereby providing benefits to both patients and the organisation. In the meantime the project team is liaising with the health records manager to explore ways in which the appointments confirmation system could be linked into the mainstream appointments function.

Measurable outcome

Case Study – Paediatric DNA Rate

![Return DNA chart]

What are the patient benefits?

- Fewer visits to hospital as patients could be discharged from clinic earlier if all appointments were kept;
- Timeous attendance and medical surveillance underpins child protection element of the service;
- Reduction in the number of DNAs facilitates better planning for new and return appointments within out-patient clinics.

What are the staff benefits?

- Clinics should be better planned and more organised;
- Better attendance improves ability to monitor patients.
What are the organisational benefits?

- Reduction in the number of paediatric DNAs;
- Reduction in the overall DNA figure for the organisation;
- Improved attendance for at risk children increases the organisation's ability to fulfil its duty in terms of child protection;
- Improved accuracy of patient information held on the computerised Patient Administration System as a by-product of completion of the proforma.

What are the lessons learnt and what would you do differently next time?

Once the pilot was underway and information was being collected, it became clear that the initial parameters for the pilot were set too high. We had intended to start with paediatrics then include orthopaedics and ophthalmology because of the high volume of DNAs within those two specialties. However, it quickly became apparent that the number of clinics and return patients involved meant the workload to support the appointments confirmation system and collect data was greater than the resources available for the pilot.

While PDSA cycles are a part of managing projects, had time permitted we would have tested our proforma out on patients before implementation. Initially although forms were returned with attendance information, they failed to confirm contact details as requested. Two PDSA cycles were necessary before getting the layout of the proforma to the stage where almost 100% were returned providing the necessary information.

What plans are there to spread the improvement?

Current discussion with head of health records on sustainability also involve the potential to roll the appointments confirmation system out to include new patients within a number of specialties that have a higher than average DNA rate. The organisation is keen to achieve a reduction in the overall number of DNAs within the organisation for both new and return patients.

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NHS Borders
Reducing the number of theatre cancellations through a urology pre-assessment service

What was the problem?

Increasingly patients were cancelled just before operations because they were medically unfit causing inconvenience and stress for patients, and wasting hospital resources.

How was this identified?

Benchmarking data demonstrated that an average of three to four operations were cancelled each week and patients were routinely admitted the day before their operation.

What were the implemented improvements (tools/techniques)?

• A three month pilot to introduce Pre-Operative Assessment (POA) clinics;
  • Senior theatre nurse worked with anaesthetists, surgeons and admin staff to screen and test patients before surgery.

What is the situation now?

• POA is continuing as a standard part of the urology pathway;
  • Agreement with primary care to run some clinics in community hospitals;
  • Working towards patients receiving operations on the day of admission, reducing length of stay by one day.

How is the change sustainable?

Theatre and ward staff have recognised the efficiency gains from introducing POA for urology and the importance of developing services for all surgical specialties. This change is valued by clinical and senior leaders and will continue to be supported beyond this programme. However, the sustainability of this service is vulnerable due to lack of qualified staff, recurrent funding and monitoring.
**Measurable outcome**

- The audit demonstrates over 80% of patients can be treated in the community, less than 20% require diagnostic tests only available at a general hospital (see attached graph);
- The audit demonstrates that no urology patients who attended the clinic were subsequently cancelled;
- Initial predicted savings are likely to be over 800 bed days as well as anaesthetic time.

**Case Study – Pre op assessment urology**

It is too soon to provide robust evidence of efficiency savings from the introduction of POA for urology, but other departments such as orthopaedics, have shown significant whole system improvements.

**What are the patient benefits?**

- Opportunities for patients to ask questions; understand their procedure and be reassured, ensuring they are fully prepared for surgery;
- Guaranteed date of operation;
- 65% of patients suggested evening clinics would be even more convenient. Most patients were positive about their experience and the quality of care;
- Appointments will be available in acute and community settings and for many this will be closer to home.

**What are the staff benefits?**

- Opportunity for specialist nurse led clinic role development;
- Less frustration and pressure due to last-minute cancellations.
**What are the organisational benefits?**

- Improved utilisation of theatres;
- Using resources in acute and community settings and sharing knowledge and skills;
- Help to deliver 18 weeks referral to treatment target and increase day case rates.

**What are the lessons learnt and what would you do differently next time?**

Allow more time for staff to set up initial clinics and carry out detailed audit in addition to the scheduled clinic times.

**What plans are there to spread the improvement?**

Establish POA clinics for all surgical specialties.

**Key Contacts**

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NHS Dumfries & Galloway
Developing a pre-operative assessment service

What was the problem?

Driven by the demands of the 18 week targets there was a requirement to improve efficiency in pre-assessment processes to:

• Ensure that patients are fully prepared for anaesthetic and surgery in order to reduce DNAs and cancellations hence ensure reductions in waiting times are not compromised;
• Ensure that the psychological, emotional and socio-economic needs of patients are addressed to facilitate discharge planning both for the patient and service providers hence promoting earlier discharge which should impact upon bed utilisation and occupancy.

How was this identified?

A working group was established to explore best practice in pre-operative assessment with the aim of facilitating the development of a comprehensive pre-operative assessment service across the region for both inpatients and day surgery services.

What were the implemented improvements (tools/techniques)?

• Visits to Ayr and Carlisle pre-assessment services;
• Scoping of service requirement – staffing, environment, potential patient numbers;
• Process mapping – close links established with inter-professional colleagues in development of service;
• Development of local guidelines/policies; for example pre-op MRSA screening, diagnostic testing, referral to inter-professional colleagues, hypertension, DVT prophylaxis.

What is the situation now?

• Working towards consolidation of existing service and integration with a new purpose built department;
• Refurbishment of new pre-assessment department has got underway;
• Nursing staff recruitment is in progress;
• Nurse training and development underway - progressing with the development of local training package from anaesthetic, surgical and nursing colleagues, HEI courses;
• Working with IT department to develop a paperless electronic system to record and audit activity in the pre-assessment unit;
• About to trial a paper version of the integrated care pathway with day surgery patients and audit;
• Still to recruit administrative staff;
• Continuing to refine the development process.
CHAPTER 4 – ACTIVELY MANAGE ADMISSIONS

Pre-operative Assessment
Referral Process for DGRI and Galloway Hospitals

Process

Patient attends out-patient department
Requirement for surgery confirmed
Referral sheet for pre-operative assessment completed

Waiting list entry created – pre-assessment section of waiting list
Pre-operative assessment offered that day
Patient given pre-operative assessment information leaflet
Patient sent to pre-operative assessment unit with Casenotes and referral sheet in sealed bag

Variations from standard pathway
If patient is unable to wait for pre-operative assessment that day
referral sheet to be filed in case notes
Pre-operative assessment clinic appointment booked on topas 6
(Pre-operative assessment clinic three only)

Pre-operative Assessment Carried Out

Suitability for DSU/23hr/inpatient surgery assessed
Appropriate diagnostic tests performed
Verbal and written information and education given
Interprofessional referrals completed

Diagnostic tests results obtained/referrals followed up and satisfactory
Waiting List entry updated to reflect successful outcome of pre-operative assessment – Entry removed from pre-operative assessment view to conventional entry type
Relevant secretary informed of outcome
Surgery scheduled

Variations from standard pathway
Requirements for further anaesthetic or interprofessional referral to ensure fitness for surgery/anaesthetic
Appropriate action taken/discussion with lead anaesthetist
Waiting list entry remained in pre-operative assessment section until outcome decided
(potential outcomes below) –
Admission type – DSU/23Hour/inpatient to reflect patient needs
Relevant secretary updated on progress and informed of outcome throughout process
Waiting list entry updated to reflect successful outcome of pre-operative assessment – Entry removed from pre-operative view to conventional entry type
Patient: not for surgery due to health status – removed from waiting list

Actioned by

Consultant Surgeon/Registrar

Clerical Staff OPD/OOP/Cresswell

Nurse OPD/OOP/Cresswell

Nurse OPD/OOP/Cresswell
Nurse OPD/OOPD/Cresswell/Pre-assessment

Pre-operative Assessment Nurses

Pre-operative Assessment Nurses

Pre-operative Assessment Clerical Staff

Clerical and nursing staff Pre-operative Assessment
Relevant Secretary

Pre-operative Assessment Nurses and Anaesthetist
Pre-assessment Clerical Staff
Relevant Secretary
How is the change sustainable?

Regular team meetings.

**Measurable outcome**

Development of measures to monitor the pre-assessment unit in progress. However, changes to the orthopedic pre-operative assessment clinics will increase their capacity from nine to 15 patients per week.

**What are the patient benefits?**

Providing patient centred individualised care responding to their needs in preparation for surgery and subsequent discharge.

**What are the staff benefits?**

Provides clinicians with better prepared patients to fill theatre lists.

**What are the organisational benefits?**

Improved waiting times and hospital efficiencies.

**What are the lessons learnt and what would you do differently next time?**

Have a communication strategy to ensure engagement of nursing and clinical staff to understand the reasons and role of developing a pre-operative assessment service.

**What plans are there to spread the improvement?**

- To raise the profile of the pre-operative service an open day for staff will be held;
- Need to market to clinicians so that they can see that pre-assessment is an integral part of the patient journey;
- Ensure ward nurses familiarise themselves with new documentation surrounding pre-operative processes.

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NHS Golden Jubilee
Admitting joint patients on the day of surgery

What was the problem?
All orthopaedic joint patients were admitted day before surgery. This meant keeping eight free beds daily although beds are at a premium. It was identified that changing admission practice may improve bed utilisation. The use of the Beardmore Hotel was also discussed in relation to patients being booked in there, the night before their surgery.

How was this identified?
A group was set up to look at reducing the length of stay and effective discharge planning and noted that it was routine practice to admit the night before surgery. An orthopaedic consultant suggested that admitting on the day of surgery would reduce the length of stay by one day.

What were the implemented improvements (tools/techniques)?
- Admit the afternoon joint lists on the morning of surgery;
- Only patients assessed by the occupational therapist were included;
- Patients were seen in the outpatient department the day before surgery.

What is the situation now?
The pilot began in December 07 and will run over four weeks. We will then evaluate the process and if successful it will be rolled out to more consultants.

How is the change sustainable?
- Embedded approach by all staff involved to admit patients at a more appropriate time;
- Focused discussions with all groups of staff to ensure full agreement.

Measurable outcome
Due to scheduling difficulties there has only been one patient admitted on the morning of surgery. This pilot will continue as soon as the scheduling problems are resolved. Patients and staff involved will be asked to complete a satisfaction questionnaire for evaluation and subsequent length of stay information will be available on completion of the pilot.

What are the patient benefits?
- Reduced length of stay in hospital with minimum disruption;
- Reduced risk of exposure to hospital acquired infections (NB The Golden Jubilee has had no incidence of hospital acquired MRSA or C Diff for the past two years);
- Lower risk of hospital cancellations.

A patient said about the new process, “could spend night before surgery with family instead of being in a hospital ward”.

"chapter 4 - actively manage admissions"
What are the staff benefits?
More appropriate use of staff resources, i.e. not nursing patients with minimal requirement for nursing care prior to surgery.

What are the organisational benefits?

- More efficient use of beds;
- Reduction in patient care-related costs, e.g. catering, energy and overnight stay.

What are the lessons learnt and what would you do differently next time?

- Early engagement with all relevant staff;
- Maintain momentum.

What plans are there to spread the improvement?

- If pilot is successful in engaging with clinicians we will spread the practice to all other orthopaedic surgeons lists.

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NHS Greater Glasgow & Clyde
Standardising pre-operative assessment guidelines

What was the problem?
There are no standardised pre-operative assessment guidelines and documentation across the 30 pre-operative assessment clinics in NHS Greater Glasgow and Clyde. Each clinic is both site and specialty specific.

How was this identified?
The problem was identified by mapping, the current practices of the areas within the board that presently perform pre-operative assessment.

What were the implemented improvements (tools/techniques)?
• A comprehensive clinic data set;
• Pre-operative assessment directory;
• Pre-operative assessment data set.

What is the situation now?
• Draft pre-operative assessment guidelines complete and waiting ratification by clinical teams;
• Training needs analysis being developed in conjunction with an audit tool to assess the implementation of the new guidelines.

How is the change sustainable?
• Senior and clinical leadership actively involved in driving this change;
• Staff fully informed and involved in the change process and training requirements identified;
• This change contributes to the organisational aims of the board.

Measurable outcome
There are currently no measurable outcomes. However, six months following the implementation of the guidelines, an audit to monitor the progress and identify issues will be undertaken.

What are the patient benefits?
The management of all pre-operative assessment patients will follow a standardised and evidenced based approach.

What are the staff benefits?
Evidenced based standardised pre-operative assessment guidelines across the board.

What are the organisational benefits?
Improvement in patient flow in relation to admission and discharge, theatre utilisation and a reduction in hospital stay.
What plans are there to spread the improvement?

To build on, and further develop, the pre-operative assessment services within the board.

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NHS Greater Glasgow & Clyde
Improving same day admission rates for burns and plastic surgery

What was the problem?
Patients visiting the burns and plastic surgery unit have not traditionally been treated as day cases or had access to same day admission. The discharge process is not efficient and there has been a poor pathway for patients attending outpatient local anaesthetic (OPLA) procedures.

How was this identified?
- Process mapping;
- Patient narratives;
- Flow for patients requiring admission the day before is poor, as often unable to admit until late in the day as beds not vacated early enough.

What were the implemented improvements (tools/techniques)?
- Creation of admission/discharge area including new procedures, i.e. discharge predictor;
- Introduction of surgical pathway forms.

What is the situation now?
The change took place in December 07. There have been several issues identified and dealt with.

