

# **Annual Report 2013**

Reporting on the Quality and Efficiency Support Team

April 1, 2012 – March 31, 2013

**Quality, Efficiency, Value** 





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## **Foreword**

We're very pleased to present this Annual Report and to have the opportunity to highlight the many achievements of NHSScotland during 2012-13, as we continue to improve the safety, effectiveness, experience and responsiveness of healthcare services within the context of a challenging financial environment.

This report highlights the significant inroads NHSScotland has made to delivering sustainable change across the healthcare system. The quality agenda is now firmly embedded throughout NHSScotland from board level, and crucially, to staff delivering front-line care to patients.

The case studies included within the report illustrate the excellent work that has been carried out by NHS Boards across Scotland. Many of these case studies provide innovative solutions to the challenges facing NHS Boards and we urge you to review these to identify examples of good practice that may be applicable in your local context.

NHS Boards have implemented these sustainable and innovative ways of delivering quality services whilst also achieving significant cash releasing savings and productive gains (i.e. time releasing savings). During 2012-13 NHS Boards reported efficiency savings of £270 million, as a result, over the last five years, efficiency savings of over £1 billion have been retained by NHS Boards and used to further enhance services.

The Quality and Efficiency Support Team (QuEST) supports NHS Boards to deliver improvements in quality and efficiency through a number of national programmes. Working in partnership with NHS Boards, QuEST tests and spreads emerging innovations and best practice across NHSScotland to enable delivery of key NHS priorities.



John Connaghan Director for Health Workforce and Performance



Linda Semple Interim Head of QuEST

This report highlights some of the key achievements of the national programmes and also sets out our priorities for the coming year. It is imperative that NHSScotland continues to drive quality improvements which increase efficiency and productivity in order to deliver NHSScotland's vision for the future.

NHSScotland's 2020 Vision is that 'by 2020 everyone is able to live longer healthier lives at home, or in a homely setting'. A Route Map to the 2020 Vision for Health and Social Care (Route Map), launched at the NHSScotland Event in June 2013, supports this aim for integrated, sustainable and high-quality health and social care.

QuEST will play a key part in supporting NHSScotland to deliver the priority areas for improvement identified within the *Route Map*. These priority areas will need to be addressed within the context of on-going financial challenge. It is essential that we continue to innovate and spread best practice and creative solutions to enable us to continue to deliver world-class services to the patients and citizens of Scotland.



## **Introduction and Context**

### **Strategic Context**

The Healthcare Quality Strategy for Scotland (Quality Strategy), launched in May 2010, provides the basis for the people who deliver healthcare services in Scotland to work with partners and the public towards our three Quality Ambitions and shared vision of world-leading safe, effective and person-centred healthcare.

In 2011 the Scottish Government announced its ambitious plan for integrated health and social care and set out the *2020 Vision* and Strategic Narrative for achieving sustainable quality in the delivery of health and social care across Scotland.

This vision is supported by A Route Map to the 2020 Vision for Health and Social Care (Route Map) launched at the NHSScotland Event in June 2013. The Route Map sets out a new and accelerated focus on 12 priority areas for action and has been designed to retain focus on improving quality and to make measureable progress towards the 2020 Vision.

The Quality and Efficiency Support Team (QuEST) plays a key part in supporting NHSScotland to deliver the priority areas for improvement. In particular, QuEST will support delivery of the following priority areas through its programmes:

- Efficiency and Productivity the Efficiency and Productivity Portfolio Office will support NHS Boards to achieve value and sustainability, for example by increasing shared services where appropriate to reduce waste, duplication and variation
- Unscheduled and Emergency Care the Whole System Patient Flow Programme\* will support NHS Boards to increase flow through the healthcare system
- Primary Care the Outpatients, Primary and Community Care Programme supports NHS Boards to shift the balance of care from acute to primary care and home to meet increasing demand
- Prevention the Cancer Performance Support Team supports NHS Boards to improve survival for people with cancer in Scotland by diagnosing and treating the disease at an earlier stage

The 2020 Vision and the Strategic Narrative describe the challenges for health and social care for the future and our direction of travel. The Quality Strategy provides the approach and the required actions to improve both quality and efficiency in order to achieve financial sustainability.

The *Quality Strategy* is supported by the *NHSScotland Efficiency and Productivity Framework for SR10 (Framework)* which emphasises the need for quality healthcare to be delivered in a sustainable way.

A key priority for QuEST for 2013-14 will be a refresh of this *Framework* to ensure it continues to reflect the context within which NHSScotland operates, and provides practical tools and guidance to support NHS Boards to deliver quality healthcare, whilst achieving efficiencies to ensure the sustainability of the service.

NHSScotland is committed to becoming a world leader in healthcare quality and to meeting the overall aim of the *Quality Strategy* 'to deliver the highest quality healthcare services to people in Scotland and through this to ensure that NHSScotland is recognised by the people of Scotland as amongst the best in the world'.

### **The Quality and Efficiency Support Team**

Performance Support

Performance Support

Cancer Performance Support

QuEST

HR Shared Services

Procurement

Procurement

Procurement

Prescribing

Efficiency and Productivity Portfolio Outpatients, Primary and Community Care

Performance Support

Whole System Patient Flow\*

QuEST provides support to NHS Boards to enable the delivery of key NHS priorities with a particular focus on achieving these through actions which improve both the quality and the efficiency of services including:

- identifying, testing and spreading changes which could significantly improve both the quality and efficiency of services
- developing guidance and tools to support NHS Boards to deliver key NHS priorities
- providing targeted support to NHS Boards who may require additional help to deliver NHS priorities
- supporting NHS Boards to use data to identify opportunities for improving the quality and efficiency of services
- coordinating the implementation of the NHSScotland Efficiency and Productivity Framework for SR10
- coordinating emerging innovation and best practice across programmes to support a whole system approach
- supporting NHS Boards to develop their capacity and capability for continuous quality improvement
- contributing to national partnerships such as the Quality Improvement Hub

<sup>\*</sup> Formerly the Acute Flow and Capacity Management Programme



# **Quality Improvements and Efficiency Savings**

QuEST works with NHS Boards to identify opportunities to deliver improvements in quality at lower cost. While seeking greater efficiency to counteract the cost pressures facing NHSScotland, everything should be done to prevent cost reduction measures that decrease the quality of services. Our approach seeks to maximise opportunities for quality and efficiency to deliver sustainable services now and in the future.

#### **Headlines**

- During 2012-13 NHS Boards reported efficiency savings of £270 million (2011-12, £319 million) against an efficiency savings target of £264 million.
- Over three quarters (78 per cent) of reported efficiency savings achieved during 2012-13 are recurring.
- This equates to an efficiency saving of 3.1 per cent of baseline funding made available to NHS Boards across the whole of NHSScotland.
- This was the fifth year in a row that NHS Boards have exceeded their efficiency target of 3 per cent of baseline funding across NHSScotland. NHS Boards have delivered cumulative Efficient Government savings of £595 million between 2008 and 2011, £251 million recurring efficiency savings in 2011-12 and £270 million efficiency savings in 2012-13. This equates to over £1.1 billion (11 per cent of the revenue budget

- for NHS Boards in 2012-13) being reinvested to fund front-line services for patients.
- Efficiency savings are retained by Territorial NHS Boards helping to ensure on-going financial balance.
- NHS Boards delivered these efficiencies at the same time as making significant improvements to the quality of services:
  - Patients continue to be treated more quickly: 90.6 per cent of patients were seen and treated within 18 weeks from initial referral during March 2013 (the expected standard is 90 per cent).
  - The Scottish Government has delivered major improvements in cancer waiting times and is committed to improving the early detection of cancer. In October

     December 2012, 98.1 per cent of patients diagnosed with cancer started treatment within 31 days of their decision to treat.
  - The overwhelming majority of patients are very positive about their experiences of NHSScotland services. The most recent survey of patients in Scotland showed that 89 per cent of Scottish patients rated their care and treatment at their General Practice as excellent or good.
  - Healthcare associated infections have fallen substantially. Between 2007 and 2012 there was a 78 per cent reduction in rates of Clostridium difficile and a 37 per cent reduction in Staphylococcus aureus bacteremia (i.e. MRSA/MSSA).



# **QuEST Programmes**

### **Efficiency and Productivity Portfolio Office**



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The Efficiency and Productivity Portfolio Office (EPPO) is part of QuEST and supports the national programmes and NHS Boards to improve efficiency and productivity by:

- providing a national overview of efficiency and productivity across all NHS Boards and programmes
- developing an approach to 'doing' efficiency and productivity, including tools available on the Quality Improvement Hub website
- identifying areas with the greatest potential productive opportunity through benchmarking and data analysis
- coordinating networks across NHSScotland to encourage sharing of learning, resources and expertise
- signposting to support and information resources
- undertaking knowledge management activity such as horizon scanning, identifying and spreading best practice, capturing and sharing knowledge and learning, and feeding into strategic partnerships such as the Quality Improvement Hub, the Joint Improvement Team (JIT) and the Quality Unit

### **Achievements 2012-13**

- During 2012-13 the EPPO refreshed the Efficiency and Productivity Portfolio of programmes. This included changes to the way in which support to programmes is delivered and changes to the governance and scrutiny of the Portfolio to ensure that key objectives are met.
- The EPPO has established an Efficiency and Productivity Leads Network. Every NHS Board has nominated a key individual(s) to act as the primary contact within their Board in relation to efficiency and productivity. The first Network event was held in January 2013 and focused on sharing good practice and innovative ideas and exploring some of the challenges around increasing efficiency and productivity while improving quality.
- The EPPO has established an approach for testing small changes to drive efficiency and productivity where these do not logically fit within one of the larger QuEST programmes, for example using health economics to quantify the benefits of improving diabetes care in Scottish hospitals or assessing the efficiency and productivity benefits of NHS Boards moving towards a paperless system.
- Health economics can inform and improve decision-making about the allocation of scarce healthcare resources. The EPPO in partnership with NHS Health Scotland has developed a Health Economics Network with the aim of facilitating collaboration between the health economics academic, policy and practice communities across the health system in Scotland to develop the use of health economics evidence by policy makers and practitioners.