How is the change sustainable?
- There has been good, clear, senior and clinical leadership to help drive this change;
- The staff have been fully involved in the change process and the necessary training requirements have been identified and progressed;
- There is support for the change from the patient and public involvement forum;
- The changes are embedded into normal practice and the processes will adapt as the service requirements demand;
- Staff have been encouraged to challenge the current practice and look at innovative ways to deliver the service;
- This change is contributing to the organisational aims of the board;
- The capital changes required to improve the flow for the OPLA patients was identified and finance secured, however, there is a delay in the implementation of the building work required to facilitate the creation of a separate reception/waiting area for these patients.

Measurable outcome
Data is being collected on a daily basis, however, it is too early to present any meaningful results.

What are the patient benefits?
Patient narratives will be repeated once change has been in place for six months.

What are the staff benefits?
Early indications are that staff consider this a positive change.
What are the organisational benefits?

- Improves flow of patients being admitted or discharged;
- Ensures effective management of available beds;
- Reduces patient flow through the system;
- Reduces the stress for staff involved in managing the admission and discharge process for patients.

What plans are there to spread the improvement?

The development of admission/discharge areas to improve the process for patients and ensure efficient use of beds has been identified as an improvement that can be replicated across other specialties within the Board. General surgery is currently reviewing the possibility of further developing their admission/discharge areas in a similar way.

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NHS Highland
Rationalising the pre-assessment process across the board

What was the problem?

Pre-Assessment (PA) practice was variable across NHS Highland. Patients living close to peripheral sites, but having their procedure at Raigmore Hospital, were required to travel to Raigmore for pre-assessment. There was no formal awareness or link detailing which procedures and clinics were being provided at each site.

How was this identified?

The project team undertook a postcode analysis of pre-assessment usage and conducted an audit.

What were the implemented improvements (tools/techniques)?

- Process mapping of current practices at peripheral sites;
- Directory of procedures and clinics available at each site;
- Data examination, i.e. high volume of Caithness general PA is potentially around gynaecology.

What is the situation now?

Pre-admission assessment is now taking place at peripheral sites and we are currently developing a directory for procedure specific pre-assessment availability.

How is the change sustainable?

Local ownership of the process is key to sustainability and this was achieved through:

- Key stakeholders engaged, nurse led;
- Whilst process has been happening (ad-hoc), it has been formalised therefore allowing dedicated PA sessions giving users greater access to service;
- Enhancing the nurse role whilst feeding into local issues such as day case nurse services, therefore allowing role development;
- Enhancing local service links into community hospitals fulfils the management agenda.

Measurable outcome

It is too early to show the results of this pilot study but reporting tools are in place to monitor the improvements.

What are the patient benefits?

- Patients being seen locally;
- Decreased anxiety caused by travel;
- Formal patient survey being developed;
- Valuing the patients’ time.
What are the staff benefits?

- Enhanced role;
- Clarity of PA process;
- Ownership and “tailoring” of process that provides a model that fits with local need.

What are the organisational benefits?

- Barriers to surgery can be addressed, resolved and monitored locally;
- Decreased claims for travel;
- Utilisation of central site beds follows unified PA process;
- Notification of cancellation for surgery due to findings at PA stage allows utilisation of cancelled slots;
- Better list planning and capacity utilisation.

What plans are there to spread the improvement?

The project currently focusses on Caithness and Fort William. This will be rolled out across smaller sites in NHS Highland.

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NHS Lanarkshire  
Establishing a single system for pre-assessment for all planned surgical procedures

What was the problem?

Inconsistent performance information around pre-admission assessment and approach to pre-operative management of patients due to information deficits and inconsistencies across the three acute hospital sites.

How was this identified?

Unification of clinical divisions across NHS Lanarkshire with the establishment of common waiting lists and concentration of some inpatient services highlighted inconsistencies where patients were assessed pre-operatively on one site and operated on at another site.

On occasions, patients were cancelled or had their admission type changed for reasons which were not always clearly evident. Some protocols did exist but marginal differences were not recognised as such and prompted different management plans to be put into effect for similar patients with similar conditions.

What were the implemented improvements (tools/techniques)?

The objective was to establish a single system of pre-admission assessment for all planned surgical procedures that facilitated patient assessment and preparation at each site for any procedure.

A multi-disciplinary group was established including anaesthetists, surgeons and nursing staff to review current processes and take forward work to achieve:

• Consistent pre-admission assessment pathway compliant with New Ways of waiting guidance;
• Standardised pre-admission assessment documentation and clinical protocols;
• Equality of resources in staffing and physical environment between sites;
• Support for existing pre-admission assessment staff to undertake formal, competency based training;
• Development of competency framework and induction pack for new pre-admission assessment staff.

What is the situation now?

• Optimal pathways for 100% pre-admission assessment for all specialties;
• Pre-admission assessment documentation revised in advance of approval by programme board at the end of November 07;
• First tranche of standardised clinical protocols circulated for comment to surgeons and anaesthetists;
• Plan to have a suite of standardised clinical protocols in place by December 07 across NHS Lanarkshire;
• Competency framework for pre-admission assessment staff being developed.
How is the change sustainable?

- Pre-admission assessment is now obligatory prior to day surgery and day of surgery admission at two of the three acute hospital sites in Lanarkshire, with good progress on the third;
- New pre-admission assessment pathways compliant with New Ways of waiting;
- Building blocks in place for future 18 week total journey;
- Wide consultation with all clinical groups ensuring maximum clinical buy in to the new processes;
- Lanarkshire pool of staff trained to core competencies in pre-admission assessment.

Measurable outcome

There are several measurable outcomes at this stage of the project:

- An increase in day surgery rates;
- An increase in the number of same day admissions;
- Improved theatre utilisation;
- Fewer cancellations for medical reasons;
- Fewer late cancellations by patients;
- Patient satisfaction surveys have been positive across a range of indicators.

What are the patient benefits?

- Improved risk management pre-operatively;
- Improved written and verbal information pre-operatively;
- Reduced cancellations;
- Consistency of approach.

What are the staff benefits?

- Improved risk management pre-operatively and ability to identify high risk patients and ensure adequate resources and preparation;
- Standardised documentation reduces repetition and minimises the potential for error;
- Standardised clinical protocols increase awareness of potential risks and consistent appropriate management;
- Access to formal competency-based training for pre-admission assessment staff.

What are the organisational benefits?

- Improved theatre utilisation, reduced cancellations and DNAs;
- Reduced complaints regarding cancellation, inconsistency of approach;
- Accountability and clinical risk management;
- Better resource allocation;
- Improved day surgery rates.

What are the lessons learnt and what would you do differently next time?

Try to improve primary care engagement and try to link in with the community to ensure discharge planning at an earlier stage in the process.
What plans are there to spread the improvement?

- Extend to discharge planning;
- Links with care of the elderly and social services;
- Occupational therapy/physiotherapy input standardised;
- Use pre-admission assessment documentation to streamline the admission process;
- Review theatre start times;
- Work with other boards to define ‘fitness for surgery and anaesthesia’;
- Linkage to PMS (Patient Management System)/ORMIS (theatre management system) for outcomes;
- Feed lessons learned into other planned care flow groups;
- Future piece of work to review time line for pre-admission assessment, consider assessment at the front end, i.e. before waiting list entry.

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NHS Lanarkshire
Standardising the theatre cancellation policy across the board

What was the problem?
There were different processes for the notification of intended theatre cancellation in place on each of the three sites. Theatres were not receiving the agreed six weeks’ notice of planned cancellations which impacted on their ability to re-allocate the cancelled sessions.

How was this identified?
Through the establishment of a multi-disciplinary theatre steering group, users were allowed input into the future direction of theatres. The group also considered how best to improve theatre utilisation in order to benefit all users. The need for a standardised cancellation policy was highlighted by the group.

What were the implemented improvements (tools/techniques)?
• The procedure for the notification of cancellation of theatres across the board was standardised;
• Surgeons and anaesthetists now provide six weeks advance notification of all planned leave;
• Short notice cancellations (less than six weeks’ notice) are only accepted when approved by the appropriate clinical director;
• Dates of all proposed leave that may require cancellation of any scheduled operating lists are sent to a mailbox on the global email system (Theatre Can) as soon as the proposed date of leave is known;
• Theatres follow this up by issuing a positive booking form to each consultant surgeon two months in advance which identifies any leave previously reported on Theatre Can and details of the sessions that remain allocated to the surgeon for that month;
• The consultant surgeon is asked to return the form completed to theatres by a specified date confirming the dates of the sessions they wish to utilise;
• This forms the Positive Booking for those sessions for which an anaesthetist and theatre nursing team will be allocated;
• Thereafter, any available staffed sessions are offered to the specialty via directorates to ensure maximum utilisation of theatre accommodation;
• In addition, a protocol was also put in place to ensure that all theatre operating sessions with cancer patients listed are protected from cancellation. Secretarial staff have been asked to ensure that when they place a cancer patient on the waiting list, they identify in the notes field that the patient is a cancer patient.

What is the situation now?
Both protocols were introduced in December 07.

How is the change sustainable?
The same protocol will be used across each of the three acute sites and will be the sole means of allocating elective theatre sessions.
**Measurable outcome**

Measurable outcome will be a reduction in the number of short notice theatre session cancellations and compliance with the protocols put in place. A mechanism to monitor compliance with the protocol is currently being developed.

**What are the patient benefits?**

- Shorter waiting times as a result of improved throughput in theatres;
- Improved notice of intended operation dates.

**What are the staff benefits?**

- Better use of resources and basis for planning lists and staff rotas.

**What are the organisational benefits?**

- Improved theatre utilisation;
- Improved ability of theatres to re-allocate theatre sessions.

**What are the lessons learnt and what would you do differently next time?**

The protocol has only been in place since December 07 and as such, it is too early to report on lessons learnt.

**What plans are there to spread the improvement?**

This will be applied across all theatres in NHS Lanarkshire. Any lessons learned will be discussed within the theatre steering group in order to inform future projects and pieces of work to be taken forward.

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NHS Lothian
Streamlining the pathway and creating a schedule for patients attending pre-admission

What was the problem?

Patients were spending up to five hours at the clinic with long spells of time waiting with no therapeutic input. All morning patients were booked to come in at the same time (9am) and all afternoon patients came in at 1.30pm. There was variation in numbers from day to day with some days very quiet and other days overbooked. Further to this the waiting area was too small if the clinic was overbooked and patients were mixed in with other outpatient clinics.

How was this identified?

Patient and staff complaints.

What were the implemented improvements (tools/techniques)?

Lean techniques were used to process map the patient pathway and the individuals involved. A schedule was then created with allocated time slots throughout the day determining the time each patient would require with each member of staff. The schedule created 30 slots a day Monday – Thursday and 20 slots on a Friday. Some patients are seen by consultants at pre-admission as they are taken from a pooled waiting list and this was built into the schedule with two consultants changing their allocated days. In addition, a suitable fit for purpose area was sought and identified.

What is the situation now?

The pre-admission clinic was moved to a new fully equipped area in December 07. This area is adjacent to the orthopaedic services and offices, which allows easy access for pre-admission staff to contact clinicians if needed and allows clinicians easy access to pre-admission clinic. The new schedule started in January 08 and appears to be working well. Patients are at the pre-admission clinic for approx 2.5 hours compared to up to five hours previously. There has been positive feedback from staff and patients.

How is the change sustainable?

• This improvement is sustainable as it has been welcomed by staff, patients and the organisation who realise the benefits to the patient journey. The enthusiasm and willingness to make this change sustainable is very clear;
• This change is aligned with the organisational goal to reduce patients’ length of stay by reducing non-therapeutic bed days and is shared throughout the service;
• Staff have been involved and have designed how this new schedule will work within their working environment, planned how the space would be best used and adapted their roles to fit with this change;
• The process change has obviously benefited both staff and patients in decreasing time wasted waiting around, making better use of the available waiting space and creating a calmer, more organised work environment.
Measurable outcome

As the schedule has only been running for one complete week, a measured outcome is not yet available. It is planned to track a number of patients over the next two weeks to determine the improvements in patient flow through the clinic with allocated slots and determine the improvement in the therapeutic time patients spend at the clinic. The revised schedule is noted below and was based on the patient tracking undertaken.

What are the patient benefits?

A patient satisfaction survey is planned to take place at the end of January 08, however there have been positive comments from patients who have attended the service in the past.

“This is much more organised”

“It was a lot quicker this time”

“There isn’t as much chaos”

What are the staff benefits?

A staff satisfaction survey is planned to take place at the end of January 08, however there has been positive feedback from them.

“It’s a much better environment to work in”

“It’s better for the patients because they are not waiting around so much with nothing happening to them”

“It’s just more organised”
What are the organisational benefits?

• All planned orthopaedic patients will be pre-assessed prior to their surgery to allow the majority of patients to be admitted on the day of their surgery, in line with the strategic aim of reducing length of stay;
• Patients’ complaints regarding the pre-assessment service should decrease;
• The facilities and equipment within the service are fit for purpose.

What are the lessons learnt and what would you do differently next time?

There needs to be a precise consultation time set for staff to comment on the changes so everyone is clear about what is expected. The short timescale to set up this project meant not everyone was fully aware of the changes. A specific communication channel needs to be in place prior to the change happening.

What plans are there to spread the improvement?

The schedule, once evaluated will be rolled out to other pre-admission areas that do not have an existing schedule.

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NHS Lothian
Admitting orthopaedic patients on the day of surgery

What was the problem?
All planned orthopaedic patients were admitted to an inpatient bed the day prior to their operation. Most patients had no therapeutic input on this day.

How was this identified?
The planned care team reviewed the admission process. Using Lean techniques the patient pathway was process mapped and all non-value adding steps were identified at a workshop involving multidisciplinary groups of staff.

What were the implemented improvements (tools/techniques)?
The pathway was streamlined to allow patients to come in on the day of surgery, fasted for their procedure. An exclusion criteria was agreed for patients who would require day before admission and a suitable area, equipment and staffing were identified. The patient flow from admission to theatre to the ward was identified, along with roles and responsibilities.

What is the situation now?
The orthopaedic Day of Surgery Admission unit (DOSA) opened in the Royal Infirmary in January 08 and is housed alongside the pre-assessment clinics. All patients (excluding the agreed criteria) are being admitted directly to this unit, being reviewed by the surgeon and anaesthetist and going to their operation. Allocating beds for the patients post-operatively has worked well, although some days have been difficult due to existing winter pressures on beds overall.

How is the change sustainable?
This unit has been set up, staffed and equipped and has now become the norm for this group of patients. Agreed processes are in place and are being monitored on a daily basis and any deviation from the pathway will be reported to the clinical management team. Staff have been involved from the start and have designed the pathway.
Measurable outcome

Case Study – Day of Surgery Admissions

What are the patient benefits?

Patients are attending pre-assessment in this unit; therefore they know where to go on their admission date and are being greeted by the same staff. Information is given to them at pre-assessment so they know what to expect. They are seen by their surgeon and anaesthetist and have an opportunity to ask any further questions. A suitable waiting area and toilet facilities are available. A patient satisfaction survey is planned to be carried out in February 08, however, some patients have given positive verbal feedback in the past week.

What are the staff benefits?

Ward staff now have more time in the morning to concentrate on patient discharges to free up beds for DOSA patients, as they no longer have to prepare all the patients for the operating theatre. Surgeons, anaesthetists and theatre staff can now locate all the patients in one area as opposed to moving round four wards and the unit is situated close to the theatre suite.

Notes and x-rays are stored in this area following the patient’s pre-assessment appointment, therefore staff are not having to move large amounts of notes and x-rays around wards or track them down when they are lost in the system. Pre-assessment staff have commented that:

“They now get to see patients again whereas they never did before”
What are the organisational benefits?

The organisational benefit is that it is aligned with the strategic aim to reduce length of stay and provide a more informative and improved pathway for the patients. A further benefit would be to reduce the number of complaints from patients and relatives who waited for long spells for a bed in an unsuitable area.

What are the lessons learnt and what would you do differently next time?

Plans to open these units should be done in line with other organisational pressures. Due to the short time scale of the planned care programme the unit has opened at a time when there is increased pressure on available beds and this has disrupted the smooth patient flow on a few occasions.

What plans are there to spread the improvement?

Plans are already underway to replicate this pathway in other surgical areas and is in place in the colorectal and urology services at the Western General Hospital.

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NHS Orkney
Establishing a pre-admission assessment for all surgical procedures

What was the problem?
Patients presenting at the day surgery unit for procedures with underlying conditions not detected until the day of surgery, resulting in the procedure having to be cancelled. Inconsistencies in the information included in pre-assessment and inequality of resources, nursing time, anaesthetic time and facilities.

How was this identified?
An audit was undertaken within the day surgery unit that demonstrated a number of patients who had their procedure cancelled on the day of surgery.

What were the implemented improvements (tools/techniques)?
- Piloting patient pre-assessment on same day as clinic appointment thereby streamlining the patient pathway;
- Anaesthetic pre-assessment to increase day of surgery admissions;
- Monitoring times of patients receiving pre-assessment during clinic time to establish staffing input for sustainability for the future.

What is the situation now?
- Local pre-assessment documentation produced, which is consistent with mainland pre-assessment;
- The anaesthetists delivered competency-based training to nursing staff;
- Nursing pre-assessment templates being set up based on times gathered over one month’s trial period;
- Further staff training to be delivered to island community nurses to undertake pre-assessment. This is to reduce overall patient journey time and reduce hospital attendances;
- NHS Orkney has plans to redesign existing areas to ensure appropriate accommodation for planned, unscheduled and long-term conditions thus improving the patient’s hospital experience.

How is the change sustainable?
The pilot to date has demonstrated that additional staffing is required to support pre-assessment. Through the redesign process we have identified ways of streamlining our staffing to meet the needs of the service. A programme of staff development to take on new and extended roles will commence. The further development of pre-assessment will be monitored closely as there is huge potential for demand to increase, especially in support of visiting consultants.
Measurable outcome

The pilot is at an early stage and no measurable outcome is available, however, it has been noted that:

• By piloting pre-assessment for local patients at a surgical clinic, surgeons and anaesthetists have noticed a marked difference and improvement in patient contact time and fitness for procedure;
• Piloting of pre-assessment has resulted in patients being more appropriately directed to day unit or ward care.

What are the patient benefits?

• Patient care and outcomes are improved by effective pre-assessment;
• Streamlining of patient journey thus reducing unnecessary appointments, cancellation of theatre appointment;
• Reduces risk to patient presenting for surgery through effective multidisciplinary team working;
• Improved communication opportunities allowing patients to ask questions and allow staff to deliver health improvement advice, e.g. smoking cessation, reducing alcohol consumption, etc.

What are the staff benefits?

• Improved communication within team and increased job satisfaction;
• Anaesthetists have more time to see each patient prior to surgery as pre-assessment has been completed;
• Improved starting times for theatre sessions;
• Patients better informed and prepared for surgery;
• Patient information and documentation relevant and updated;
• Improved risk management pre-operatively and ability to identify high-risk patients and ensure adequate resources and preparation.

What are the organisational benefits?

• Able to maintain or further reduce waiting times;
• Improved utilisation of theatre and day unit;
• Increase throughput;
• Reduced cancellations;
• Improve patient/public perspective of healthcare;
• Better resource allocation.

What are the lessons learnt and what would you do differently next time?

Pre-assessment is at an early stage of development but given the evidence from other sites this is an important development for NHS Orkney. The service will be closely monitored to ensure it is appropriately staffed and developed.
What plans are there to spread the improvement?

There is the opportunity to expand pre-assessment to support visiting services and particularly patients referred to mainland services for treatment. Therefore we need to ensure through this pilot of pre-assessing patients for our local lists that the training and education of staff is taken into account and that comprehensive processes and data recording is established. The continued support from the anaesthetic team will be essential to any further development. In addition the establishment and development of a pre-assessment service will feature in the development of the proposed new hospital facilities.

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NHS Shetland
Establishing a pre-operative assessment service

What was the problem?

There is no comprehensive service for Pre-Operative Assessment (POA) at the Gilbert Bain Hospital at present. POA is undertaken on an ad-hoc basis for some specialties as time allows. NHS Shetland wished to review this situation to see if pre-operative assessment could be delivered in a more comprehensive manner.

How was this identified?

A process mapping exercise was undertaken in April 07 to describe the current processes for organising elective care through the outpatient department, theatres and the surgical ward. In October 07, a review of key patient flows was undertaken using process mapping. Patient flows were reviewed in three categories, complex, moderate and minor, divided by level of surgical and anaesthesia intervention.

In October 07, work was also undertaken to review the surgical profile and plan the demand for the new service and a retrospective review of all surgical cases was undertaken. This involved assessing the amount of time it would have taken to provide POA to each of the patients seen during the month. These data were then used to extrapolate how much demand there would be for POA services and time over a 40-week period.

What were the implemented improvements (tools/techniques)?

• A schedule and service specification was prepared using the profiling information. In order to accommodate the variety of case mix and the differing processes for visiting and local services, the template includes both booked and open clinic slots so that patients requiring POA on the day can be seen and others can be booked into an appointment date which is convenient;
• A POA health questionnaire has been put in place to capture clinical information about the POA, act as a communication tool between clinical teams and administration staff, monitor the effectiveness of the tool as a health record and capture capacity and demand data;
• The POA service aims to pre-assess all patients undergoing elective surgery at the Gilbert Bain Hospital. It will also pre-assess patients attending the Golden Jubilee Hospital. In order for patients to be admitted for their procedure they must have been assessed by the service. The patient can be referred to the pre-assessment service from a wide range of healthcare professionals.

What is the situation now?

The pilot phase of the POA service commenced in January 08 with all visiting lists being pre-assessed. The service will then be phased in over February and March increasing staff time to support that happening. The service will be fully established in April. This will be managed within existing resources.

During the spring and summer the service will be evaluated with patient numbers and length of consulting time being recorded.
How is the change sustainable?

Proposals are being incorporated into the Board’s local delivery plan for additional resources that will be required in October 08 in line with developments around a new day surgery unit.

Measurable outcome

Improvements are too early to measure at this stage and the service will be evaluated in summer 08.

What are the patient benefits?

- Establishes that the patient is fully informed and wishes to undergo their procedure;
- Ensures that the patient is prepared both physically and mentally for the procedure;
- More effective access to services for patients;
- Begins the discharge process.

What are the staff benefits?

- Frees up time for ward staff to care for inpatients;
- Efficient and active bed management.

What are the organisational benefits?

- Minimises the risk of late cancellations and non-attenders;
- Efficient use of theatre and bed resources;
- Improved day surgery rates;
- Reduction in patient complaints;
- Supporting the achievement of the 18 week referral to treatment access target;
- Contributing to the achievement of access to cancer services (diagnosis and treatment).

What plans are there to spread the improvement?

Plans for the service to cover all elective surgical procedures.

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NHS Tayside
Standardising nurse led pre-assessment training

What was the problem?

Currently, NHS Tayside has a number of areas screening patients pre-operatively. Nursing staff undertake pre-admission screening of patients to elicit fitness for surgery and anaesthetics. This role is delivered and informed by both local and national guidance in the form of protocols and guidelines. However, while the nurses involved in this screening are registered nurses very little or no formal training in pre-admission assessment has been provided in the past, resulting in variation in practice throughout the organisation.

How was this identified?

This was identified as a training need by the nursing staff involved in pre-admission assessment and through an initial pre-admission assessment scoping exercise.

What were the implemented improvements (tools/techniques)?

Ten nurses in NHS Tayside have been given the opportunity to take part in the Southampton University – pre-operative assessor, level three distance training course.

What is the situation now?

All 10 applications were sent to the university in December 07 and the course is due to commence in February 08.

How is the change sustainable?

• Nurses that are fully trained in pre-admission assessment will assist the organisation to better plan the patient journey and effectively and efficiently utilise resources available;
• It has been agreed that the nurses involved in this training course will, on completion of the course, work with NHS Tayside’s nursing and patient services directorate to develop an in-house training package that can be cascaded to other nurses involved in pre-admission assessment.

What are the patient benefits?

Studies have shown that pre-admission assessment reduces anxiety in patients pre-operatively. It gives the patients the opportunity to plan for their forthcoming procedures and gives them the necessary information to ensure minimal disruption.

What are the staff benefits?

By taking part in the training, nurses will be better equipped to pre-assess patients and will be more confident in doing so. Anaesthetists can be more confident on the day of surgery that patients have been fully assessed prior to admission.
What are the organisational benefits?
By ensuring that patients are appropriately investigated prior to admission a reduction in cancellation at short notice will be seen. It is anticipated that there will be an increase in the number of patients that can be admitted on the day of surgery therefore reducing length of stay.

What plans are there to spread the improvement?
In conjunction with NHS Tayside nursing and patient services directorate, it has been agreed that the 10 nurses taking part in this training will develop an in-house training package that can be cascaded to other nurses working in pre-admission assessment.

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NHS Tayside
Introducing orthopaedic pre-assessment

What was the problem?
In discussion with the clinical group it became apparent that a number of patients were being added to the waiting list for surgical procedures about whom there may be concerns about their fitness to progress to surgery.

How was this identified?
This was identified as an ongoing concern by the clinical group manager.

What were the implemented improvements (tools/techniques)?
• In order to address the problem, it was decided that pre-admission assessment ought to be implemented to reduce the number of unfit patients being added to the waiting-list for surgery;
• A screening document was developed to filter out the patients that would need to be seen by an anaesthetist prior to being added to the waiting-list in order that further medical intervention may be initiated if necessary;
• Patients are screened by a nurse in clinic when they are to be listed for surgery and if necessary booked on to an anaesthetist clinic.

What is the situation now?
• All patients requiring major orthopaedic surgery in Ninewells and Perth Royal Infirmary are now being screened prior to being added to the waiting-list;
• Plan to roll-out to Angus patients in 08;
• To date 99 patients have attended the anaesthetic assessment clinic as a result of the nurse screening;
• Patients will be tracked when they come in for surgery to assess the effectiveness of the pre-admission assessment service.

How is the change sustainable?
• This change has been implemented largely by the staff involved and has strong clinical and managerial backing;
• Progress has been fully monitored;
• This change is fully compatible with the introduction of New Ways.

What are the patient benefits?
• It is anticipated that patients are significantly less likely to be cancelled on the day of surgery because underlying medical problems are picked up at the start of their journey;
• Patients should be better informed about the procedure that is planned and have the opportunity to discuss what may be a worrying procedure.
What are the staff benefits?

• Surgeons and anaesthetists can be confident that the patient is fit to proceed with surgery;
• Theatre lists are less likely to be disrupted owing to a reduction in last minute cancellations;
• Anaesthetists are less likely to have to request tests when patients are admitted for surgery as these will have been done prior to admission.

What are the organisational benefits?

• Patients are not added to waiting lists until they are fit to proceed to surgery;
• Theatre utilisation will be optimised;
• Ward beds will not be occupied by patients that are unable to proceed to surgery.

What are the lessons learnt and what would you do differently next time?

Significant monitoring of clinic capacity required.

What plans are there to spread the improvement?

Plan to roll-out to Angus patients in 08.

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NHS Tayside
Adapting the urology ward’s administrative process to improve the patient journey

What was the problem?

The urology ward in Ninewells Hospital admits a high volume of short-stay patients. Regardless of whether a patient was admitted for a long stay or a short stay, the same amount of paperwork was filled-in. This paperwork takes a long time to fill in and it was thought that a lot of it was unnecessary for short stay patients.

How was this identified?

This was identified as a constraint on nursing time by the clinical team manager.

What were the implemented improvements (tools/techniques)?

In order to reduce the amount of paperwork that nursing staff have to fill in, the NHS Tayside ambulatory care pathway was tested for use in the urology ward for short stay patients.

What is the situation now?

It was found that the ambulatory care document greatly reduced the amount of paperwork that was needed for each short stay patient and is now being used for all short stay patients where possible.

How is the change sustainable?

Nursing staff see a benefit in the use of this document as it reduces the paperwork that is required for each short stay patient.