- The QuEST web presence on the Quality Improvement Hub website has been refreshed as a key medium for communicating with our stakeholders, including providing access to quality and efficiency tools, techniques and information.
- The Danish Government is currently developing its own national plan for health. A highly successful visit to Copenhagen, as invited guests of the Danish Government, was undertaken to exchange knowledge and showcase the quality and efficiency work being done in Scotland.
- The Health Services Journal (HSJ) has acknowledged the excellent work undertaken by QuEST and NHS Boards to realise significant efficiency savings whilst also improving quality of healthcare. Following a submission by the EPPO, QuEST was shortlisted for an HSJ Efficiency Award.
- **Priorities 2013-14**
- The EPPO will lead the refresh of the NHSScotland Efficiency and Productivity Framework for SR10 to ensure it continues to reflect the context within which NHSScotland operates, and provides practical tools and guidance to support NHS Boards to deliver high-quality and efficient healthcare.
- The EPPO will work with QuEST National Programme Leads to refresh the role and remit of QuEST to ensure that our work continues to be focused on supporting NHS Boards to deliver NHS priorities, whilst also horizon scanning to discover innovations internationally, nationally and locally, to identify and test good practice to spread across NHS Boards.

- The EPPO held a major event in August 2013 which focused on the use of data and information to drive quality, efficiency and productivity and brought together colleagues working in the fields of quality improvement, efficiency and productivity, health intelligence, health economics, finance, performance management and planning.
- The EPPO will lead the Soft Facilities Management Programme, to optimise synergies between this Programme and the Facilities Shared Services Programme which focuses on hard facilities management. The Soft Facilities Management Programme will involve a strategic review of catering, laundry, domestic, portering and retail provision across NHSScotland.

### **Outpatients, Primary and Community Care**



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### **Key Drivers**

- The Outpatients, Primary and Community Care Programme supports NHS Boards and local partnerships to move care closer to home and enable more people to receive the right care, from the right person, at the right time, in the right place.
- The Programme supports teams and networks across outpatient services, primary and community care to work together to understand and diagnose system issues, design and innovate, and use continuous quality improvement to deliver excellent safe, effective and person-centred care.
- Each of the three streams of work includes a focus on reducing variation, waste and harm and making best use of resources including the time of patients, the public and staff.

### **Programme Aims**

- The overall aim of the Programme is for more people to receive the right care, from the right person, at the right time, in the right place.
- This is reflected in the Transforming Outpatient Services driver diagram (figure 1).

Key objectives for work in Community Care are to:

 partner JIT in supporting planning and implementation of Reshaping Care for Older People Pathways, including the design and

- delivery of the Reshaping Care Improvement Network and evidencing impact of improvement
- commission and deliver support for sustaining and spreading the use of Releasing Time to Care

Key objectives for work in Primary Care are to:

- support the delivery of a reduction in variation, waste and harm through better use of data, peer review and development and improvement of patient pathways
- design and test new models of care and concepts of service delivery that make best use of resources and improve the flow of patient pathways through the health and social care system

### **Programme Workstreams**

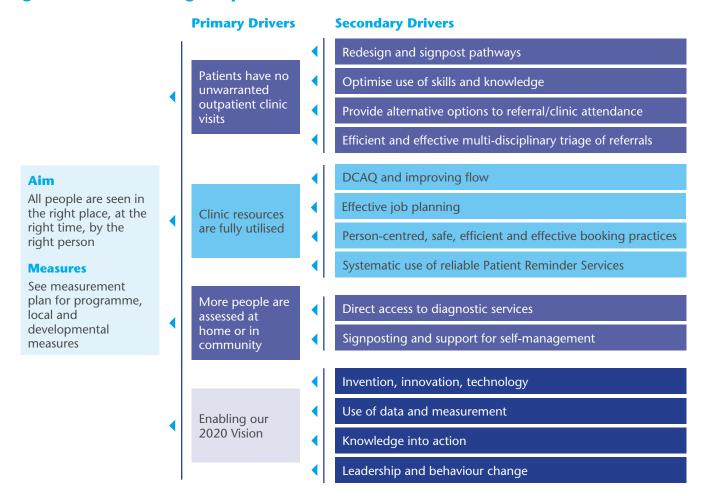
### **Transforming Outpatient Services**

All NHS Territorial Boards working with some of the NHS Special Boards are engaged in:

- adopting, spreading and sustaining reliable high impact changes
- increasing the quality and use of data for peer review, benchmarking, and understanding and managing demand and capacity
- design and innovation in the way outpatient services are provided (clinicians, managers, patients and public representatives working together to imagine the future for those services that we currently recognise as outpatient services and generating new concepts, designing and testing prototypes)

Four commissioned NHS Boards will also lead projects to innovate through technology, improve utilisation of resources and rapidly test and spread reliable improvements.

**Figure 1: Transforming Outpatient Services** 



### **Primary and Community Care**

The Primary and Community Care workstreams deliver projects and support to reduce unwarranted variation and waste, release time to reinvest in patient care and design and test new ways of working.

In Primary Care, working closely with the Scottish Government's Primary Care Division, this includes:

- supporting the design and delivery of the Quality and Outcomes Framework (QOF)
   Quality Product Indicators
- exploring the use of data and improvement tools
- supporting General Practices in the systematic use of Lean in the form of Productive General Practice

### **Achievements 2012-13**

Key achievements to date include:

### **Transforming Outpatient Services**

- publication of Towards Our 2020 Vision
- testing to identify five reliable and sustainable high impact changes to spread within and across all NHS Boards
- NHS Grampian (digital information and tailored postcards) and NHS Lanarkshire (self-care planning for skin conditions) designed potential technology solutions to enable people to access outpatient support to self-manage
- teams in NHS Highland increased availability and use of appointment slots, case notes and the clinic environment
- NHS Lothian introduced the use of advice only requests in a number of specialties and initiated review of consultant to consultant referrals
- innovation and learning sessions

### **Community Care**

- commissioning of a cost consequence analysis of anticipatory care planning with polypharmacy and a planning tool to aid partnerships in development of anticipatory care planning
- commissioning Healthcare Improvement Scotland (HIS) and NHS Education for Scotland (NES) to implement Stocktake Report recommendations and support NHS Boards to spread and measure the impact of Releasing Time to Care

### **Primary Care**

- over 200 General Practices using Productive General Practice tools as part of Local Enhanced Services
- over 400 General Practices registered to use Productive General Practice
- joint implementation support from QuEST and the Royal College of General Practitioners Scotland
- integration of the Primary Care Patient Safety Programme's SafeQuest tool into Productive General Practice

### **Priorities 2013-14**

### **Transforming Outpatient Services**

- adoption and spread of five high impact changes (use of advice only, clinical dialogue and referral feedback, centralised and eTriage, improved booking practices and use of reminder services, direct access to diagnostics and musculoskeletal redesign)
- continue to support four commissioned NHS Boards to generate new evidence base and rapidly share and spread learning
- increase the quality and use of data for peer review to understand and reduce unwarranted variation and to inform and test improvements

### **Community Care**

- commissioning HIS and NES to produce resources to support sustainability of Releasing Time to Care and transition to use of Releasing Time to Care as business as usual for NHS Boards, and in partnership with JIT, test the use of the tools and approaches to support development of integrated health and social care teams
- supporting design and testing of new models of care, ways of working and technologies, and evidencing the impact of improvement

### **Primary Care**

- supporting the design and delivery of the QOF Quality Product Indicators for anticipatory care planning/polypharmacy review and outpatient referrals
- delivering Managing Patient Flow, a project to test and extend the use of data and improvement tools to improve patient flow within primary care and across secondary care–primary care interfaces
- continuing to integrate Productive General Practice and other improvement programmes and initiatives

This report includes the following case studies from NHS Boards in relation to Outpatients, Primary and Community Care:

- NHS Highland: Why Did the Patient Cross the Road? Because their Rehab was on the Other Side!
- NHS Western Isles: Community
   Nursing Patient Held Record and Digital
   Pen Technology
- NHS National Services Scotland (Scottish National Blood Transfusion Service): Transforming the Donation Experience
- Scottish Ambulance Service: Scheduled Care Project

### **Acute Flow and Capacity Management**



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### **Key Drivers**

The 18 Weeks Service Redesign and Transformation Programme supported NHSScotland to deliver the 18 Weeks Referral to Treatment (RTT) Standard in December 2011.

The 18 Weeks Service Redesign and Transformation Programme was primarily focused on elective care and there was an increasing desire to broaden the focus on whole hospital flow and capacity management. This was driven by a need to improve flow and to make best use of capacity to ensure acute services can meet the growing demands of the population whilst maintaining a high-quality and efficient service.

Building on the achievements of the 18
Weeks Service Redesign and Transformation
Programme, the Acute Flow Capacity
Management Programme was initiated.
This Programme ensured a continued focus
on improvement areas on which NHS Boards
were working, to support delivery of access
standards which were not yet consistently and
uniformly applied across the service.

### **Programme Aims**

The aims of the Acute Flow and Capacity Management Programme were to:

- increase use of day and short stay surgery models
- embed a sustainable approach to demand

- and capacity planning at sub speciality level
- optimise the management of inpatient capacity, including the use of beds and theatres
- accelerate the roll-out of Enhanced Recovery in surgical specialities
- optimise the management of queues and pathways in high volume specialities, such as orthopaedics
- sustain delivery of acute access standards
- horizon scan to discover innovations internationally, nationally and locally to identify good practice to spread across NHS Boards

### **Programme Workstreams**

The Acute Flow and Capacity Management Programme comprised the following workstreams:

- Day and Short Stay Surgery
- Demand and Capacity Planning
- Enhanced Recovery
- Inpatient Capacity and Flow
- Orthopaedics
- Theatres

### **Achievements 2012-13**

Some of the key achievements of The Acute Flow and Capacity Management Programme are as follows:

• The national team supported NHS Boards to set up local infrastructures to implement and spread Enhanced Recovery in Colorectal, Urology, Gynaecology, Breast and Orthopaedics. This included providing national support for spreading and sharing best practice across NHS Boards, for example through the Programme Managers Network. Most NHS Boards now have Enhanced Recovery programmes in place which are providing improved quality of care for patients. Local achievements include:

- establishment of local measurement databases
- development of standardised preoperative education for patients and carers, including producing DVDs and YouTube videos to support effective communication
- multi-disciplinary team working
- development of standardised pathways
- establishing processes to collect and audit patient experience, which is used to support further improvement
- supporting a culture which empowers patients to be partners in their own care
- The national team developed Demand, Capacity, Activity and Queue (DCAQ) methodology to support NHS Boards with capacity planning and delivery of waiting times targets. The methodology is supported with a suite of modelling tools which help to produce DCAQ analysis at subspecialty level enabling NHS Boards to evidence pressure areas within their service and to support job planning processes. The national team also provided tailored support to a number of NHS Boards where the DCAQ tools and methodology were utilised to help improve performance against waiting times targets. In order to help embed robust capacity planning through DCAQ in NHS Boards and develop peer networks, training was provided for NHS Board analysts. The team also delivered a two day technical workshop which analysts from most NHS Boards attended.
- An annual Day Surgery Conference was held in October 2012 in partnership with the British Association of Day Surgery (BADS) to promote day and short stay surgery and allow the sharing of national data and best practice.

### **Priorities 2013-14**

Designing care systems with effective patient flow is critical to the delivery of NHSScotland's Quality Ambitions of safe, effective and person-centred healthcare.

Poor flow can lead to failures, increased costs, poor quality and poor patient experience. Moreover, evidence links poor flow and sub-optimal scheduling in healthcare to an increase in mortality, adverse events, readmissions and poor financial performance.

It is observed that a high level of variation remains in the way demand is managed within healthcare systems. Although natural variation will always exist, artificial variation should be reduced, smoothed and eliminated. Significant progress has been made by NHS Boards in improving flow; however, there are still opportunities for improvement and spread of good practice.

Building on the work done through the Acute Flow Capacity Management Programme, a new programme of work has been initiated to respond to these challenges.

The Whole System Patient Flow Programme will move away from focusing on a specific area of flow (i.e. unscheduled or elective flows) in isolation and will adopt a whole system approach to patient flow designed to ensure patients receive the right care, at the right time, in the right place, by the right team.

The Whole System Patient Flow Programme will test, implement and spread an approach that will optimise and improve flow across the whole system through the application of operations management science. The national team will lead this work in partnership with NHS Boards and a technical partner. The aim of this work will be to successfully test, implement and spread an operations management approach that will optimise throughput and improve flow across the whole system as well as improve the experience of both patients and staff and

improve patient safety by reducing variation. Successful implementation will be a crucial element of the programme and will require executive, middle management, and clinical leadership and engagement at local Board level to support successful testing, implementation and spread.

The Whole System Patient Flow Programme is currently being established, and key priorities for 2013-14 include:

- proof of concept work to test an innovative approach to improving whole system patient flow will be piloted in four NHS Boards (NHS Greater Glasgow and Clyde, NHS Tayside, NHS Forth Valley, and NHS Borders) with a plan to spread across NHSScotland
- an improvement programme and approach to ensure a focus on, and spread and sustainability of:
  - Day surgery
  - Day of surgical admission
  - Enhanced Recovery
  - Non-operative fracture pathway redesign

 testing a flow, cost, quality improvement programme in one health system similar to the Health Foundation's Flow, Cost, Quality Programme

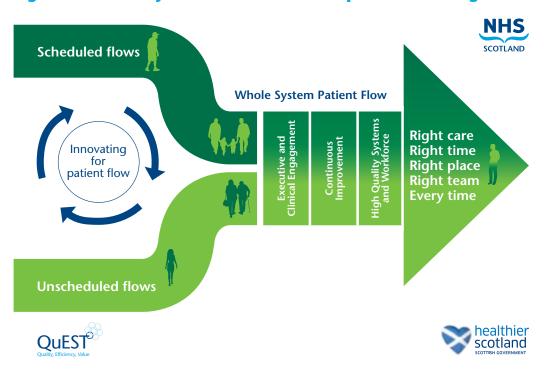
Programme visuals are set out in figure 2.

### **Case Study Example**

NHS Greater Glasgow and Clyde developed a new, innovative model of care for patients with non-operative limb fractures. Traditionally patients with a non-operative fracture present at the Emergency Department and are referred to a Fracture Clinic within a few days of injury. However, many of these patients were discharged after the first visit to the Fracture Clinic with no change to their treatment. Unnecessary attendance at the Fracture Clinic results in increased demand and longer waiting times.

In order to address these issues the Fracture Service at Glasgow Royal Infirmary and Stobhill Minor Injuries Unit redesigned the patient pathway. Patients are now either discharged directly by the Emergency Department supported by standardised

**Figure 2: Whole Systems Patient Flow Improvement Programme** 



information of self-care using advice leaflets (around 38 per cent of patients) or are reviewed at a virtual clinic by an Orthopaedic Consultant via PACS (around 62 per cent of patients). Of these patients around 40 per cent are discharged by telephone and the remaining 60 per cent of patients are referred to see the appropriate specialist. This approach has a key benefit of freeing up staff time so that it can be used elsewhere in the department.

This transformational change has led to a safer, more patient-focused, efficient and clinically effective process. There has been interest in this model of care from both Scotland and England and other NHS Boards are implementing a similar model including NHS Tayside, NHS Dumfries and Galloway, NHS Fife, NHS Grampian and NHS Forth Valley.

This report includes the following case studies from NHS Boards in relation to Acute Flow and Capacity Management:

- **NHS Ayrshire and Arran:** Emergency Care Quality Improvement Programme
- NHS Fife: Fracture Pathway Redesign
- **NHS Lanarkshire:** Clinical Decisions Unit: Hairmyres Hospital
- **NHS Lothian:** Outpatient Antimicrobial Therapy
- NHS National Waiting Times Centre Board: Streamlining Job Plans across Surgical Specialties and Anaesthesia

### **Mental Health**



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### **Programme Aims**

In 2012-13 the aims of the Mental Health Programme were to:

- Support NHS Boards to deliver a maximum waiting time of 18 weeks from referral to treatment for psychological therapies by December 2014 through:
  - enabling the use of system improvement techniques in mental health including DCAQ theory
  - ensuring clinical outcomes and service user experience data are routinely used to drive improvement.
- Lead the National Dementia Demonstrator Programme which is a partnership between three Health and Social Care Partnerships, QuEST, JIT, Alzheimer Scotland, the Scottish Government Mental Health Division, the Scottish Dementia Working Group and the Local Government Improvement Service. Its purpose is to show that it is possible to deliver better care for more people with the same or less resource by redesigning services and strengthening cross sector working across health and social care.
- Support NHS Boards to release efficiency and productivity savings in mental health services whilst maintaining or improving the quality of care.

### **Achievements 2012-13**

Some of the key achievements of the Mental Health Programme are as follows:

- Working with NHS Lothian to complete the first full DCAQ analysis in a mental health service. This work has generated significant new learning on the application of these techniques to a mental health setting and has resulted in the development of a range of tools and guidance to support work across Scotland. QuEST's work in this area has also generated interest from mental health services in New Zealand where it has informed their national work around access to psychological therapies. A detailed report on this work can be found on the QuEST Mental Health web pages.
- The Programme continued to support the three National Dementia Demonstrator sites: Midlothian Community Health Partnership (CHP), North Lanarkshire CHP and Perth and Kinross CHP. Some of the highlights this year included the publication of the Midlothian Dementia **Demonstrator Integrated Resource** Framework 2008-09 data which has generated significant insights into the current resources used by people with dementia across health and social care; the Motherwell Dementia Friendly Community Initiative which has generated interest across the country and the piloting of Family Group Conferencing for people with Dementia in Midlothian. We were also delighted to see North Lanarkshire Dementia Demonstrator Site winning the COSLA Excellence Award 2013 One to Watch category, recognising the significant and innovative work that is taking place to redesign Dementia Services.
- Working jointly with four health and social care partnerships, JIT, NHS National

Services Scotland Information Services Division (ISD), Alzheimer Scotland and the Mental Health Division to define the new Dementia Post Diagnostic Support HEAT Target. The project also involved working together to better understand the opportunities for delivering the target through the redesign of services across health and social care. Working in partnership with front-line health and social care teams to define the target has ensured that it is measured in a way that provides useful information that helps local services to drive forward improvements in care. Testing its application in advance helped us to understand some of the key challenges that services would face in meeting this target. It also enabled us to provide guidance and tools to support local partnerships to meet those challenges.

- Production of a range of tools/guidance to support NHS Boards to deliver HEAT Targets including efficiency and productivity savings. Examples include:
  - Mental Health Pathway Efficiency and Productivity Report
  - Effective and Efficient Community Mental Health Teams Toolkit
  - a suite of tools to support DCAQ work

     including the QuEST Mental Health
     DCAQ Tool
  - Dementia Post Diagnostic Support Workforce Planning and Costing Tool
  - examples of what data community mental health teams need to look at regularly to support improvement work and how it should be presented to maximise understanding
- A Mental Health National Learning Event was held in October 2012 which provided a forum to share practical experiences and ideas on how to deliver improvements which save money whilst also maintaining or improving the quality of mental health services. Feedback from attendees was extremely positive about the benefit of the

day which also saw the launch of the new Effective and Efficient Community Mental Health Teams Toolkit. This new toolkit brings together a range of existing resources and tools, many of which have been developed by the QuEST Mental Health Team, into one accessible format. Responses have included 'tremendous piece of work' and 'thanks for all the work you've put into this, since it does make life a bit easier out here on the front-line'.

#### **Priorities 2013-14**

The priorities for the Mental Health Programme for 2013-14 are detailed below:

- Setting up the new National Dementia Care Improvement Programme in partnership with JIT will:
  - support the delivery of the Post-Diagnostic HEAT target across all Health and Social Care Partnerships across Scotland
  - support the test of Alzheimer Scotland
     '8 Pillars' model for in-community pilots
  - support improvement in the care of individuals with dementia in acute hospitals
  - work with colleagues in primary care to identify specific initiatives that can be taken forward to improve primary care services for individuals with dementia and their families
  - test initiatives around community capacity and co-production
- managing the end of the National Dementia Demonstrator Programme including the production of an overall national evaluation report
- consolidating work around access to psychological therapies to enable delivery of the 18 weeks referral to treatment target

### **Case Study Example**

Midlothian is one of three Dementia Demonstrator Sites in Scotland established following the launch of Scotland's National Dementia Strategy in 2010, to create better outcomes for people with a diagnosis of dementia with the same or less resource.