What are the patient benefits?

The patient does not have to sit through a lengthy pre-admission assessment in order to fill in the required ward paperwork with a nurse, so pre-admission is much shorter.

What are the staff and organisational benefits?

Staff have more time to dedicate to patient care rather than filling in paperwork.

What are the lessons learnt and what would you do differently next time?

When introducing new documentation, a formal tracking process may be necessary to ensure staff know how they are expected to use the paperwork.

What plans are there to spread the improvement?

Plan to roll the use of this document out further to other specialties in general surgery where possible.

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NHS Tayside  
Pre-assessing breast surgery patients

What was the problem?

Initial data collection against the BADS directory of procedures at the start of the planned care improvement programme showed that the majority of breast surgery patients in Ninewells experience a pre-operative overnight stay.

How was this identified?

Staff reported that patients are brought in the night before their surgery to ensure that they are clerked in and ready to go to theatre in the morning.

What were the implemented improvements (tools/techniques)?

- In order to address the problem, it was decided that pre-admission assessment ought to be implemented to ensure any problems can be identified before the patient is admitted for surgery;
- A screening document was developed to filter out the patients that would need to be seen by an anaesthetist prior to being admitted to hospital for surgery;
- Patients are screened by a nurse in the day surgery unit in Ninewells when they are to be listed for surgery and if necessary booked on to an anaesthetist clinic for further assessment;
- Initially process mapping was completed and changes have been implemented on a PDSA basis.

What is the situation now?

- All breast surgeons now have the opportunity to pre-assess the patients that they are adding to the waiting-list for surgery;
- Where there are concerns about the health of the patient they are added to a clinic run by an anaesthetist for further investigation.

How is the change sustainable?

The changes should become normal practice for the breast surgery team and the day surgery unit.

What are the patient benefits?

It is anticipated that patients are significantly less likely to be cancelled on the day of surgery because underlying medical problems are picked up at the start of their journey;

Patients should be better informed about the procedure that is planned and have the opportunity to discuss what may be a worrying procedure.

What are the staff benefits?

- Surgeons and anaesthetists can be confident that the patient is fit to proceed with surgery;
- Theatre lists are less likely to be disrupted owing to a reduction in last minute cancellations;
- Anaesthetists are less likely to have to request tests when patients are admitted for surgery as these will have been done prior to admission.
What are the organisational benefits?
• Theatre utilisation will be optimised;
• Ward beds will not be occupied by patients that are unable to proceed to surgery.

What are the lessons learnt and what would you do differently next time?
• Good communication of the changes required at all stages.

What plans are there to spread the improvement?
• Currently continuing to refine the process;
• Implementation of a similar model in Perth Royal Infirmary for general surgery.

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Standardising pre-assessment

What was the problem?

Based upon clinical opinion and experience it was felt that many patients were admitted to the hospital who could have been managed without admission by prompt assessment and then rapid follow up. Some patients requiring further diagnostic tests could have them scheduled for the following morning, allowing the patient to go home, then return for tests, subsequent diagnosis and commencement of treatment.

What were the implemented improvements (tools/techniques)?

Initially, one consultant physician took the decision to address clinical practice, by opting, wherever clinically appropriate, not to admit patients, but to provide them with rapid consultant assessment and then planned follow up via the day hospital, scheduling diagnostic tests, etc. Two of the conditions focussed on were respiratory problems and urinary tract infections. In both cases patients would be assessed and treated as necessary then if their general condition allowed they would be sent home with instructions to nursing and care staff. In addition they also started more targeted follow-up of patients following discharge, with planned post-discharge reviews undertaken within the day hospital.

Process mapping of the flow of patients through the day hospital was undertaken which led to looking at the layout of the day hospital and the facilities provided. A report was produced which suggested how the facilities could be developed to improve the flow: improved disabled facilities, increase the number of treatment rooms from one to three whilst maintaining the ability to treat rehabilitation patients were all considered improvements. The report and plans were put forward for consideration by the hospital management team and are currently under discussion.

What is the situation now?

- As an interim, arrangement due to re-development of the A&E department, GP assessment cases have stopped being admitted via A&E and have been taken straight to a closed side ward. Unfortunately it has not always been possible to use the same side ward, which has sometimes led to confusion;
- There has been a determined effort to stop patients coming to hospital as the initial decision and to utilise the community nursing staff more efficiently.

How is the change sustainable?

These improvements have shown the need to invest in the day hospital to provide a permanent site for the assessment unit since it has its own external entrance and can be developed to be an efficient self contained unit.
Measurable outcome

Impact of this service change has been quite significant, demonstrated by:

- Improved management and outcomes for patients;
- Improvement in the four hour casualty waits to over 98%;
- Specific case studies;
- Reduction/prevention of admissions;
- More rapid access to diagnostic tests and subsequent management;
- Prevention of re-admission/repeat admissions;
- Positive feedback from patients, carers and clinical staff.

What are the patient benefits?

- Improved patient care;
- More effective use of resources;
- Reduced patient journey times;
- Prevented admissions and re-admissions;
- Improved confidence in management of some conditions outside of the hospital;
- Improved longer-term management.

What are the staff benefits?

- Less pressure on A&E staff;
- Better patient management.

What are the organisational benefits?

- Decrease in number of unnecessary admissions;
- Reduction in four hour A&E waits;
- Better utilisation of community staff resource;
- Proactive working to keep patients from being admitted;
- Fewer long term patients being admitted, thereby reducing the number of unnecessary admissions;
- ‘Gate-keeping’ of admissions of assessment patients into hospital beds;
- Less demand on departments for diagnostic tests as ‘urgent’ requests.

What are the lessons learnt and what would you do differently next time?

Important to include data analysts early in the discussions so that baseline activity is recorded, any improvement can be measured and changes in workload can be monitored.

What plans are there to spread the improvement?

Most GPs are on board as they are aware of the A&E re-development. There is a need to share information on the improvements seen so far and support their continuation. Consideration is being given to how the medical staffing may need to be deployed to maintain the service and to improve efficiency. Look at more short-term working teams in areas where improvement may be made quickly and efficiently.

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Chapter 5
Actively Manage Discharge and Length of Stay
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NHS Ayrshire & Arran
Dispensing discharge prescriptions directly from the day surgery unit

What was the problem?
There are delays in patients getting home due to delays in prescriptions being signed by medical staff or delays in dispensing from pharmacy due to heavy workload.

How was this identified?
• Observations by day surgery staff and project team;
• Complaints from patients and carers of delays or having to return later in the day to collect prescriptions.

What were the implemented improvements (tools/techniques)?
• Purchase of drug cupboard for sole use of dispensing drugs directly to day surgery patients;
• The compilation of relevant Patient Group Directions (PGDs).

What is the situation now?
Cupboard is in place ready to dispense drugs, awaiting the purchase of appropriately labelled drug boxes to dispense the relevant amount of drugs.

How is the change sustainable?
Once we begin to dispense the drugs directly to our patients, it will create a smoother flow for patients through our department. It will be a continual improvement and the pharmacy department feel in the future they will be able to further increase the amount and range of drugs we can dispense, thus improving the quality of care provided.

What are the patient benefits?
Patients will not be delayed unnecessarily.

What are the staff benefits?
Improved staff morale.

What are the organisational benefits?
Better use of pharmacy services.

What plans are there to spread the improvement?
Similar service available in other departments.

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NHS Borders
Reducing the length of stay for fractured neck of femur patients

What was the problem?
NHS Borders has an increasing reliance on outsourcing orthopaedic work due to a lack of capacity. We wish to treat all patients locally and will need to manage a potential 20% increase in activity.

How was this identified?
Data from a bed modelling tool and national audit was discussed with the head of service, clinical service manager, charge nurse and nurse lead for community hospitals.

The average length of stay of Fractured Neck of Femur (FNOF) patients for the past three years is 16-21 days. The Multi-Disciplinary Team (MDT) agreed this could be reduced to five days.

What were the implemented improvements (tools/techniques)?
Current patient flow was investigated through process mapping with individuals from the wider MDT including community and social work staff and the team then agreed the changes to be made. The key change identified was to categorise patients by complexity at the beginning of the journey and prepare for discharge or further rehabilitation within five days.

What is the situation now?
- Patients aware of estimated date of discharge from admission;
- Rehabilitation is planned for another environment, not the acute ward. In six months the length of stay has reduced from an average of 16 to 10 days and is still reducing;
- Case notes are transferred more quickly.

How is the change sustainable?
Nurses, allied health professionals, social workers, consultants and managers continue to work towards achieving five days. They regularly discuss and make further improvements at team meetings.
Measurable outcome

Case Study – Fractured neck of Femur

What are the patient benefits?
- More patients are treated closer to home;
- Patients are aware of their own journey at the earliest opportunity and have a shorter stay in the acute environment;
- Rehabilitation environment is excellent and often closer to home.

What are the staff benefits?
Staff can concentrate on the acute phase of patient stay with confidence that further rehabilitation will continue elsewhere.

What are the organisational benefits?
- Improved utilisation of all hospital beds;
- Approximately two acute beds saved per annum;
- Good links with falls prevention scheme, process improvements in A&E and unscheduled care programme.

What are the lessons learnt and what would you do differently next time?
- Obtain more patient feedback;
- Provide more visual updates of progress for all staff on the ward.
What plans are there to spread the improvement?

- Identify other pathways where similar improvements can be made;
- Measure and reduce whole system patient length of stay.

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NHS Fife
Reducing the length of stay for hip replacements

What was the problem?
Average length of stay for hip replacement patients was too long.

How was this identified?
Data from the patient information system was compared with best practice guidance.

What were the implemented improvements (tools/techniques)?
Improved pre-assessment to manage patient and carer expectations and improved pain management protocols on the ward, ensuring patients did not remain in hospital unnecessarily.

What is the situation now?
Average length of stay has reduced from around 10 days to seven days.

How is the change sustainable?
- Process adaptability;
- Staff involvement in training;
- Clinical leadership and engagement.

Measurable outcome

Case Study – Total Hip Replacement

![Graph showing the reduction in average length of stay for hip replacements from Oct-06 to Dec-07. The actual average length of stay is represented by a purple line, and the target trajectory is represented by a blue line.](image-url)
What are the patient benefits?

- Reduction in risk of hospital acquired infection;
- Discharge is planned at the time of admission.

What are the staff benefits?

- Staff more proactive in discharge planning;
- Pathway protocols clearer.

What are the organisational benefits?

Improved bed availability and occupancy.

What are the lessons learnt and what would you do differently next time?

Not being able to maximise the potential gain derived from reduction in length of stay due to lack of available community infrastructure in terms of aftercare.

What plans are there to spread the improvement?

An organisation wide generic pre-assessment model is to be developed which will include admission and discharge planning.

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NHS Fife
Improving post-operative rehabilitation

What was the problem?
Variation in patient experience dependent upon day of procedure with limited rehabilitation available post-operatively at weekends.

How was this identified?
Discussions with staff and changes to workload planning impacting on demands on service.

What were the implemented improvements (tools/techniques)?
Extension of Allied Health Professional (AHP) working at weekends, initially physiotherapists and subsequently Occupational Therapists (OT).

What is the situation now?
Discharges now happen over seven days instead of five and there is less variance in terms of length of stay and care pathway.

How is the change sustainable?
The organisational infrastructure has been developed ensuring adequate levels of appropriately trained staff are available over seven days. The changes are being driven and audited by staff and will make jobs easier as well as improving the ease of access to healthcare by patients.

Measurable outcome
This service was originally put in place to help improve patient and staff experience for hip/knee replacement care. Since then the orthopaedic operating schedule has changed and other orthopaedic patients are also benefiting. Whilst the length of stay for hip and knee replacement patients has improved, with the move of less complicated patients to Stracathro, more complicated patients are treated in Fife leading to less impact on the average length of stay than might have been anticipated.

With all of these changes there are few statistical representations which show an improvement. However, nursing staff, consultants and patients have commented on the improvement and data shows the number of discharges on Mondays has improved.

What are the patient benefits?
Patient experience and length of stay is not affected by the day of their procedure.

What are the staff benefits?
- Improved job satisfaction;
- Enhanced team working, nursing staff see patients continue to progress over the weekend and can have AHP input for specific problems;
- Continuation of specialised orthopaedic AHP input over the weekend.
What are the organisational benefits?
Improved discharge planning.

What are the lessons learnt and what would you do differently next time?

• Audit has shown that lack of AHP input at weekends is not the only reason for delays, pain relief given in theatre can impact on the ability of patients to commence rehabilitation. We need to tackle these additional causes for delays when planning discharge;
• The OT service also had to be extended over weekends to take account of the shift in care by physiotherapists. This had not been anticipated.

What plans are there to spread the improvement?

• The model has already been extended to other orthopaedics patients but we plan to identify potential areas which could benefit from this model through performance monitoring reports and clinical audit;
• We anticipate building a team to allow rotational service.

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NHS Forth Valley
Actively managing the length of stay for hip and knee replacements

What was the problem?
Variable length of stay for elective total hip (THR) and knee replacement (TKR) surgery in NHS Forth Valley.

How was this identified?
• Detailed analysis of procedure data;
• Anecdotal evidence of length of stay for elective THR and TKR surgery.

What were the implemented improvements (tools/techniques)?
• Length of stay data collected per procedure, consultant and by day of surgery;
• Audit of delayed discharges on elective orthopaedic ward 27, Stirling Royal Infirmary by physiotherapist.

What is the situation now?
• Agreed standard length of stay for elective THR and TKR of four days. This is in process of being communicated to all orthopaedic surgeons by departmental lead;
• Pre-operative service communication of four day stay to patients and carers and pre-operative arthroplasty booklets amended. Potential joint group being started to further promote the message;
• Weekend physiotherapy service commenced in January 08 for a three month trial period for early mobilisation ensuring all patients receive the same amount of physiotherapist input;
• Occupational therapist will have priority to review patients in morning to ensure timely assessments take place;
• Integrated care pathway is in development for THR and TKR procedures.

How is the change sustainable?
This change is sustainable because it offers improvement across process, staff and organisation. Staff have been involved in change process with engagement of clinical leaders (orthopaedic surgeons and extended scope practitioners). NHS Forth Valley has a good history of embracing change and this change fits with organisational strategic and corporate objectives. It is important that sustainability is built into redesign work with a vision for the longer term.

What are the patient benefits?
• Patients and carers will be aware and expecting a length of stay of four days;
• Patients will be seen by physiotherapist regardless of their day of surgery;
• Reduced complications from prolonged bed rest and late mobilisation.
What are the staff benefits?

- Improved job satisfaction;
- Better distribution of workload across seven days;
- Earlier identification of problems;
- Happier working environment for staff both nursing and physiotherapist.

What are the organisational benefits?

- Reduction in the length of stay for uncomplicated THR and TKR procedures;
- More effective transfer to Falkirk District Royal Infirmary site for extended rehabilitation if patient not expected to be four day length of stay;
- By investing in weekend physiotherapy service the organisation saves on an extended length of stay for above procedures;
- Fewer complaints to organisation.

What are the lessons learnt and what would you do differently next time?

To appreciate the time it takes to agree change in practice with clinicians and that changing culture and mindsets cannot be accomplished quickly.

What plans are there to spread the improvement?

It is planned that this work will be rolled out to other specialties, general surgery in the first instance.

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NHS Grampian
Introducing an estimated date of discharge throughout Aberdeen Royal Infirmary

What was the problem?
Discharge planning and communication of possible discharge date is poor in most ward areas leading to inefficient patient journeys and extended lengths of stay.

How was this identified?
A benchmarking exercise and information sessions with key stakeholders identified the current estimated date of discharge practice within Aberdeen Royal Infirmary.

What were the implemented improvements (tools/techniques)?
• Regular meetings with key stakeholders to ensure buy in of staff and ease resolution of issues;
• Piloting chosen areas to estimate dates of discharge and supporting and auditing them during the change;
• Reviewing the pilot areas with discussion groups to suggest any areas of improvements of the project plan before rolling out;
• Continuing to support initial pilot areas whilst rolling out to further ward areas;
• Ongoing monitoring, auditing and charting of practice performance and giving feedback to project managers at regular intervals;
• The sustainability of change model was used to increase the likelihood of sustaining the change.

What is the situation now?
A target has been set for all patients to receive an estimated date of discharge within 12 hours of arrival at the hospital. This date is discussed on the doctor’s ward-round and during the nurse’s hand-over every day. The date is recorded in the nursing documentation, on the patient administration system and also displayed using a colour-coded system on the whiteboard at the Nurses Station. A discharge checklist is then carried out 24-72 hours prior to discharge, to ensure the patient will have an organised and efficient discharge.

How is the change sustainable?
• The processes involved in the project were designed to fit in with current practice routines, minimising the change and disruption felt by ward staff;
• The operational support team regularly visit, support and audit the ward areas that are estimating dates of discharge;
• Ward managers are given the responsibility for the project being a success in their area to encourage ownership of the change;
• Benefits are demonstrable to ward staff.

Measurable outcome
Approximately 75% of ward areas within Aberdeen Royal Infirmary are currently recording estimated dates of discharge.
What are the patient benefits?

- Reduced length of stay;
- More efficient patient journey;
- Reduced risk of hospital acquired infection;
- Increased awareness and more open communication of discharge dates for patients and their relatives;
- More organised and less stressful discharge process.

What are the staff benefits?

- More organised care and discharge process;
- Better communication within the multi-disciplinary team;
- Reduced stress levels and time lost on day of discharge as patient has a doctor’s letter and any medication required.

What are the organisational benefits?

- Reduced length of stay for patients;
- More efficient bed management and fewer capacity and demand mismatches;
- Better utilisation of hospital resources and services, such as: ambulance, pharmacy, social work, liaison nurses, discharge lounge due to better planning;
- Potential for increasing elective activity and reducing waiting times due to effective utilisation of beds.

What are the lessons learnt and what would you do differently next time?

- The importance of being visible whilst supporting wards through the change process;
- Ensuring regular praise and feedback of progress and achievement to ward areas to keep motivation levels high;
- Ensure enough time is given for wards to prepare for the change commencing;
- Although this initiative has been mainly nurse led and has improved discharge planning considerably, in order to create the benefits listed above and to be sustainable, medical staff buy-in and support must be achieved.

What plans are there to spread the improvement?

The next roll out of this project will be in February 08 and with funding from the planned care project the support offered to ward staff will increase from five days to seven days per week. This will allow higher focus and speedier success of the project.

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NHS Lanarkshire
Standardising discharge information for day surgery patients

What was the problem?
The quality of written discharge information provided for day case patients varied across sites and specialties and this was also a barrier to timeous nurse led discharge that compromised optimal use of capacity.

How was this identified?
Staff commented that some consultant surgeons and anaesthetists sent patients out to the day surgery unit without sufficient information to allow for nurse led discharge. The nurses then had to spend time trying to contact the consultants to obtain the necessary information.

What were the implemented improvements (tools/techniques)?
Work is being undertaken to produce a standardised admission document for day surgery patients within Lanarkshire. This includes a review of the current anaesthetic record with a view to incorporating this into the standardised admission document. Protocols have been developed for nurse led discharge for day surgery patients with agreed clinical discharge criteria, which has been standardised across the three sites.

Work is ongoing with the theatre systems administration to optimise use of the Theatre Management System (ORMIS) in producing written post-operative information for patients, thereby improving communication with day surgery units and streamlining the nurse led discharge process.

What is the situation now?
• Clinical discharge criteria for day surgery patients has been approved and circulated to all consultant surgeons;
• The first draft of the standardised day surgery admission documentation will be available for consideration by end of January 08;
• Operation/discharge templates established for some specialties: urology, ophthalmology;
• Each specialty asked to identify a key person to work with the theatre systems administrator to develop the templates.

How is the change sustainable?
• Increasing clinical buy in as consultants see the benefit to them of reduced administrative workload and also the ability to protect elective activity;
• Support from ward staff who can now be given more time to manage true inpatients;
• Support from the clinical management structure as a way to facilitate waiting times management;
• Support from the clinical governance structure to ensure appropriate care for patients and effective communication with patients and primary care.

Measurable outcome
Broad support from clinical community of protocols developed to date.
What are the patient benefits?

• Increased patient satisfaction;
• Earlier discharge home with good post-operative instructions and information for GP/community nurse.

What are the staff benefits?

• Fewer complaints regarding the waiting time to go to theatre;
• Development of professional practice. Nursing staff have a greater level of autonomy and patient contact as they are responsible for nurse led discharge.

What are the organisational benefits?

• Improved day surgery rates and utilisation of existing resources;
• Improved waiting times management.

What are the lessons learnt and what would you do differently next time?

Early engagement of clinicians (nursing and medical) with an emphasis on improving clinical care rather than hitting targets has reaped considerable dividends.

What plans are there to spread the improvement?

Protocols to be ratified by acute division clinical board with work continuing to look at all processes and make improvements where possible.

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NHS Tayside
Improving the utilisation of surgical bed capacity

What was the problem?

During the winter of 06/07 there was constant concern about surgical bed capacity and the ability to meet the health needs of general surgery and urgent cancer patients. Key issues were:

• Surgery for cancer and charter patients cancelled on a regular basis;
• Complaints from patients due to lengthy waits for a bed and last minute cancellations due to lack of beds;
• Building work scheduled for April 07 would reduce bed complement;
• Increasing pressure on surgical beds from medical boarders.

How was this identified?

Quantitative and qualitative baseline measurement was undertaken by project staff.

What were the implemented improvements (tools/techniques)?

A consultation process with all bed holding departments was undertaken with the following outcomes:

• A patient flow proforma was tested and rolled out within general surgery, urology, oncology and haematology in February 07;
• This proforma was supported by thrice weekly meetings with a clinical team manager and the senior charge nurse of each ward participating;
• Agreement that if senior charge nurses created the capacity to admit the general surgery emergency and elective patients, they could do so without authorisation from the bed manager.

What is the situation now?

The proforma is fully implemented in surgery and oncology, medicine and cardiovascular clinical groups, the two largest bed holding areas.

How is the change sustainable?

• Medicine and cardiovascular implemented the system in November 07, just prior to winter;
• The senior charge nurse’s report shows continued satisfaction with the approach;
• Bed managers feel clinical areas are more proactive in forward planning the patient journey.

Measurable outcome

• As a consequence of the changes in surgery, general medicine reviewed their patient flows and processes as well, leading to a significant and sustained reduction in medical boarding;
• Since the change has been implemented there has been, on average, no more than one medical boarder in surgery;
• Length of stay of the target patient population has been sustainably reduced;
• Number of medical boarders during post new years week is around 50% less than previous years.
What are the patient benefits?
Since implementation there have been no cancellations of elective patients due to lack of beds and there have been no patient complaints about long waits or cancellation due to lack of beds.

What are the staff benefits?
Senior charge nurses felt empowered and independently promoted the system as an innovative improvement at the organisation’s clinical governance committee.

What are the organisational benefits?

- Reduction in length of stay, freeing capacity;
- Improved bed management system.

What are the lessons learnt and what would you do differently next time?

- This work has increased local understanding at senior charge nurse and staff nurse level about key actions that must be fulfilled in order to achieve better patient flow;
- There has been an increase in the local understanding of the pivotal role that the senior nurses play in driving their ward’s capacity and demand. They are demonstrating a true understanding of capacity, demand and flow, and are proactively managing it;
- Development of specific criteria to focus thinking has ensured meetings are short, decisions are made and progress is documented;
- Changes in one part of the system impact on, and have consequences for, other parts of the system.

What plans are there to spread the improvement?

Medicine and cardiovascular implemented in November 07. Further spread not required.

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NHS Ayrshire & Arran
Improving the dermatology new to review ratio

What was the problem?

The ratio of new to review outpatient appointments within the dermatology service in Ayrshire was higher than national average (1.5 vs. 1.2 over the six months to September 07). One consultant’s ratio was higher still at 1.8. Reducing this ratio would allow more new patients to be seen in each clinic thus shortening waiting times.

How was this identified?

Analysis of nationally available data showed regional variation; in-house IT systems were used to determine new to review ratios for individual consultants; one of the dermatology consultants expressed an interest in looking at the service’s ratios.

What were the implemented improvements (tools/techniques)?

• A return appointments audit form was used within the dermatology service in Ayrshire to establish reasons for return appointments and potential alternatives;
• Demand, Capacity, Activity and Queue (DCAQ) charts were used to determine current activity levels in relation to new outpatient appointments in order to provide a base line for improvements;
• Trials of alternative methods of follow-up are being evaluated.

What is the situation now?

• Audit data revealed that the number of patients brought back for consultant review might safely be reduced;
• Clinic templates are being altered to increase the number of new slots and reduce the number of return slots;
• Alternatives such as telephone follow-up and fast track re-appointment for patients are also being considered.

How is the change sustainable?

• With at least one of the dermatology consultants keen to internally monitor and review new to review ratios over time, clinical leadership has been secured;
• Evidence used to inform discussion was based on the best sources available and an honest evaluation of the limitations of the data was given in order to give confidence in the data;
• Charts showing the potential effect of altering new to review ratios by 15% were used to illustrate potential reductions to waiting times and potential release of consultant’s time in order to offer reasons for making the changes in line with organisational goals and benefits for patients and staff;
• Regular meetings between the project lead, service manager and consultants have been arranged to monitor the progress of change and maintain enthusiasm. Beyond project timescales, the service manager concerned will continue to use DCAQ to monitor the effect of changes to clinic templates in general and new to review ratios in particular.
What are the patient benefits?

• Reduced numbers of unnecessary return outpatient appointments and the convenience of phone-based follow-up without the need for travel to hospital;
• Shorter waiting times for new appointments.

What are the staff benefits?

Reduced waiting times will reduce pressure on consultants and departments and ultimately allow surgical specialists to spend less time in outpatients and more time in theatres.

What are the organisational benefits?

More efficient working will aid attainment of national waiting times targets.

What plans are there to spread the improvement?

Ophthalmology and orthopaedics are the next specialties that will be encouraged to decrease review to new ratios.

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NHS Dumfries & Galloway
Reducing the reliance on waiting time initiative clinics in orthopaedics

What was the problem?

The orthopaedic service in Dumfries & Galloway has for some time relied on waiting time initiative clinics to ensure waiting times are kept within targets. This has had a knock-on effect throughout the service as the number of return appointments has become unmanageable resulting in a worsening new to review ratio.

How was this identified?

There were wide oscillations in activity in the department’s monthly performance figures.

What were the implemented improvements (tools/techniques)?

- To create a buffer in the outpatient clinic to accommodate short term fluctuations in new patient and surgical activity;
- We have focussed on the end of the hospital process, considering (successful) completion of treatment to be a more appropriate measure of effectiveness than the number of intermediate steps performed (new clinical patients and theatre activity);
- We have identified procedures which can have at least parts of their aftercare safely supervised by GPs;
- These procedures are also included in the Orthopaedic Competence Assessment Project (OCAP) so a lot of important work has already been done concerning competence assessment;
- Orthopaedic consultants have met with a large number of the region’s GPs from all four localities to outline the proposals and hear their views about problems and benefits of the proposal;
- The consultants have agreed follow-up routines for the procedures which have been sent to the GPs and accepted by the region’s GP subcommittee, these routines include clear indications for referral back to the hospital clinic.

What is the situation now?

- Six procedures have been identified. For day surgery these are: carpel tunnel release, trigger finger release, removal of ganglion and other benign soft tissue swellings, and knee arthroscopy. The major procedures are total hip replacement and total knee replacement. The day cases will have their last planned hospital attendance on the day of surgery. The joint replacements will have their last planned hospital attendances one year after surgery;
- Funding is agreed (£35 per patient per year);
- The scheme has now started as the existing hospital appointments management system has now been set up to remind patients who have been discharged early to see their GPs at the correct time;
- Information flows for shared care both directly after day surgery and after hospital clinic follow-up have been developed to identify procedures for appointment scheduling, protocol for review after GP assessment, identification of outcomes by GP practice and processes for recording these key outcomes on TOPAS systems at the hospital in order to trigger appropriate payments to GPs via primary care.
How is the change sustainable?