In Midlothian, the project seeks through a whole system approach (within existing resource constraints), to develop responsive services for people with dementia which support them throughout their journey from a diagnosis of dementia through to the end of life. To meet this aim the project has focused work across a number of different workstreams:

### **Mapping and Data Gathering**

- The Firefly Research team within Queen Margaret University conducted an in-depth narrative study of the lived experience of individuals living with dementia and their carers in Midlothian. The findings were published in the *International Psychogeriatrics* journal and have been used to inform the redesign of services locally.
- Midlothian are using data generated through the Integrated Resource Project to better understand the local use of health and social care resources by individuals with dementia and from this to identify opportunities for redesign.

### **Post Diagnostic Support**

To deliver the five pillars of post diagnostic support, the following services have been established:

- the new 'Link Worker' provides people with dementia and their carers with information and support for up to a year after they are diagnosed
- a new Local Area Co-ordinator for Dementia promotes access to activities in the community for people with dementia which suit their skills and interests
- a pilot of Family Group Conferencing is

- being conducted with people with dementia and their families to empower and support family based solutions to planning care and support
- to improve the support in the community and minimise unnecessary admissions to acute hospital, a self-management care plan is being piloted with clients referred through a local General Practice

### **Midlothian Single Dementia Service**

- A joint multi-disciplinary dementia service is being developed in Midlothian to provide a single point of access for people with dementia and their carers with services and support from diagnosis to end of life.
- The development of the single service is supported by the newly established user and carer reference group. The group advises and influences the decisions being made around the new service in order to ensure that it is shaped around service users' and carers' needs and views.

### **Workforce Development**

Workforce development will include:

- an audit of services including the private and voluntary sector, against the Standards of Care for Dementia in Scotland has been completed including a staff survey
- a training programme is being developed and delivered for professionals to improve their understanding of dementia and outcomes based approaches

This report includes the following case studies from NHS Boards in relation to Mental Health:

- **NHS Borders:** Analysis of Increasing Referrals into the CAMH Service
- **NHS Borders:** Incorporating Patient Choice in Appointment Allocation
- NHS Shetland: Mental Health (Administration Services and Clinical Governance)
- NHS Tayside: Child and Adolescent Mental Health Service

### **Cancer Performance Support**



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### **Key Drivers**

Every year, about 30,000 people in Scotland are diagnosed with cancer and trends predict that the number is likely to rise to almost 35,000 in 2016-2020. The reason for this increase is that there are more elderly people in the population and life expectancy is increasing further.

Over the last 20 years, almost all cancers have shown improvements in survival five years after diagnosis and survival rates from cancer in Scotland are broadly similar to those in England and Wales.

The Cancer Programme focuses on three key areas:

- sustaining cancer waiting times standards performance
- Cancer Modernisation: further improvements in the effectiveness, efficiency and patient-centeredness of service delivery
- Detect Cancer Early: contributing to and improving five year survival from cancer for the population of Scotland, through earlier diagnosis and treatment

### **Programme Aims**

Over the last few years, cancer services have developed and improved significantly with more doctors, nurses and other healthcare professionals and state-of-the-art equipment in all five cancer centres. The Scottish Cancer Taskforce Cancer Modernisation Programme

aims to build upon the progress already made in effective and efficient cancer service delivery, further improving patient experience and patient outcomes, whilst managing the anticipated increase in cancer incidence.

The Detect Cancer Early Programme aims to increase the proportion of people diagnosed and treated in the first stage of breast, colorectal and lung cancer by 25 per cent by 2015.

### **Programme Workstreams**

The Cancer Programme includes six main workstreams:

- Cancer waiting times performance support
- Detect Cancer Early Programme
- Acute oncology service delivery
- Surgical oncology, including enhanced recovery after surgical treatment
- Radiotherapy, including the capacity and capability for radiotherapy treatment
- Transforming Care After Treatment

### **Achievements 2012-13**

The key achievements of the Programme to date include:

# **Cancer Waiting Times Standards Performance**

NHSScotland achieved and sustained performance above 95 per cent in all quarters against the 31-day cancer access target and in most quarters against the 62-day target throughout 2012. During the final quarter, October – December 2012, 95.8 per cent of patients started treatment within 62 days of urgent referral with a suspicion of cancer. Within the same period, 98.1 per cent of patients started treatment within 31 days of decision to treat, irrespective of the route of referral.

#### **Cancer Modernisation**

- The development and piloting of the 24-hour cancer treatment helpline
- The Radiotherapy Programme Board (RTPB) was established in June 2012 to drive forward improvement work across
   Scotland. The RTPB reports to the Scottish Cancer Taskforce. A cohesive work-plan has been developed and implementation of the RTPB's objectives is supported by the wider Radiotherapy community. RTPB priority areas of work include:
  - development of national pathways to ensure equity of access to new innovative techniques and technologies
  - continued development of workforce capacity and capability
  - development of evidence based consensus treatment protocols and pathways
  - robust patient engagement to better understand and improve the experience of radiotherapy
  - development of future models of working that meet the rising incidence of cancer and radiotherapy demand
  - promotion of clinical trials and research, and the unique opportunities that exist within Scotland
  - proactive commitment to exploring new technologies and techniques to ensure Scotland's radiotherapy programme is up-to-date and well-prepared
  - collaboration with our NHS colleagues across all UK countries, and Europe, to better understand the cost benefits of radiotherapy

# **Transforming Care After Treatment Programme**

The Transforming Care After Treatment (TCAT) Programme was launched in May 2013 and aims to ensure that people diagnosed with cancer are prepared for and supported to live with the consequences of the diagnosis and its treatment.

To achieve this aim, Macmillan Cancer Support is working in partnership with the Scottish Cancer Taskforce and providing up to £5 million in funding over the next five years, supporting clinical teams and other partners to review, redesign and test new approaches and models of cancer care after treatment.

The Programme will focus on the redesign of current models of cancer follow-up, managing the transition between acute care and home, and enablement and support for effective self-management.

It will seek to build upon what has already been achieved in Scotland and other parts of the UK and also contribute to the delivery of the *Quality Strategy*. The timing of this development coincides with a growing appetite for greater collaboration and mutuality across the public sector.

The Scottish Cancer Taskforce will monitor progress of the programme to ensure that there is delivery against focused, evidenced outcomes that will inform on-going commissioning of services.

### **Detect Cancer Early**

Key achievements of the Detect Cancer Early Programme include:

- development and launch of priming, breast and bowel cancer social marketing campaigns
- development of systems and processes for data collection to support the detect cancer early HEAT target
- development and implementation of nGMS contract element to support primary care contribution to increasing bowel screening programme participation
- a programme of work is being taken forward to refresh the GP Referral Guidelines for Suspected Cancer and provide education sessions for primary care professionals
- funding to support diagnostic and treatment capacity building has been released to NHS Boards

### **Priorities 2013-14**

Priorities for 2013-14 include:

- Sustain cancer waiting times standards performance
- Cancer Modernisation
  - roll-out of cancer treatment helpline
  - continue to support efficient and productive radiotherapy treatment delivery
  - support Transforming Care After Treatment pilot projects
- Detect Cancer Early
  - develop lung cancer and breast screening social marketing campaigns
  - support NHS Boards to build capacity in diagnostics and work towards HEAT target achievement
  - build upon impact of social marketing campaigns to date
  - continue to support NHS Boards around diagnostic and treatment capacity building

### **Prescribing**



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### **Key Drivers**

NHSScotland spends around £1.3 billion a year on medicines. Of this expenditure, around £1 billion is spent on medicines dispensed in primary care and just over £300 million a year is spent on medicines in hospitals.

Despite much work over the last 10 years to improve prescribing practice in primary care, there is still significant variation in the quality of prescribing and cost-effectiveness.

The Prescribing Programme has been set up to ensure medicines are used appropriately and that cost-effective choices are made.

### **Programme Aims**

Improve the quality and cost-effectiveness of prescribing by:

- identifying the major improvement opportunities in Scottish prescribing
- resolving issues that need to be addressed at a national level
- monitoring progress and sharing learning between NHS Boards

### **Programme Workstreams**

The Prescribing Programme includes five workstreams:

- National Therapeutic Indicators
- Polypharmacy
- National Prescribing Policy
- Waste and Repeat Prescribing
- Development of Prescribing Advisor Networks (e.g. Scottish Prescribing Advisers Association)

### **Achievements 2012-13**

The key achievements of the Programme to date include:

• National Therapeutic Indicators (NTIs) have been set up to provide benchmarks across primary care prescribing in Scotland. NTIs identify major areas where there is variation in prescribing quality and help GPs understand and apply the latest clinical evidence. Prescribing information is used to encourage General Practices to move towards the 'best' quartile of prescribers. In addition to savings in 2012-13 from patent expiries, there have been underlying efficiency savings of almost £8 million as a result of changes in prescribing behaviour.

This includes almost £3 million from using more evidence based cholesterol lowering drugs, plus reductions in inappropriate prescribing of high dose inhaled steroids, dipyridamole, quinine and anti-microbial wound products.

Providing a plan to tackle polypharmacy. Polypharmacy is the term for patients receiving lots of medicines. Almost half of Scots aged 65 and over are now prescribed five or more medicines. It is important to be sure the benefits of these medications do not outweigh the potential side effects and drug interactions.

It is important to review patients who are taking multiple medications to ensure those medicines are still needed and to check they are not causing problems. Guidance was issued in 2012 to NHS Boards in Scotland about the management of polypharmacy. This has been supported in the 2013-14 GP contract.

### **Priorities 2013-14**

The key areas of focus for the coming year will be:

- NTIs will be refreshed for 2013-14 and work will be undertaken to continue to embed these in prescribing practice.
- Work will be undertaken to support the implementation of polypharmacy reviews and to measure the impact of the reviews on patient safety.
- Waste occurs from medicines that are dispensed to patients but not taken.
   Tools and guidance are being developed to help General Practices identify preventable waste in their repeat prescribing.
- Prescribing guidance is being developed for five specific clinical areas where opportunities exist to improve product choice, based on clinical evidence and cost-effectiveness. This includes respiratory, diabetes, oral nutritional supplements, wound management, and gluten free products.

### **Case Study Example**

Audit Scotland published a report *Prescribing* in *General Practice in Scotland* in 2013 and recognised improvements in prescribing efficiency over recent years. We have worked with NHS Boards to build on this good practice and have provided the impetus and framework for NHS Boards to implement and sustain improvements.

NHS Fife has implemented the NTI guidance in relation to drugs to reduce cholesterol. This leads to more people receiving drugs with a strong evidence base, at lower cost. A saving of between £210 and £314 per patient per year has been identified, resulting in over £1 million being saved for NHS Fife.

This report includes the following case studies from NHS Boards in relation to Prescribing:

- NHS Ayrshire and Arran: Pharmacist Led Review of Patients Prescribed Last-Line Antimicrobials
- NHS Forth Valley: GP Prescribing Incentive Scheme
- NHS Greater Glasgow and Clyde: ScriptSwitch Software Implementation across Inverclyde CHCP and East Dunbartonshire CHP

### **Procurement**

### **Key Drivers**

Virtually all NHS Board activity involves the requirement to procure some form of product or service meaning spend with suppliers is approximately 20 per cent of NHSScotland's total budget.

NHSScotland spends £2.1 billion per annum on goods and services from around 10,000 suppliers. Currently about £1.5 billion of this spend is influenced nationally, regionally or locally by the procurement community.

As such, efficient and effective procurement is imperative.

### **Programme Aims**

Our Procurement Programme aims to drive increased value from NHSScotland spending as well as supporting economic growth. This will be achieved through improving processes and tools, obtaining reductions in price, influencing demand, working closely with suppliers and creating new and improved structures.

### **Focus Areas**

Focus areas for the Procurement Programme include:

- ensuring a higher percentage of total spend is covered by an appropriate procurement process and increasing the level of national contracting activity
- improving current contract conformance and compliance levels
- driving further savings from existing national and local contracts while improving quality through initiatives such as Intensive Improvement Activity (IIA)

- developing regional procurement consortia (the East of Scotland Procurement Consortium and West of Scotland Procurement Consortium) to drive economies of scale, share expertise, reduce costs and improve capability and capacity
- continued roll-out of eProcurement systems and a National Spend Dashboard to support management decision-making

### **Achievements 2012-13**

Some of the key achievements of the Procurement Programme are as follows:

- The East of Scotland Procurement Consortium has delivered £4.7 million through implementing national contracts and £670,000 through regional contracting and joint working in 2012-13, with a further £4.5 million in savings targeted in 2013-14. Additional efficiency gains of £100,000 in resource savings per annum have also been achieved by sharing management and operational resources between NHS Lothian and NHS Tayside, with further resource saving opportunities identified for 2013-14 between NHS Highland and NHS Grampian.
- The West of Scotland Procurement
   Consortium has delivered over £4.6 million
   in savings during 2012-13 as a result of
   implementing national contracts and better
   buying decisions better deals from
   existing suppliers or better value for money
   products from new suppliers. It is targeting
   a further £5 million saving during 2013-14.
- Development of a National Spend Dashboard, building on existing systems, to increase availability and use of management information to support decision-making.

 14 Intensive Improvement Activity events have been undertaken to improve procurement capability and to identify savings opportunities. Three commercial review engagements have been undertaken and have identified £4.7 million of savings opportunities so far.

### **Priorities 2013-14**

Some of the key priorities for the Procurement Programme in 2013-14 are outlined below:

- implementation of NHSScotland Procurement Framework which will give strategic direction and a performance framework for the function
- a review of Procurement structures across NHSScotland will be undertaken to identify the optimum structures that could drive increased savings and effectiveness
- regional consortia will continue to create consistent operational practice and systems, build procurement capability by sharing best practice, exploit economies of scale to deliver savings and share workload to improve capacity
- National Procurement will continue to deliver Intensive Improvement Activity (IIA) to support NHS Boards to identify additional savings opportunities, increase procurement capability, and improve performance
- during 2013-14, the National Spend Dashboard will be tested with four pilot NHS Boards (NHS Tayside, NHS Highland, NHS Forth Valley and NHS Greater Glasgow and Clyde) with an aim to roll-out the Dashboard to all NHS Boards by December 2013

### **Case Study Example**

Prior to the West of Scotland Procurement Consortium Continence Product project, suppliers had regularly demanded unrealistic price increases, quoting supply and production costs.

Following a retender by National Procurement, the West of Scotland Procurement Consortium Project Team worked with National Procurement and the National Distribution Centre (NDC) to promote a single supplier fixed price award contract for all west of Scotland Boards.

Expert end users from each NHS Board were appointed to a Technical User Group decision-making group, and following the completion of a mini-competition, SCA Molnlycke were appointed to supply all continence products to west of Scotland acute hospitals via the NDC and direct to patients via their direct delivery service.

The combined efforts of this group approach released over £1.2 million back to patient care across the west of Scotland.

This report includes the following case study from NHS Boards in relation to Procurement:

 NHS National Services Scotland: Modernisation of Home Oxygen Service

### **HR Shared Services**



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### **Key Drivers**

Best practice from industry and the wider public sector suggests there may be a better way of working; the majority of organisations across a number of sectors (including health) have already implemented or are exploring shared service operating models.

This is supported by a desire to improve quality and to increase the professionalisation of the HR service for NHSScotland.

It is recognised that within HR there is already collaboration around workforce planning in particular, along with other HR initiatives, at regional level. In 2012, the implementation of a national single instance HR system (eESS) commenced, enabling standardisation, sharing of information, links to other workforce related IT systems and consistency of HR transactional processes across all NHS Boards. This builds upon the successful implementation of Financial Shared Services for NHSScotland.

There is an on-going focus on maintaining and delivering front-line services within NHSScotland and as a result it is necessary to develop a sustainable and efficient HR service for the future.

The underpinning ethos of the Shared Services agenda is:

 Simplify: processes and procedures are as lean as possible minimising inappropriate waste

- Standardise: variation between NHS Board areas and individual users is minimised or removed
- **Share:** where there are benefits in doing so, processes are delivered from fewer locations or once for the whole of Scotland

### **Programme Aims**

The Programme has been established with the high level objectives of ensuring that the appropriate development of HR Shared Services:

- improves the quality and efficiency of HR services delivered to customers
- improves the governance of HR and workforce related services and activities
- improves the resilience and sustainability of HR services
- delivers redesigned HR service processes which are effective, efficient and productive
- ensures the maximisation of business systems integration opportunities (e.g. eESS, ePayroll)

### **Programme Workstreams**

Phase 1 of the HR Shared Services Programme has focused on the following areas:

- Recruitment
- Employee Services
- Medical Staffing and Trainees

These three areas cover approximately 50 per cent of HR activity in NHSScotland.

A further workstream focused on Payroll and Benefits Advice will progress following the roll-out of ePayroll across NHS Boards.

In addition, the programme may develop a workstream focused on Training, Development and Education which covers a further 14 per cent of HR activity undertaken in NHSScotland.

### **Achievements 2012-13**

The key achievements of the Programme to date include:

- Visible ownership of the Programme by HR Directors, supported by a common understanding of shared service models and how they operate. HR Directors are providing strategic leadership and are focusing on the potential for overarching HR transformation.
- Significant engagement in the baselining and benchmarking exercise, which has provided, for the first time, a complete and robust picture of HR and HR related activity across the whole of NHSScotland. This data will be used to identify opportunities for improvement, including quick wins and longer term benefits which can be realised by developing a model of shared services.
- Increased senior staff understanding of the potential of shared services gained by examining other models, identifying and sharing best practice.

#### **Priorities 2013-14**

The key areas of focus for the coming year will be:

- building on the activity scoping work previously undertaken, to develop options for appraisal and a supporting business case
- engaging in a more detailed data verification and analysis exercise with NHS Boards based on that already captured through the baselining and benchmarking exercise earlier in 2013
- working with the eESS project team as it rolls out the single national HR system to ensure standardisation of processes and to ensure benefits of the new system are identified, tracked and realised

### **Case Study Example**

The case studies below are examples of how the HR Shared Services Programme could develop, based on shared services principles and practices that have already been adopted at the local level.

NHS Grampian currently provides HR services to NHS Orkney through a service level agreement (SLA). Although some HR support is still available locally, the SLA with NHS Grampian enables NHS Orkney to access the full breadth of specialist HR services, demonstrating the benefits of exploiting economies of scale and adopting a 'centre of excellence' approach.

NHS National Services Scotland (NSS) have implemented an HR Service Centre Model supported by a call logging case management system. NSS is a national board covering a wide geographical area which makes it challenging to provide access to HR support at every location. NSS has restructured its HR Service so that all staff, regardless of location, have access to the same quality of HR service.

This report includes the following case studies from NHS Boards in relation to Shared Services:

- NHS Borders: Local Forensic Learning Disability Service
- NHS Orkney: Contracting Out Payroll Services

### **Facilities Shared Services**



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### **Key Drivers**

The key drivers for change were identified by Directors and Heads of Facilities Services across NHSScotland, these include:

- skills shortages and a need to share scarce specialist resources
- a need to develop services, building on models of good practice already extant in NHSScotland
- a need to reduce variation and exploit the economies of scale offered by NHSScotland
- a need to share intelligence amongst NHS Boards regarding major contracts
- changes in legislation and government policy in relation to recycling and improved environmental standards

### **Programme Aims**

There are a number of overarching objectives for the Facilities Shared Services Programme:

- improve the quality, efficiency and resilience of facilities services
- support change in healthcare delivery and where possible accelerate change
- ensure that facilities services are fit for purpose to support NHS Boards to deliver the 2020 Vision
- build on the opportunities offered by wider collaboration with public and private sectors

- ensure better use of specialist resources, ensuring specialist skills are shared across NHS Boards
- ensure compliance with the *Waste* (Scotland) Regulations 2012

These objectives are supported by a number of workstream specific objectives:

- ensure the capital programme is delivered
- ensure proper skills are available for delivering maintenance
- ensure better investment of capital in relation to sterile services
- improve procurement for transport
- Increase contract management capacity and capability
- ensure compliance with the *Waste* (Scotland) Regulations 2012

### **Programme Workstreams**

The Facilities Shared Services Programme comprises five key workstreams:

- Capital and Hard FM
- Sterile Services
- Transport
- PPP
- Waste

### **Achievements 2012-13**

The key achievements of the Programme to date include:

 Extensive data collection has been undertaken in relation to the Capital and Hard FM workstream, including reviewing the skill mix and age profile of the workforce to assess preparedness for delivery of a changing care environment (capital programme) to meet the requirements of the 2020 Vision and ensure sustainability for the future.