We have just begun weekly meetings between clinical staff, a business manager, an appointments manager and a senior orthopaedic secretary, to identify earlier problems with excess returns, long waiters for clinic or surgery, or schedule conflicts.

Measurable outcome

• To make a worthwhile contribution to department capacity we are aiming to achieve successful early discharge for 1,600 patients/year;
• With an expected 20% re-referral rate we need to discharge early from the hospital clinic a total of about 1,900 patients per year (total returns seen in orthopaedic and fracture clinics in 06-07 was 10,089 from 5,249 new patients);
• As at the end of December 07 there have been 270 patients identified from existing review patients for long-term follow-up by GPs under this service.

What are the patient benefits?

Delivering patient care closer to patients home.

What are the staff benefits?

• Targeting medical or clinical care by the most appropriate professional for the needs of the patient.

What are the organisational benefits?

• Frees up capacity within outpatient clinics. This can then be utilised where required (e.g. increase theatre sessions).

What are the lessons learnt and what would you do differently next time?

Our small department provides a fairly comprehensive elective and emergency service to one DGH, a large community hospital and several smaller community hospitals. We have co-ordination problems that are quantitatively different from those affecting larger departments. We expect to apply some of the abundant research in schedule optimisation and co-ordination in other fields to achieve competent management.

What plans are there to spread the improvement?

We are considering other professionals who may follow-up groups of elective or trauma patients in hospital but outside the consultant clinics or in the community.

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NHS Golden Jubilee
Introducing Patient Focussed Booking to reduce DNA rates

What was the problem?
Within the outpatient department the average did not attend (DNA) rate was 7.7%.

How was this identified?
Through analysis of the performance information.

What were the implemented improvements (tools/techniques)?
Patient Focussed Booking (PFB) approach to arranging appointments.

What is the situation now?
PFB clinics were held in dermatology and minor procedures in October 07 and December 07. This is now being rolled out to diagnostics and general surgery.

How is the change sustainable?
- Further training on PFB being rolled out within diagnostics and general surgery;
- Continued monitoring of performance at directorate and organisational level.

Measurable outcome
- Minor procedures: PFB clinic held in October 07. DNA rate was 1.7% (52 patients with only one DNA);
- Dermatology: PFB clinic held in December 07. DNA rate was 1.8% (56 patients with only one DNA).

What are the patient benefits?
- Clinic appointments at a time which suits them;
- Meets the needs of patients;
- Improved quality of service.

What are the staff benefits?
- Improved patient satisfaction;
- Better utilisation of clinic sessions.

What are the organisational benefits?
- Improved performance through fewer DNAs and Could Not Attends (CNA);
- Efficient waiting list management on behalf of referring boards.

What are the lessons learnt and what would you do differently next time?
- Maintain momentum;
- Keep staff informed and engaged.
What plans are there to spread the improvement?

PFB approach appears to work to reduce DNAs and CNAs and this needs to be rolled out across the organisation.

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NHS Grampian
Introducing a nurse led pessary service

What was the problem?
Increasing outpatient attendances for pessary patients across NHS Grampian, coupled with the need to reduce the number of patients attending a secondary care facility for routine long term care.

How was this identified?
NHS Board activity figures and an audit of provision of pessary services within GP Practices and a training needs analysis. 88% response rate with 76% providing some form of pessary service.

What were the implemented improvements (tools/techniques)?

• The introduction of a nurse led pessary clinic for all patients requiring follow up appointments for pessary care, with introduction of measures to discharge suitable patients back to community care;
• Nurse specialist trained to run pessary clinics at Aberdeen Royal Infirmary and utilised to deliver pessary training and support to clinic nurses based in the community;
• Introduction of discharging patients back to GP for management of pessaries;
• Establish nurse led referral protocols to list for prolapse surgery if they have previously been seen by a consultant and refer to physiotherapy, continence care or cystometry;
• Information sessions were held with key stakeholders to ensure buy-in;
• Audit patient satisfaction of nurse led pessary clinic and monitoring of development of service provision;
• Competencies agreed for nurse led pessary clinics which will also be utilised for training nurses in peripheral clinics and GP practices;
• Nurse led protocol introduced for patients requiring pessary management;
• Health promotion leaflets produced to improve information available for patients.

What is the situation now?

• Gynaecology consultants now send return patients to the nurse led service;
• GPs refer patients with pessary problems directly to the nurse led service;
• Patients are being discharged to the GP practice where applicable;
• Training programme created for GPs and practice nurses by nurse specialist and gynaecology consultant;
• Peripheral nurse led clinics being set up and training of local nurses underway.

How is the change sustainable?
The nurse led pessary clinic has been made sustainable in the acute sector through training of another nurse. Dissemination of knowledge and training with core competencies and protocols enables the provision of local nurse led services.
What are the patient benefits?

• Patients treated locally in a more appropriate setting;
• Continuity of care by nurse in clinic;
• More efficient patient journey;
• Increased awareness of pessary care, lifestyle changes and treatment options available through increased health promotion and access to leaflets;
• Reduction in waiting time from three months to two weeks for return appointments.

What are the staff benefits?

• More organised and structured care for this patient group;
• A single point of access resulting in better communication within the multidisciplinary team;
• Medical staff are now seeing more complex patients.

What are the organisational benefits?

• Reduction in waiting times for consultant-led return appointments;
• More efficient use of clinic appointment times;
• Better utilisation of hospital resources.

What are the lessons learnt and what would you do differently next time?

• To collect evidence of previous activity prior to introduction of service development instead of relying on hospital information systems;
• Engage GPs at an earlier stage improving communication between primary and secondary care;
• Multidisciplinary change challenging and the length of time for change to happen is longer than expected.

What plans are there to spread the improvement?

Continue to work on service development in other areas of gynaecology:

• Development of nurse led prolapse clinic from point of GP referral which has increased capacity of prolapse service;
• Creation of 18 week patient pathways;
• Increase provision of health promotion through creation of relevant leaflets;
• Undertake nurse led post-operative clinic;
• Improve quality of referral letters through audit;
• Develop nurse led endometriosis clinic for return post-operative patients;
• Undertake TV ultrasound scanning course to further develop skills and assist in provision of other services such as post-menopausal bleeding and menstrual clinics;
• Set up gynaecology pre-assessment service at peripheral clinics;
• Spread change to all gynaecology consultants.

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NHS Tayside
Actively managing the follow-up of breast cancer patients

What was the problem?
Currently follow-up for breast cancer patients is shared between surgery and oncology unless the patient has undergone surgery only. There is no clear guidance of who should review the patient, at what stage and who takes ownership of the patient. Some patients on complex treatment and recovery programmes see a number of different people.

How was this identified?
• Clinical staff working with breast cancer patients;
• Process mapping of the follow-up process;
• Patients turning up in clinics in no clear sequence and sometimes without necessary tests or results;
• There is currently no process that checks when and where the patient has their next appointment or test.

What were the implemented improvements (tools/techniques)?
• Suggest that breast care nurses could provide some of the follow-up appointments;
• Introduction of a patient diary which clearly outlines what should happen and when. This would change the current process as patients generally get an appointment for 6-12 months time when they leave the clinic. Although psychologically important that patient knows of appointment this can be overcome with the use of a patient diary where necessary information is recorded for the patient’s information. The next appointment would be sent out nearer the time of the appointment;
• Suggest that oncologists may provide more appropriate follow-up care for patients who have a combination of treatments, with surgeons reviewing patients who have had surgery only, or if identified as appropriate by the oncology staff;
• It is also intended to benchmark the current guidance within the department to that of other areas.

What is the situation now?
The process maps are to be shared with the necessary stakeholders. The aim is to have a more clearly defined process for patients at each stage of their follow up plan, allowing the most appropriate person to see the patient at the right time. There needs to be further discussion about the booking of appointments and implementation of a patient diary.

It is also necessary to be clear about the impact on the service if proposed changes to the pathway are implemented. There is a raised awareness within the service of the need to revisit the pathway.

How is the change sustainable?
• Strong clinical leadership;
• Empowered staff;
• Patient satisfaction;
• Simplified booking.
What are the patient benefits?

• Clearly defined follow-up process;
• Appointments and tests attended in sequence;
• See the same staff during the follow-up period allowing continuity of care;
• Patient diary will allow a record of when appointments should be, important dates and somewhere to write down questions they may wish to ask;
• Reduce risk.

What are the staff benefits?

• Continuity of care;
• Role development for breast care nurses;
• Extra capacity at surgical outpatient department if some activity moved to oncology;
• Improved communication;
• Simplified booking.

What are the organisational benefits?

• Patient satisfaction;
• Reduce risk.

What are the lessons learnt and what would you do differently next time?

• Process mapping allows key stakeholders to see the process visually.

What plans are there to spread the improvement?

• Process mapping is already recognised to be a useful tool within the current improvement work ongoing in NHS Tayside.

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NHS Tayside
Reducing the DNA rate in ENT clinics

What was the problem?
Current NHS Tayside data shows the average Did Not Attend (DNA) rate is 9% with wide variation (6 - 20%) across specialties. Within NHS Tayside DNA rates in ENT services show a consistently high rate across all three locations. At the time of this analysis ENT were showing DNA rates averaging 14%.

How was this identified?
Organisational data and a snapshot audit using a structured patient questionnaire by telephone across Dundee, Perth and Angus was undertaken during August. The findings of the snapshot audit were as follows:

• One of the biggest challenges of this piece of work was finding up to date contact details for patients, mainly telephone numbers. Despite using Patient Focussed Booking (PFB), GP surgeries and phone books we could not contact 20 of the 46 DNAs to follow-up the reasons for non-attendance;
• Of the DNA patients contacted the majority had forgotten their appointment. Some patients had received their appointments six months previously; a small number of other patients had personal reasons for forgetting;
• The high DNA rate during this snapshot audit, within the new patient cohort, suggests that PFB does not necessarily ensure that a patient remembers an appointment, however, it does provide the patient with an element of choice;
• The remainder of those contacted stated a wide range of reasons for not attending. For example, the patient did not think appointment was necessary (further investigation identified trainees bringing patients back when a consultant would discharge); there were system errors, i.e. more than one appointment issued and the patient became confused; the patient mixed up the date of attendance.

What were the implemented improvements (tools/techniques)?
A number of solutions were identified and included:

• A need to provide discharge protocols that support trainee led discharge for high volume conditions;
• Open access follow-up was another potential method that gives the patient responsibility within defined criteria to come back for review if they feel it necessary;
• PFB for return patients was another option for consideration. Text messaging and SMS are other options that should be considered in the future to remind patients of appointments.

However, in the first instance the agreement was for standardisation of DNA management within the ENT group using New Ways guidance as a template thereby reducing variation in practice across the specialty.

What is the situation now?
Agreement by all ENT clinicians to adopt this practice was reached and was implemented at the end of December 07.
How is the change sustainable?

- This change should become normal practice not only within the ENT department but across the whole organisation based on the introduction of New Ways;
- Strong clinical leadership;
- Regular monitoring and feedback regarding performance.

What are the patient benefits?

- Shorter waiting times if DNA rates reduced;
- Less confusion for patients.

What are the staff benefits?

- Clearer management pathway for all staff in event of patient DNA;
- Better utilisation of appointments;
- Improved communication.

What are the organisational benefits?

- Shorter waiting times;
- Reduction in costs of DNAs;
- Improved communications between primary and secondary care.

What are the lessons learnt and what would you do differently next time?

- Patients appear genuinely disappointed that they have forgotten an appointment;
- Patients report some confusion around appointments;
- It is difficult to contact patients in traditional office hours.

What plans are there to spread the improvement?

New Ways has been launched within NHS Tayside across all specialties.

Key Contacts

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NHS Tayside
Reducing the DNA rate in orthopaedic hand clinics

What was the problem?

Within NHS Tayside DNA rates at the orthopaedic hand clinic based in Ninewells are consistently high averaging 13-15%. Despite widespread acknowledgement that follow-up patients generally show a higher DNA rate than new patients this particular service, during the year 2006/07, constantly had a higher DNA rate for new referrals.

How was this identified?

We gathered the DNA data from all orthopaedic hand clinics in Ninewells during the month of November and undertook a snapshot audit using a structured patient questionnaire. The audit showed that:

• One of the biggest challenges of this piece of work was finding up to date contact details for patients, mainly telephone numbers. Despite using GP surgeries and phone books we could not contact 11 of the 24 DNA patients to follow-up the reasons for non-attendance;
• From the 24 DNA patients six were A&E referrals of which three were new referrals, none of whom could be contacted;
• Of the DNAs contacted five had forgotten their appointment. The remaining seven had a range of reasons for not attending, three stated they had not received a letter to attend, one mixed up the date of attendance and three gave reasons of being unwell and social problems.

What were the implemented improvements (tools/techniques)?

No improvements have been made to date as this report has been compiled for the clinical group in January 08.

What is the situation now?

The following solutions have been suggested:

• Efforts need to be made to ensure up to date patient contact numbers are available. Patient contact details should be confirmed whenever the patient makes contact with the health service;
• During the introduction of electronic referral pathways this piece of information needs to be clearly defined and completed within the pathway;
• The process for booking patients to the hand clinic from A&E could be explored with the potential to provide open access to the hand clinic by patient contact. Clear patient focussed information would be needed to support this;
• Open access follow-up is one recognised method of allowing the patient to be discharged from the clinic and gives the patient supported responsibility in the care pathway. Patients are given a letter, which describes what they should do if they feel the need for review within an agreed timescale. The patient is then able to either contact a nurse for a telephone consultation and/or make a review appointment without firstly going through the GP;
• Patient Focussed Booking, if not already being used in this service, should be considered;
• Text messaging and SMS are another way of reminding patients of appointments and are used successfully in other workplaces such as dentists and hairdressers. Accurate contact details would be required;
• Implementation of New Ways will allow standardisation of practice when re-appointing DNA patients.