- Ensuring service engagement with the solutions that are identified through use of the technical advisory structure of Health Facilities Scotland (HFS). This, combined with full partnership engagement through Scottish Partnership Forum (SPF), has enabled the process to be well advised and fully transparent.
- In addition to fleet management, the Transport workstream has developed a logistics subgroup to examine the delivery of goods and services from the NDC and the 'final mile distribution' from local hubs to patient care facilities. This has involved working with National Procurement and other logistics services to ensure a joined up approach and reduction of duplication. A more efficient logistics service also has the added environmental benefit of a reduced carbon footprint.
- Working with Zero Waste Scotland we are preparing a national service for health to meet the new requirements of the Waste (Scotland) Regulations 2012 to effectively segregate recycleate into its constituent parts to reduce waste going to landfill and potentially generate income from waste.

#### **Priorities 2013-14**

The key areas of focus for the coming year will be:

- the Transport and Fleet Management Working Group will identify a common specification and procurement policy for all vehicles, with the aim of reducing variation across NHSScotland and maximising the procurement benefits
- NHSScotland will be compliant with the Waste (Scotland) Regulations 2012 as they apply from January 1, 2014
- there will be effective benchmarking of sterile services departments across NHSScotland and assessment of the capital investment necessary to continue to deliver services which are compliant with all current legislation and mandatory standards

- development of an effective communications plan to ensure that all staff affected, or potentially affected, by changes emanating from the Programme are fully informed and engaged in the process from the development of options to delivery of solutions
- alignment with the Soft Facilities
   Management Programme, to optimise
   synergies between the two Programmes
   of work

### **Case Study Example**

By pulling together contract management expertise from NHS Lothian and working with the Scottish Futures Trust (SFT), effective negotiations with a PPP provider has resulted in savings of £495,000 for NHS Lothian in relation to the Edinburgh Royal Infirmary contract.

The experience gained will be spread across the service to ensure this good practice is consistently embedded nationally. This expertise will be used to negotiate with contractors as and when PPP contracts are reviewed.

This report includes the following case studies from NHS Boards in relation to Shared Services:

- NHS Borders: Local Forensic Learning Disability Service
- NHS Orkney: Contracting Out Payroll Services

This report includes the following case studies from NHS Boards in relation to Estates and Facilities:

- NHS Borders: Hawick Inpatient Facilities
- **NHS 24:** Facilities Management Contract
- **Healthcare Improvement Scotland:** Accommodation Rationalisation

### **Performance Support**



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### **Key Drivers**

The QuEST Performance Support team continues to support NHS Boards to deliver HEAT targets and standards which contribute towards delivery of the Scottish Government's Purpose and National Outcomes; and NHSScotland's Quality Ambitions.

The key drivers of the team are:

- the Performance Support team maintains a flexible response to NHS Boards encountering difficulty in delivery
- to bring together external expertise and facilitate a mechanism for collective support
- to provide a detailed analysis of local operational data, known as 'walking the patient pathway'
- supporting the exchange of ideas with staff providing the service
- identifying recommendations for NHS Boards to implement, and identify additional support as necessary

### **Programme Aims**

The QuEST Performance Support Programme aims to help NHS Boards to achieve key Scottish Government objectives.

Further aims are:

 to provide a mechanism of finding collective support and opportunities for NHS Boards to focus jointly on areas of concern such as the HEAT targets

- to assist in drawing together resources to support NHS Boards by making connections between experts and staff
- to aid NHS Boards in the understanding and analysis of patient 'pathways', which may result in more rapid identification of inconsistencies and delays
- to collate data for the informed evaluation of improvement and performance measures
- to identify and offer further avenues of support for implementation such as timely assessment, appropriate interventions and use of specialist skills
- to stimulate the development of pathways to community support

### **Programme Workstreams**

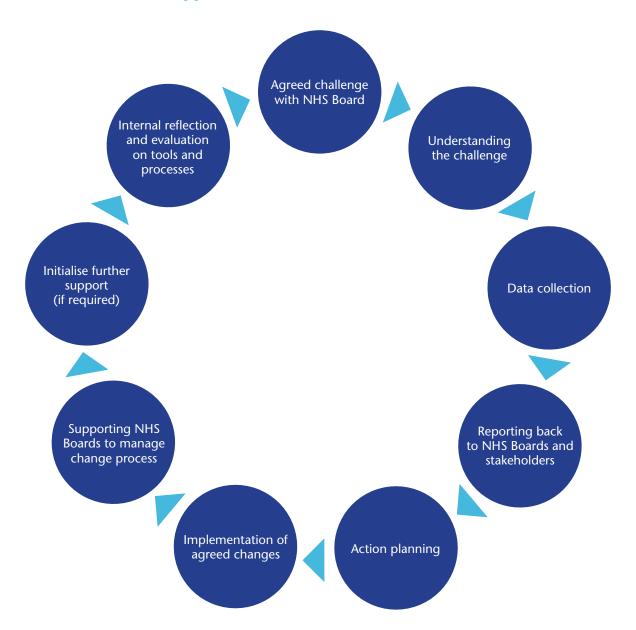
The responsive nature of the Performance Support Programme accommodates a range of skills. NHS Boards are able to access the skills and time of the Performance Support team when needed.

Support available via the Programme includes:

- Seeking out partners and expertise on behalf of NHS Boards to focus skills on the area of concern. In some areas the Programme has assisted in creating professional networks of support and creating local champions to sustain change.
- The collection and analysis of data via the Programme has assisted in the facilitation of informed discussions between NHS Boards and stakeholders and assists in raising issues beyond the local area if necessary. The collection of data assist in identifying patterns and trends in an unbiased manner that NHS Boards, clinicians and other stakeholders have found valuable.

The process of working with the Performance Support Programme is shown in figure 3.

**Figure 3: Performance Support Process** 



### **Achievements 2012-13**

The achievements of the Performance Support Programme 2012-13 included sustained work in Scotland but also providing advice to health systems in England and Australia.

The Programme also spent time drawing together learning from their supportive work throughout the year and identified ways of moving towards deeper customised analysis of the data collected.

The Programme has become more accomplished in the analysis of large data sets and creating clean operational data that is more easily scrutinised by NHS Boards and other stakeholders.

The Programme has become more adept at exploring patterns and trends within data and sharing knowledge with NHS Boards and stakeholders to increase awareness and support informed change.

### **Priorities 2013-14**

Throughout 2013-14 the Performance Support Programme will offer support to NHS Boards in a flexible way that offers guidance and balance to the requirements of improvement and performance.

Further priorities in 2013-14 for the Performance Support Programme are to:

- continue to provide responsive support that is informed and flexible for NHS Boards
- continue to improve the understanding of data to identify emerging priorities for NHS Boards and other stakeholders
- continue to work closely with the Scottish Government in improving the quality of care, including accomplishing HEAT targets
- support broader plans and wider ambitions for improvement and performance objectives

### **Case Study Example**

During 2012-13 the Performance Support Programme undertook an exploration of 'boarding', reporting to the Scottish Medical and Scientific Advisory Committee (SMASAC) and informing guidance to NHS Boards for winter planning.

Demand for hospital services continually changes. Hospital patients are sometimes treated in areas not designed, staffed or equipped for their specific care needs. The need to understand the consequences of such patient boarding was a common issue raised during recent performance support visits as well as successive national winter reviews, with implications for future planning and improvement.

The team reviewed the limited evidence available, a new paper for which has been submitted for publication in November 2013. The Performance Support team also agreed with ISD and clinical experts to implement this operational definition of inpatient boarding:

"A boarder is a patient who occupies a borrowed bed.

This includes patients in beds who are:

- 1. managed by an individual consultant or consultant team outwith the main allocated inpatient area for that consultant, or patient speciality
- 2. transferred to any non-inpatient bedded area (for example day units)"

Inpatient boarding levels for each acute hospital are now reported to the Scottish Government within weekly monitoring returns. This, together with monitoring of compliance with the four hour Emergency Department Standard, 12 hour Emergency Department length of stay breaches and numbers of hospital discharges delayed in excess of four weeks, represents near real-time intelligence regarding flow across transitions of care, and thus planning and management of capacity within hospitals.

The detrimental effect of boarding on both boarded and non-boarded patient outcomes was investigated through analysis of large datasets. This is the first such multi-centre analysis of its kind and preliminary results have been presented to SMASAC and winter planning conferences.

Detailed results have been presented at the Royal College of Physicians of Edinburgh Consensus Conference in November 2013 and will be submitted for peer reviewed publication. These will include: what types of boarding for which patients were found to be most harmful or disruptive; and queue modelling to estimate what level of capacity with what degree of specialisation would be expected to minimise boarding and 'turnaway' rates for patients. Both elements have provided insight for planning and prioritising improvement.



# **Case Studies**

Outpatients, Primary and Community Care	
NHS Highland: Why Did the Patient Cross the Road? Because their Rehab was on the Other Side!	
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## **Outpatients, Primary and Community Care**

# NHS Highland: Why Did the Patient Cross the Road? Because their Rehab was on the Other Side!

#### **Background/Context**

Fort William in the Highlands of Scotland has a rural general hospital with wards located 0.5 km apart. Belford is the main building and delivers more acute services. On the other side of the main road, is the Belhaven Ward – a rehabilitation unit.

#### **Problem**

This layout meant duplication of some services and resources split (medical staff only based in the main Belford building). This imposed a barrier to good patient flow and resulted in significant cost implications.

#### **Aim**

To reorganise services to be more personcentred, safe and efficient by relocating staff and community services to better but fewer facilities.

#### **Action Taken**

The following actions were undertaken:

- Lean improvement techniques and PDSA (Plan, Do Study, Act) cycles
- staff consultation and patient feedback
- monitoring of emergency admissions, length of stay and occupied bed days

#### **Results**

#### **Inpatient Facilities (Belford Hospital)**

Improvement work in Belford Hospital has delivered significant reductions in occupied bed days freeing up bed capacity:

- five beds transferred from Belhaven Unit to Ward 1 in Belford (November 2011)
- originally the unit had 17 beds but occupancy steadily declined
- reduction in 'hand-offs' and movement of staff and patients between wards
- daily presence of social work and community nursing staff in the Belford

#### **Community Services**

- transfer of staff (physiotherapists and occupational therapists) from Belhaven Unit to Fort William Health Centre completed (March 2013)
- rehabilitation services delivered from better facilities (individual clinic rooms, air conditioned gym and fully equipped tele-rehabilitation)
- development of physiotherapy classes in Fort William Leisure Centre

#### **Patients and Staff**

- patient feedback very positive on better atmosphere and nicer surroundings
- better transport links and car parking
- lone working and security issues for staff resolved
- staff morale improved by providing better permanent facilities

#### **Efficiency Savings and Productive Gains**

Significant savings from reduced running costs and cost avoidance (£1 million):

- total cost avoidance from essential upgrade works (£634,900)
- recurring savings from the overall redesign (£250,000)
- running costs saved from closing the Belhaven (£90,000)
- value of Belhaven, now surplus to NHS requirements (£68,300)

#### **Lessons Learned**

"The whole thing has been a big success. It is a much better physical working environment and we've been made very welcome. Staff have responded really positively and have taken on real ownership of the move. The benefits of co-location with the other professions are becoming more and more apparent."

Kenny Mackintosh (Superintendent Physiotherapist), April 2013

# NHS Western Isles: Community Nursing Patient Held Record and Digital Pen technology

#### **Background/Context**

**November 2009** – Leading Better Care programme invited senior charge nurses to lead on improvement initiatives.

**January 2010** – Documentation Group established to develop, standardise and improve on current documentation practice and to manage the patient held record at point of care.

**March 2010** – Invitation to stakeholders to join group initiated a synergy and joint working with the IT department that would impact on the design and implementation of core objectives.

#### **Problem**

Patient held documentation evidenced only a narrative of care given by nurses; it did not evidence patient involvement, nursing assessment or plan of care. Additionally, inefficient use of community nursing time spent duplicating patient documentation in the patient's home and then electronically back at base. This raised the question of the quality of data being recorded electronically several hours after interaction as opposed to recording at point of contact.

A scoping exercise evidenced that 41 per cent of community nurses' time was spent on administration tasks at base, 28 per cent of time was spent on direct patient contact.

#### **Aim**

To achieve improvements in efficiency and productivity and patient safety by:

- producing a universal patient held record that would be patient-centred involving patients and carers in developing and agreeing their plan of care involving aspects of self-care where appropriate, thereby enhancing the quality of patient care, experience and safety
- reducing the amount of time community nurses spend on administration and data entry and increase patient facing and patient enhancing activity time
- reducing the lapsed time and duplication of data entry

The project aims to evidence an increase in patient facing time and a decrease in administration time by community nurses; this should be clearly evidenced one year on from commencement of the project.

#### **Action Taken**

The following actions were taken:

- an inclusive approach was used involving key stakeholders
- the group worked jointly with the IT department to explore solutions to improve efficiency – a scoping exercise was commissioned to identify issues and propose solutions
- digital pen technology commissioned
- patient held documentation piloted across the Western Isles and improved and finalised using PDSA cycles of change
- digital pen technology pilot launched alongside revised patient held documentation in July 2012 in one community nursing team in the Western Isles
- a local workload tool was utilised to evidence outcomes
- patient and staff satisfaction surveys were conducted and will be repeated one year on from implementation

#### Results

The project has delivered on developing a universal patient held record which has improved on the quality of data recorded. Documentation is instant at the point of patient contact and records can be shared with other professionals electronically evidencing safer practice.

The initial phase of the project met with significant technological challenges which were overcome over time; these problems compromised the planned phased roll-out to other teams resulting in a much longer than anticipated pilot phase. Phased roll-out to other teams began in March 2013.

The finalised product has now been implemented in four out of five community nursing teams within the Western Isles with significant support being provided during each team's initiation phase. Feedback from staff is extremely positive. Improvement in efficiency and productivity can be evidenced. The pilot team (East Team) has by far the largest caseload, practice population 13,000, and is less geographically spread. The East Team can evidence an increase in patient facing time from 29 per cent to 44 per cent pre and post digital pen. Travel and administration time have reduced by small margins (see charts 1 and 2).

Similarly the Uist Team, a remote geographically dispersed team with a practice population of 4,000, can evidence similar results since commencing the patient held record in March 2013. Patient facing time has increased, travel time has decreased, administration time has however increased; this can be attributed to the transition phase when all patients on the case load required to be transferred onto the new system (see charts 3 and 4).

Additionally, the East Team can evidence an increasing proportion of complex contacts over the period since implementation of the project. This may reflect work arising from the more comprehensive assessment now in the new patient held records as well as an increasing number of patients discharged home with complex needs (see chart 5).

#### **Efficiency Savings and Productive Gains**

The pilot community nursing team has been absolutely integral to the implementation of the digital pen project, initially through simply trialling the technology but, more latterly, by playing a proactive role in its development and effective application in practice. This is reflected in the significant increase in time spent on service development as the digital pen and PHR were being introduced (see chart 6). This investment in nurses' time has been

essential in the roll-out of this project and demonstrates that nurses have helped to develop a system that suits their and their patients' needs rather than adapting their work practice to fit in with an existing system. This increased productivity, used to improve working practice and service development, is an essential investment initially to deliver a system that will improve efficiency and productivity.

#### **Sustainability**

This plan has been sustainable by ensuring good partnership working with IT colleagues and service providers and solving all potential problems within pilot phase prior to disseminating to other areas.

We have kept key stakeholders informed and included at all times throughout the initial pilot phase and have not spread to other areas until problems encountered within the pilot phase have been rectified and the infrastructure is in place to ensure a seamless progression. Staff feedback is extremely positive and encouraging despite initial technological problems.

The initiative has attracted national attention and prompted a number of other NHS Boards to undertake feasibility studies into the adoption of digital pen technology. Our providers inform us that to date four other NHS Boards have bought the technology; NHS Ayrshire and Arran, NHS Dumfries and Galloway, NHS Highland and NHS Orkney.

The technology is to be further deployed to other areas of NHS Western Isles where similar productivity gains are required.

Plans are in place to increase the scope of practice for clinicians e.g. development of apps toolkits (such as patient nutrition assessment tools and staff workload tools) and explore the potential for integrated working with social care utilising digital pen and patient held record.

This is now embedded in practice: it is the way we work now.

#### **Lessons Learned**

The following lessons were learned:

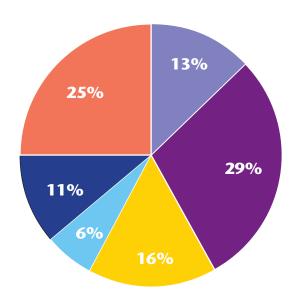
- investment in time to iron out technology problems before 'going live'
- IT staff should shadow clinical staff in clinical areas in order to experience problems first hand, such as connectivity problems, and resolve any issues found quickly to maintain engagement with clinical staff
- recognise variation in staff technology skills
- utilise clinical staff alongside IT staff when rolling out to other areas

#### **Provider Comments**

- create more process/workflow material that is specific to the new processes and easy to digest for clinical staff
- introducing two new processes to clinical staff (patient held records AND new technology) was brave but worked
- engaging patients through using the media created an atmosphere of 'collaborative excitement' when the nurses were seen using the technology in the patient's home
- engaging clinical staff at all stages of procurement and seeking 'buy-in' pays dividends when teething issues occur

Chart 1: Breakdown of time May 2012 – East team pre digital pen





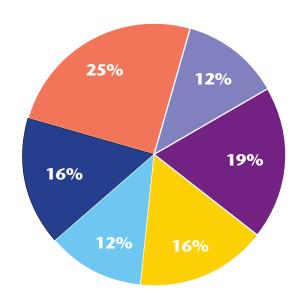
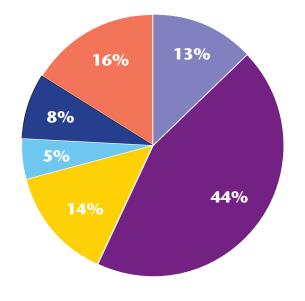
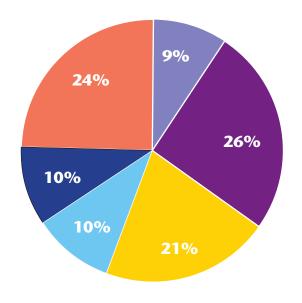


Chart 2: Breakdown of time July 2013 – East team post digital pen

Chart 4: Breakdown of time July 2013 – Uist team post digital pen



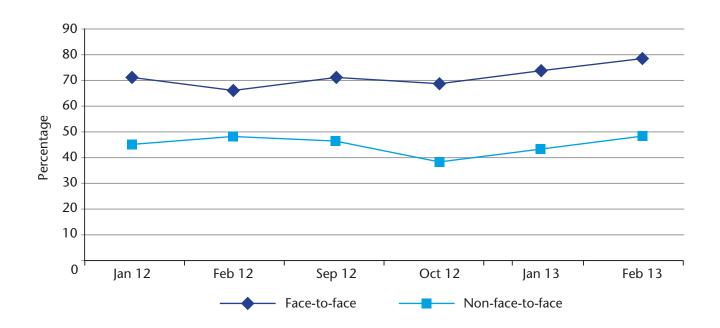


#### Key

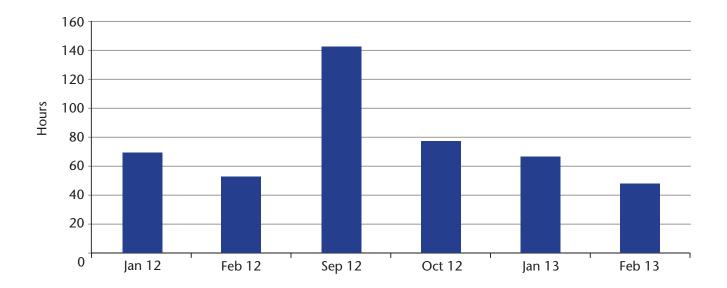
- Non-face-to-face work
- Face-to-face work
- Administration

- Travel time
- Professional and service development
- Caseload and team management

**Chart 5: Complex and highly complex contacts** 



**Chart 6: Time spent on service development** 



# NHS National Services Scotland (Scottish National Blood Transfusion Service): Transforming the Donation Experience

#### **Background/Context**

The Scottish National Blood Transfusion Service (SNBTS) Strategy identified the need to transform the donation experience by improving the quality of care and communication, and to improve the efficiency and effectiveness of our service to volunteer, non-remunerated blood donors. Alongside this we aimed to streamline the process and improve efficiency and productivity, transforming the service in three phases. This case study relates the first phase which aimed to redesign and streamline the collection process, improve the donor experience while improving efficiency by balancing workloads across the session, and remove internal inefficiencies.