How is the change sustainable?
• Strong clinical leadership;
• Systems to monitor situation;
• Regular feedback to those providing the service.

What are the patient benefits?
• Shorter waiting times if DNA rates reduced;
• Ability to make appointments at a time that suits.

What are the staff benefits?
• Clearer management pathway for all staff in event of patient DNA;
• Better utilisation of appointments;
• Improved communication.

What are the organisational benefits?
• Shorter waiting times;
• Reduction in costs of DNAs;
• Improved communications between primary and secondary care.

What are the lessons learnt and what would you do differently next time?
• Patients report some confusion around appointments;
• It is difficult to contact patients in traditional office hours.

What plans are there to spread the improvement?
New Ways has been launched within NHS Tayside across all specialties.

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Chapter 7
Measuring the Patient Pathway
CHAPTER 7 – MEASURING THE PATIENT PATHWAY

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NHS Dumfries & Galloway
Measurement of the whole orthopaedic patient pathway

What was the problem?
It was evident that end-to-end measurement of all aspects of the patient pathway in orthopaedics was not possible from existing data sources.

How was this identified?
• High level process mapping of orthopaedics specialty carried out under the planned care improvement programme in order to understand different stages of the patient pathway;
• This highlighted problem areas where changes could be made and actions were investigated to tackle these at different stages of the patient journey;
• In tandem to this it was decided to collate a range of measures that would both assist with understanding the end-to-end patient pathway and also to provide a template in which to monitor changes that were put in place in the orthopaedics specialty.

What were the implemented improvements (tools/techniques)?
Needed to identify:
• The steps where data are required at the different stages of the patient journey;
• The systems (paper and electronic) where data are routinely collected and find out what information is captured by these systems;
• The solutions for filling in gaps in the data (e.g. short-cycle audits).

What is the situation now?
A spreadsheet was set up to collate information that answered various questions raised along the patient pathway. Working through what and wasn't available it was found that:
• Some data was available on IT systems but some was in paper format;
• Not all data that would be useful to have was routinely collected at the moment;
• Gaps in data identified areas where information would need to be collected by short-cycle audits to provide more detail on processes that take place.

How is the change sustainable?
Regular multidisciplinary team meetings (e.g. clinicians, allied health professionals, physiotherapists, managers) provide opportunity to develop and discuss issues and service development within the orthopaedics department.

Continuing development of IT systems that will allow an increasingly ‘joined-up’ measurement of the patient pathway.

What are the patient benefits?
Improved waiting times and smoother flow of the patient journey if able to understand end-to-end pathway.
What are the staff benefits?
Informed decision making and data to back up discussions and issues raised.

What are the organisational benefits?
- Better able to understand capacity and demand in order to meet waiting time targets;
- End-to-end pathway monitoring is helpful in preparation for the 18 week referral to treatment pathway.

What are the lessons learnt and what would you do differently next time?
Small audits can be useful to fill information gaps if data required is not regularly or routinely collected.

What plans are there to spread the improvement?
Weekly monitoring of key orthopaedic information, e.g. referrals, new and return outpatient activity, theatre activity and waiting lists to be provided at weekly consultant meetings. This will enable close monitoring of the service with the ability to quickly react to any changes in capacity and demand pressures.

Developments in data collection are ongoing with commissioning of IT systems well underway. This should enable a move towards 18-week readiness.

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NHS Lanarkshire
Benchmarking day surgery performance across NHS Lanarkshire

What was the problem?

Day Surgery rates within Lanarkshire were about average, however, there were some very proactive consultants with high day case rates and some specialities such as ophthalmology with very high day case rates, contributing to the above average figures. It was perceived that day surgery rates for urology and gynaecology where inpatient facilities were concentrated on a single site had reduced. Comparisons were difficult due to the altered case mix by site that now existed.

How was this identified?

Local analysis through the BADS Information System provided an opportunity to benchmark our performance with other Board areas and against the BADS aspirational targets. The analysis showed sub-optimal day surgery rates in some specialties and variance between hospital sites.

What were the implemented improvements (tools/techniques)?

A multi-disciplinary group agreed a standardised approach for listing of patients as day cases or inpatients following a revised pre-admission assessment process. All consultants were requested to complete a template indicating procedures suitable for treatment. The information shall be used in two ways:

- Provide graphical representation of observed vs. expected day surgery rates which will include benchmarking individual rates against best local, national and BADS rates;
- Inform the pre-admission assessment of the default admission type for procedures.

To improve confidence in the ability to manage cases through day surgery units, a protocol for overnight admission (if required) has been developed to allow patients with no-ongoing surgical issues to remain overnight on a site.

What is the situation now?

Day surgery rates by consultant are awaited from the Information Services Department (ISD). The protocol regarding overnight admission is awaiting approval from the divisional management team.

How is the change sustainable?

- A separate project standardising the approach and maximising the capacity to treat patients as day cases will help to promote sustainability. Day surgery activity is already reported in the activity reports for the acute operating division and this will be extended to include a quarterly review of case mix adjusted reports in line with the BADS targets;
- It is hoped that an annual report can be included for consultant appraisal and job plan review;
- The changes to overnight admissions are to be ratified by the divisional management team.
Measurable outcome

- Increase in same day surgery rates;
- Reduction in length of stay for particular procedures;
- Comparison of same day surgery rates and length of stay at consultant and hospital level.

What are the patient benefits?

- Patient satisfaction;
- Reduced cancellations from bed shortages;
- Reduced hospital acquired infection.

What are the staff benefits?

- Greater job satisfaction for clinicians;
- Reduced need for administrative duties by nursing staff in inpatient wards;
- Fewer patient complaints.

What are the organisational benefits?

- Reduced average length of stay;
- Reduced cancellations;
- Protection of elective activity therefore easier to manage waiting times;
- Better use of existing theatre resources.

What are the lessons learnt and what would you do differently next time?

Publication of the BADS profile has been helpful but came only a few months ago. The local data that is required to match with this profile is time consuming for an already hard-pressed ISD to produce.

We did consider a similar in-house project at the outset of the planned care improvement programme but did not pursue it – in retrospect, if we had we may have some measurable change by now. However, staying with the BADS profile is probably more useful in the longer term for benchmarking against peers in other board areas.

What plans are there to spread the improvement?

- The approach will be applied across the acute operating division;
- The BADS system will be used to provide reports on performance against the BADS targets by specialty. This will be submitted to the clinical division management teams for consideration and detailed review by the specialties.

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Planned Care Team
Rationalising the codes within the BADS directory

What was the problem?

Across Scotland there was concern that the local recording of some procedures, included in the British Association of Day Surgery (BADS) directory of procedures, did not reflect the activity taking place. It was found that there were two main reasons for this:

- Anomalies between the procedure codes used and those listed in the BADS directory;
- Under recording and/or inaccurate recording of procedures.

How was this identified?

Local planned care project staff analysed their health board activity for procedures included in the BADS directory. When this data was shared with clinical staff, the validity of the analysis was questioned.

What were the implemented improvements (tools/techniques)?

NHS staff involved in the planned care project identified anomalies between the OPCS4 codes used locally, compared with those listed in the BADS directory. This work was validated by ISD coding tutors. BADS used the refined codes when compiling the 07 BADS directory of procedures which includes exclusion codes where needed.

What is the situation now?

- NHS staff across the UK have a refined and more accurate list of procedure codes to identify performance against the aspirational performance for BADS procedures;
- This work has helped identify where activity has been incorrectly recorded;
- The involvement of clinical staff in validating data helps to focus improvement efforts where required, rather than prolonged discussions regarding the accuracy of the data reported.

How is the change sustainable?

The refined codes will be used to measure performance against BADS aspirational targets beyond the life of the planned care improvement programme.

Measurable outcome

The outcome of the work is that NHS Boards and the Scottish Government have a more accurate set of procedure codes to measure performance against BADS aspirational targets.
What are the patient benefits?

The patient benefits will be indirect. Once the length of stay profiles change patients will then receive the associated benefits, for example:

• Lower risk of hospital acquired infection vis-à-vis inpatient treatment;
• Patients spend less time in hospital;
• Patients receive care that is better suited to their needs;
• Less risk of the operation being cancelled (as long as day surgery facilities are separate from those for emergency patients).

What are the staff benefits?

There are benefits for both management staff and clinicians since the improved accuracy of data analysis allows staff to focus on improvement rather than prolonged discussions about data validity.

What are the organisational benefits?

NHS Boards and the Scottish Government will have a more accurate tool to measure same day surgery rates for BADS procedures.

What are the lessons learnt and what would you do differently next time?

The lessons learnt are that data is fundamental to the improvement process. Reliable data will definitely remove the need to argue why things have to change and by how much.

What plans are there to spread the improvement?

Spread and sustainability are factored in by continuing and building on the good working relationship with the British Association of Day Surgeons through the 18 weeks programme.

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Planned Care Team
Building the BADS Information System

What was the problem?

Across Scotland there wasn’t a shared understanding of what improvement in day surgery rates were possible through the use of aspirational length of stay profiles as listed in the British Association of Day Surgery (BADS) directory of procedures.

How was this identified?

The problem was identified by making an assessment nationally of what information was currently available to NHS Boards. It was established that there was a significant gap in the analysis of BADS procedures against existing case mix and volumes and as such there was a lack of understanding on what could be achieved by the implementation of BADS aspirational targets.

What were the implemented improvements (tools/techniques)?

The BADS Information System, commonly known as BIS, was designed in order to fill the information gap. The BIS helps identify variation in current length of stay profiles both between and within NHS Boards. Procedure specific BADS aspirational targets are built into the BIS allowing a clear understanding of how length of stay profiles have to change if these targets are to be realised.

The BIS is split into three sections. Section one covers benchmarking against the Scottish Average. Section two covers BADS specialty benchmarking and section three compares actual length of stay performance with the BADS directory at a procedure level. The three sections together form a powerful information system which is both informative and very easy to use.

What is the situation now?

The position now is that NHS Boards can:

• Understand what their own length of stay performance looks like;
• Understand how they perform vis-à-vis other NHS Boards;
• Understand how their services would have to change if they were to perform in line with the BADS aspirational targets.

The BIS also breaks down the information into individual hospital locations allowing an even greater understanding of the variation that exists, which will give NHS Boards the opportunity to focus improvement efforts on certain areas.

The BIS is an interactive tool meaning that through manipulation of the available reports many questions can be answered. This has the benefit over normal reports which are only designed to answer specific questions.

How is the change sustainable?

The change is sustainable since it has been agreed that the BIS will continue to be updated after the closure of the planned care improvement programme through the 18 weeks programme. The BIS updates will most likely coincide with the updated quarterly ISD reports.
Measurable outcome

The outcome of the work is that NHS Boards and the Scottish Government have a tool which can be used to highlight variation and understand what the impact on same days surgery rates can be as a result of the implementation of BADS aspirational targets.

What are the patient benefits?

The patient benefits of the BIS will be indirect. Once the length of stay profiles change patients will then receive the associated benefits, for example:

• Lower risk of hospital acquired infection vis-à-vis inpatient treatment;
• Patient spends less time in hospital;
• Patients receive care that is better suited to their needs;
• Less risk of the operation being cancelled (as long as day surgery facilities are separate from those for emergency patients).

What are the staff benefits?

There are benefits for both management staff and clinicians since the information obtained from the BIS can be used to bring all stakeholders up to the same level of understanding when looking at procedural length of stay performance. Using the inbuilt BADS aspirational targets, the BIS will then act as a stimulus for future reconfiguration of service delivery.

What are the organisational benefits?

The organisational benefits of reducing length of stay are as follows:

• Infection rates will be less as a result of patients spending less time in hospital, which is good for clinical governance;
• Less risk of operation being cancelled resulting in a shorter waiting time for surgery;
• Less pressure on inpatient beds since length of stay is reduced.

What are the lessons learnt and what would you do differently next time?

The lessons learnt are that data is fundamental to the improvement process. Without a common understanding of the issues, projects will most likely falter. Reliable data which is presented in a user friendly way, as it is in the BIS, will definitely remove the need to argue why things have to change and by how much.

What plans are there to spread the improvement?

Spread and sustainability are factored in by continuing and building on the good working relationship with the British Association of Day Surgeons through the 18 weeks programme.

Key Contact

Laura Jones Laura.Jones@scotland.gsi.gov.uk
Planned Care Team
Piloting the use of Primary Target List Scores

What was the problem?
Seeing patients in date order of referral within the routine cohort would greatly reduce maximum waiting times, however, there is no clear, robust summary statistic available within Scotland to determine good waiting list management, demonstrating that routine patients are seen in date order of referral.

How was this identified?
This was identified through working with planned care improvement programme members. It was through individuals’ testimonies that it became apparent that there really isn’t a summary statistic available to compare and contrast how well patients are being appointed from waiting lists.

What were the implemented improvements (tools/techniques)?
The suggested improvement was to carry out a pilot study with both NHS Highland and NHS Lothian and explore the use of the Primary Target List Score (PTLS) as an improvement measure for appointing patients in turn.

The PTLS is a summary statistic which is easy to calculate and is a reliable indicator of how well waiting lists are managed. The PTLS is calculated by comparing the proportion of days waiting removed from the waiting list each month with the number of potential days waiting which could have been removed if all patients were taken from the end of the waiting list.

What is the situation now?
The situation now is that NHS Highland and NHS Lothian are actively involved in the derivation of primary target lists for named specialties and calculating the respective primary target list scores.

Boards have fed back some initial comments on the process that they have followed and any issues that they are facing.

How is the change sustainable?
At present, this change is in the testing phase, i.e. pilot and proof of concept. Once all the feedback from the participating boards has been received and collated, the programme will be in a better position to either pull back from the project or to consider creating a spread and sustainability plan.

Provisional findings are that the use of Primary Target Lists and PTLS give a quick indication of how well lists are being managed. A relatively low PTLS flags up potentially bad waiting list management thus acting as a trigger for further analysis.


**Measurable outcome**

The calculation is simple to perform, and gives a better indication of how well a list is managed vis-à-vis other measures.

It is envisaged that the outcome of improving the PTLS will lead to the convergence of waiting times for routine patients towards a mean level. In other words the waiting times for routine patients will be less variable and as a result be far more deterministic.

**What are the patient benefits?**

The implementation of primary target lists and PTLS could potentially lead to a reduction in maximum waiting times for patients.

**What are the staff benefits?**

The staff benefits are that there will be an increased understanding of waiting list management practices across a whole wide range of staff. At present, within NHS Boards only a few people with good information skills know how to analyse and understand waiting list management practices.

**What are the organisational benefits?**

The organisation can use PTLS as a vehicle to help shape improvement programmes and prioritise workload.

**What are the lessons learnt and what would you do differently next time?**

The lessons learnt are:

- The PTLS is affected by a number of factors (such as sub-specialisation) so that while it is an excellent measure for improvement, prompting users to investigate the reasons for low scores, its potential use as a simple performance measure has difficulties;
- The PTLS relies on the correct clinical priority of patients being recorded on the waiting list. Inaccurate recording of clinical priority can lead to an artificially low PTLS;
- Exemptions from the calculation of the PTLS have to be well considered since the inclusion of some patient groups and/or clinical services can lead to a misleading PTLS. A good example would be where a nurse led service is included with consultant led appointments; if there are different waiting times for these services and not all patients can be seen by both groups, the calculation of a combined PTLS would be spurious;
- People involved in the booking process should be involved in the project from the start since their expertise is invaluable when working out the scope of the project and the exclusion criteria for the calculation of the PTLS. Failure to engage with booking staff has the potential to slow the project down and/or lead to errors in the correct application of the PTLS.

**What plans are there to spread the improvement?**

The plan is to carry out a review of the pilot and if it is found to be useful the use of primary target lists and primary target list scores will be taken on by the 18 weeks programme, at which point a spread strategy will be designed and implemented.

**Key Contact**

Laura Jones  
Laura.Jones@Scotland.gsi.gov.uk
Resources and References
To support the sharing of good practice, please see below for key contacts, professional bodies and educational resources. This information resource has been separated into the following sections:

- Professional bodies/colleges;
- Documents/resources supporting redesign and improvement work;
- Lean resources.

1. Professional Bodies/Colleges

18 weeks
www.18weeks.scot.nhs.uk
www.18weeks.nhs.uk

British Association of Day Surgery
www.bads.co.uk

E-library

ISD Scotland – Information Services Division
www.isdscotland.org

Improvement and Support Team (IST)
www.scotland.gov.uk/Topics/Health/NHS-Scotland/Delivery-Improvement

Lean Enterprise Academy
www.leanuk.org

New Ways
- New Ways of Defining and Measuring Waiting Times introduces a significant change in how NHSScotland collects and defines waiting times, and how waiting lists are clinically and administratively managed. The aim of these changes is to make the management of waiting clear and transparent, with information available to patients, and a consistent approach taken throughout Scotland.
  www.isdscotland.org/isd/4508.html

NHS Education for Scotland (NES)
www.nes.scot.nhs.uk

NHS Quality Improvement Scotland (QIS)
www.nhshealthquality.org

Patient Safety
www.patientsafetyalliance.scot.nhs.uk

Planned Care Improvement Programme Guidance
www.scotland.gov.uk/Publications/Recent

Royal College of Surgeons of Edinburgh
www.rcsed.ac.uk
2. Documents/Resources Supporting Redesign and Improvement Work

A Toolkit 4 Change

Better Health, Better Care
• Better Health, Better Care: Action Plan (RR Donnelley, December 2007)
  This Action Plan sets out the Government’s programme to deliver a healthier Scotland by helping people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care. The report is informed by the response to the consultation on Better Health, Better Care: A Discussion Document. For further information, email betterhealthbettercare@scotland.gsi.gov.uk

• Better Health, Better Care: A Discussion document (RR Donnelley, August 2007)
  A discussion document to inform the development of the forthcoming health and wellbeing action plan. For further information, email betterhealthbettercare@scotland.gsi.gov.uk

Cosla Concordat Agreement
This agreement sets out the terms of a new relationship between the Scottish Government and local government. It underpins the funding to be provided to local government over the period 2008-09 to 2010-11. www.cosla.gov.uk/attachments/aboutcosla/concordatnov07.pdf

Demand, Capacity, Activity, Queue (DCAQ)
• DCAQ – A resource pack for healthcare professionals, IST (RR Donnelley, December 2007)
  This learning and teaching resource includes DVDs and accompanying notes to a DCAQ master class led by Richard Steyn, Cardiothoracic surgeon and a series of interviews with clinicians, managers and front-line staff discussing the importance of using DCAQ information. To order a free copy, email ISTmailbox@scotland.gsi.gov.uk

• Guide to Service Improvement, Centre for Change and Innovation (Astron, November 2005)
  This document introduces the tools and techniques for improvement that are fundamental to getting to grips with the challenges of delivering improved patient access. It is not intended to be a detailed guide to every concept and its applicability. Where necessary it introduces a key concept and leads the reader to more detailed information. www.scotland.gov.uk/Publications/2005/11/04112142/21428
• Steyn DCAQ models
Download computer models used in a master class from Richard Steyn’s website. There are also several presentations that have been used by his team when delivering their lectures around the world.
www.steyn.org.uk

IST Continuous Improvement Toolkit
• The Improvement and Support Team (IST) have developed a Continuous Improvement Toolkit which can be accessed from the e-library website below. Select IST and goodpractice.net from the Quick Links on the left-hand side and follow the instructions to log in. From the toolkits page select Toolkit 3: Continuous Improvement Toolkit.
http://athens.goodpractice.net/nhs/nhs.aspx

Measurement for Improvement
• The Institute for Healthcare Improvement (IHI) website has links to tools, resources and literature for practical information to help improvement leaders find the best way to measure their process and show where improvements have been made.
www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/ImprovementStories/SuccessfulMeasurementForImprovement.html

• The NHS Institute for Innovation and Improvement’s No Delays Achiever website has a section dedicated to service improvement.
www.nodelaysachiever.nhs.uk/ServiceImprovement/

No Delays Achiever
• A collection of service improvement tools and techniques, tailored to focus on helping to deliver an 18 week pathway for patients.
www.nodelaysachiever.nhs.uk

Statistical Process Control (SPC)
• The Clinical Indicators Support Team at the NSS Information Services Division (ISD) have a website with information and tools to learn more about using SPC.
http://www.indicators.scot.nhs.uk/SPC/SPC.html

3. Lean Resources
• 5 Pillars of the Visual Factory, Hiroyuki Hirano (Productivity Press, 1995)
How the 5S theory fosters efficiency, maintenance, and continuous improvement, from the factory floor to the sales office. This book includes case studies, illustrations, and training materials.

• Becoming Lean, Jeffrey K Liker (Productivity Press, 1997)
This book gives an account of some diverse companies on their journey towards lean production.

• Creating Continuous Flow, Rother & Harris (Lean Enterprise Institute, 2001)
An action guide for Managers, Engineers and Production Associates.

• Creating Level Pull, Art Smalley (Lean Enterprise Inst. Inc. 2004)
A lean production system improvement guide for Operations, Production-Control, and Engineering Professionals.
• Gemba Kaizen, Masaaki Imai (McGraw-Hill, 1997)
  This booklet gives an overview of Gemba Kaizen, a change strategy for continuous improvement.

• Hoshin Kanri, Yoji Akao (Productivity Press, 1991)
  A book on policy deployment for successful Total Quality Management.

• Improving Quality and Flow – The Power of Lean, IST (RR Donnelley, October 2007)
  This learning and teaching resource includes a DVD and accompanying notes to a Lean master class held in January 2007. The DVD is a recording of presentations from Prof Dan Jones, Chair, Lean Enterprise Academy and Elizabeth Bradbury, Clinical Systems Specialist, Bolton PCT and Bolton Hospitals NHS Trust.

To order your free copy, please email ISTmailbox@scotland.gsi.gov.uk

• Lean Solutions, Womack & Jones (Simon & Schuster, 2005)
  How companies and customers can create value and wealth together.

• Lean Thinking, Womack & Jones (Simon & Schuster, 2003)
  Womack and Jones further develop their ideas from The Machine that Changed the World to suggest the application of lean thinking to the whole product cycle, from suppliers to customers.

• Learning to See: Value Stream Mapping to Add Value and Eliminate Muda, Mike Rother (Lean Enterprise Institute, 1999)
  How value stream mapping can help drive lean transformation.

• Making Materials Flow, Harris, Harris & Wilson (Lean Enterprise Institute, 2003)
  A lean material-handling guide for Operations, Production-Control, and Engineering Professionals.

• Poka-Yoke: Improving Product Quality by Preventing Defects, Factory Magazine (Productivity Press, 1988)
  An illustrated guide to poka-yoke (mistake-proofing) for supervisors and shop-floor workers.

• The Gold Mine: a Novel of Lean Turnaround, Balle & Balle (Lean Enterprise Inst. Inc. 2005)
  This unusual book uses a fictional struggling organisation to help the reader to understand and apply lean principles to their own organisation.

• The Lean Lexicon, Lean Enterprise Institute (Lean Enterprise Institute, 2003)
  All the key lean terms you need to know from A to Z.

• The Machine that Changed the World, Womack, Jones & Roos (Simon & Schuster, 1991)
  A detailed look at how Japan's innovative ‘lean production’ methods work.

• The New Lean Toolbox, John Bicheno (PICSIE Books, 2004)
  A guide to key lean tools and techniques.

• The Nun and the Bureaucrat, Savary & Crawford-Mason (CC-M Productions Inc. 2005)
  The book to accompany the US documentary highlighting how two American hospital groups (one run by a nun, and one by a bureaucrat) used continuous improvement principles to transform their hospitals.
  This book explains the business philosophy that underpins Toyota’s unparalleled reputation for quality and reliability, and gives examples of organisations that have successfully employed the Toyota approach.

• **TPM for the Lean Factory**, Sekine & Arai (Productivity Press, 1998)
  A book about Total Productive Maintenance.
Glossary
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;C</td>
<td>Administrative and Clerical</td>
</tr>
<tr>
<td>A&amp;E</td>
<td>Accident &amp; Emergency</td>
</tr>
<tr>
<td>Activity</td>
<td>Refers to the work done, expressed as the number of procedures performed</td>
</tr>
<tr>
<td>AHP</td>
<td>Allied Health Professionals</td>
</tr>
<tr>
<td>BADS</td>
<td>British association of Day Surgery</td>
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<tr>
<td>BIS</td>
<td>BADS information system</td>
</tr>
<tr>
<td>Capacity</td>
<td>Resources available in terms of equipment, space and skills</td>
</tr>
<tr>
<td>CNA</td>
<td>Could not attend</td>
</tr>
<tr>
<td>DCAQ</td>
<td>Demand, Capacity, Activity, Queue</td>
</tr>
<tr>
<td>Demand</td>
<td>The number of referrals being made to this service</td>
</tr>
<tr>
<td>Diagnostic</td>
<td>Capable of identifying the cause of signs or symptoms of the disease</td>
</tr>
<tr>
<td>DNA</td>
<td>Did not attend</td>
</tr>
<tr>
<td>DOSA</td>
<td>Day of Surgery Admissions</td>
</tr>
<tr>
<td>DSU</td>
<td>Day surgery unit</td>
</tr>
<tr>
<td>DVT</td>
<td>Deep Vein Thrombosis</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear, Nose &amp; Throat</td>
</tr>
<tr>
<td>FNOF</td>
<td>Fractured neck of femur</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>GPWSI</td>
<td>General Practitioner with special interest</td>
</tr>
<tr>
<td>Invasive</td>
<td>A procedure which is usually complex and requires appreciable penetration into internal areas of the body</td>
</tr>
<tr>
<td>ISD</td>
<td>Information &amp; Statistics division</td>
</tr>
<tr>
<td>MDT</td>
<td>Multi-Disciplinary Teams</td>
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<tr>
<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>NTIG</td>
<td>National Theatres Implementation Group</td>
</tr>
<tr>
<td>OCAP</td>
<td>Orthopaedic Competence Assessment Project</td>
</tr>
<tr>
<td>OMF</td>
<td>Oral-Maxilo Facial</td>
</tr>
<tr>
<td>OPLA</td>
<td>Outpatient Local Anaesthetic</td>
</tr>
<tr>
<td>OT</td>
<td>Occupational Therapy</td>
</tr>
<tr>
<td><strong>Outpatient</strong></td>
<td>A hospital patient who is not admitted to a hospital bed</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------------------------</td>
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<tr>
<td><strong>PCIP</strong></td>
<td>Planned Care Improvement Programme</td>
</tr>
<tr>
<td><strong>PFB</strong></td>
<td>Patient Focussed Booking</td>
</tr>
<tr>
<td><strong>PTLS</strong></td>
<td>Primary Target List Score</td>
</tr>
<tr>
<td><strong>Queue</strong></td>
<td>Is the number of procedures for which referral has been made, but the procedure has not yet been performed</td>
</tr>
<tr>
<td><strong>RIE</strong></td>
<td>Rapid Improvement Event</td>
</tr>
<tr>
<td><strong>RMS</strong></td>
<td>Referral Management System</td>
</tr>
<tr>
<td><strong>SIGN</strong></td>
<td>Scottish Intercollegiate Guidelines Network</td>
</tr>
<tr>
<td><strong>THR</strong></td>
<td>Total hip replacement</td>
</tr>
<tr>
<td><strong>TKR</strong></td>
<td>Total knee replacement</td>
</tr>
</tbody>
</table>
The Planned Care Improvement Programme
Improvement Stories