#### **Problem**

SNBTS had undertaken diagnostic work to analyse the underlying cause of process issues on blood collection sessions that could result in bottlenecks, extended wait times for donors and extended work hours for staff. This analysis indicated the following contributing factors:

- unbalanced workload at stages of the process
- suboptimal skill mix
- lack of control of flow of donors into the sessions
- lack of internal controls to trigger corrective action in process
- inability to control loss rates resulting from donor deferrals

#### **Aim**

Enable service excellence through delivery of high-quality, efficient and modern donor services that will ensure safe and sufficient blood is available to support the transfusion needs of Scotland and that demonstrates an effective and value for money service.

#### **Action Taken**

#### **Introducing the Home DSR**

Completion of the Donor Session Record and Health Check Questionnaire (DSR) is a requirement for all donors to assess their eligibility to donate. Although the time to complete this at session is not extensive it does require an element of privacy for the donor and can result in the donor being deferred from donation. This can impact negatively on both the donor (who has wasted their time in attending a session) and the productivity rates (as part of the donation time is reviewing the DSR with the patient to ascertain if they are eligible to donate). Prior to home DSR, 14.5 per cent of donors were deferred. By issuing the DSR to donors at home we are able to:

- save the donor from having to attend a session if they are deferred (telephone support is available if they wish to speak to a medical advisor)
- improve donor satisfaction through reduced waiting times at donor sessions (the health check can become a bottleneck and reducing the number of donors who attend and are then deferred will ultimately reduce the number of donors in the queue)
- increase productivity (a higher percentage of donors attending will be eligible to donate and it was anticipated that productivity rates will increase by 5 per cent)
- increase efficiency of mail shots (longer term the cost of home DSR is anticipated to be neutral as other stationary/postage costs will be reduced due to process changes)
- support change in process for both staff and donors as we move towards online DSR

## Rebalancing Workload across the Process

Diagnostic work demonstrated the need to redistribute workload across the stages in the collection process and improve the session layout to facilitate effective use of all available resources. To support this work we:

- redesigned the session layout, co-locating welcome and donor registration alongside post-donation care and refreshments with staff flexing between the two stations to match the workload
- introduced a 'priming role' on session to increase the health-screening capacity at the start of the session to 'push' more donors through this stage as quickly as possible
- introduced a controlled queue for beds at pack issue to act as a trigger for staff to flex between beds and health screening and follow the workload
- introduced automated blood mixers to reduce loss and streamline the bedside process

## **Ensuring Session Appropriately Resourced**

SNBTS Donor Services have used a well-defined collection staffing model to allocate resources for collection activities since 2003. In 2012 this was extensively overhauled to develop a workload planning and resourcing tool with the ability to scenario plan and cope with variations in donor types (new, regular, lapsed, age, etc.), venue layouts and restrictions. This can also be used to optimise skill mix and has the option for the session resource manager to apply professional judgement in deciding the resource level and skill mix. The revised model is also used to monitor individual collection session performance and this can provide feedback to the session manager.

#### Results

Phase 1 of Transforming the Donation Experience (TDE) was implemented across SNBTS Donor Services between April and July 2012. To deliver this, around 330 collection staff were trained and assessed as competent in the new process. The revised process has now been used in more than 1,000 community blood collection sessions. In addition the home DSR has also been used in 750 Donor Centre sessions.

#### **Reduction in Loss Rates**

The number of donors attending sessions who are rejected on medical selection grounds has reduced from 14.6 per cent to 13.8 per cent at the end of 2012-13 (1,746 additional red cells banked from the donors attending). In addition, collection associated losses resulting from out of specification volumes reduced marginally from 3.6 per cent to 3.2 per cent (657 additional red cells banked).

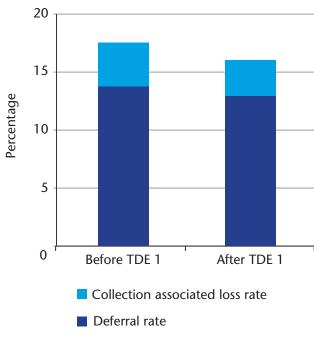
Together these released an additional 2,400 red cells into the supply chain with an associated full cost value of approximately £280,000 (chart 7).

The home DSR also reduced the number of donors attending unnecessarily following travel to a malarial area by 1,000 and reduced the need to test these donors by 700 tests resulting in an additional saving.

#### **Donor Satisfaction**

Donor satisfaction is routinely measured twice each year using the industry standard measure of Top Box which aims to get as many donors as possible scoring the service they received as 10/10 across a number of indicators. The results of two surveys carried out after TDE implementation demonstrated significant improvement across a number of indicators, (see table 1).

**Chart 7: Loss reduction following TDE 1** 



#### **Efficiency Savings and Productive Gains**

The TDE 1 programme exceeded the savings target of £364,000 during 2012-13 and these will be recurring.

SNBTS use two measures to assess collection productivity:

- useable donations per staff hour open (excludes travel to the session and nondonor contact time)
- useable donations per WTE (includes travel and non-donor contact time)

TDE resulted in the productivity gains outlined in table 2.

In addition we reduced the number of enhanced rate hours by 25 per cent and overtime by 19 per cent.

**Table 1** 

TOP BOX Question	Average Pre TDE 1	Average Post TDE 1	Per cent Change
The overall experience	8.98	9.03	0.41
Welcome on arrival	8.95	9.05	0.90
Waiting time	8.05	8.40	3.52
Fingerprick test	9.07	9.16	0.82
Sensitivity of health and lifestyle questioning	9.16	9.17	0.15
Insertion of needle	8.78	8.83	0.52
Cleanliness of the venue	9.08	9.33	2.31
Friendliness of our staff	9.42	9.52	0.85
Professionalism of our staff	9.44	9.49	0.39
Did we make you feel valued and appreciated?	9.12	9.24	1.11
Did we treat you with consideration and sensitivity?	9.25	9.31	0.51
Did we provide sufficient explanation at each stage of the process?	9.09	9.23	1.29
Average for all Top Box questions	9.04	9.16	1.10

#### Table 2

Productivity Indicator	Average Pre TDE 1	Average Post TDE 1	Per cent Change
Useable donations per staff hour open	1.10	1.17	6.1
Useable donations per WTE	1,452	1,634	12.5

#### **Sustainability**

The following will ensure sustainability:

- the work to review our collection footprint and reduce non-donor contact time will further improve these gains and consolidate the improvements
- the workload on sessions has been further reviewed to reduce the workload in medical assessment of donors over 65
- plans are progressing to extend the use of appointments to control donor flow and smooth the workload
- feedback and communication to staff to demonstrate the benefits
- improvements in skill mix by introducing donor carer venepuncturists to reduce waiting times and collection losses
- improved information on website and all donor communications to promote accurate self-deferral if ineligible to donate

#### **Lessons Learned**

The following lessons were learned:

- effective planning is essential
- training, assessment and familiarisation are highly beneficial
- involve staff in finding solutions to issues raised
- effective partnership working is highly beneficial
- provide a mechanism for rapid improvements and trouble shooting
- effective anticipation and management of risks is essential
- use staff feedback and donor feedback and complaints as an opportunity to improve further and prioritise the next stage in service and process improvement
- phased implementation allowed us to support each team effectively and to continue to problem solve at each stage

### Scottish Ambulance Service: Scheduled Care Project

### **Background/Context**

The scheduled care project is a major piece of redesign and improvement work relating to the delivery of our patient transport service (PTS).

#### **Problem**

Analysis of the PTS in 2010 identified significant variation and inefficiency in the delivery of this service. This manifested itself in poor patient, staff and other stakeholder experience.

#### Aim

To improve the patient and staff experience of PTS by upgrading its IT infrastructure and redesigning its systems and processes. Additionally, whole system understanding of the role of PTS would underpin the redesign and improvement agenda to achieve a paradigm shift in culture, efficiency and quality.

#### **Action Taken**

The following actions have been taken:

- redeploy and streamline circa 30 hospital based Area Service Offices (ASOs) to three regional Ambulance Control Centres (PTS ACCs)
- refocus the clinical role of PTS from the perspective of the patient, staff and health colleagues
- invest in the IT infrastructure of the PTS
- initiate a review and redesign of all PTS systems and processes
- introduce direct patient access to the service
- introduce an industry standard call taking model for direct patient access
- reduce PTS request routes from 11 to two (phone and web)
- undertake major communication and engagement exercise with patients, NHS Boards and SAS staff
- initiate the creation of a capacity model for PTS

#### Results

The following results have been achieved:

- improving patient experience (on-going)
- improving staff experience (on-going)
- patients have direct access to PTS to discuss their individual health needs and hence ensure the right ambulance transport is provided to meet that need
- industry standard call taking performance
- better management of demand and appropriate use
- increase in use of PTS by patients with medical/mobility need
- improving PTS productivity (on-going)
- improving understanding of PTS capacity and demand (on-going)
- increasing efficient use of PTS resources (on-going)
- improving partnership with NHS Boards and other transport providers

#### **Efficiency Savings and Productive Gains**

Approximately £2.5 million savings released from improvement work to date.

#### Sustainability

This initiative is being delivered within the existing budget.

#### **Lessons Learned**

The following lessons have been learned as a result of this project:

- delivery of PTS is complex
- an efficient PTS creates similar benefits across the system e.g. alternative transport costs, delayed discharges, 18-week referral to treatment compliance
- an efficient PTS is dependent on an efficient outpatient, discharge and inter-hospital transfer system
- an effective PTS is central to a positive patient experience

## **Acute Flow and Capacity Management**

# NHS Ayrshire and Arran: Emergency Care Quality Improvement Programme

#### **Background/Context**

NHS Ayrshire and Arran initiated the Emergency Care and Quality Improvement Programme (ECQIP) to identify an improvement programme to address the increasing activity and challenges within the organisation. The programme is led by the Director of Integrated Care and Emergency Services and the clinical lead is the Associate Medical Director. This programme of work has been supported by a service improvement facilitator with the assistance of funding from QuEST in 2012-13.

#### **Problem**

Increasing demand on A&E services particularly with the demographic changes associated with the aging population, impact of increased demand on capacity and resulting inefficiencies caused by high occupancy levels, including boarding of patients outwith specialty.

#### **Aim**

ECQIP was set up to:

- improve the quality of care for patients needing emergency care
- retrieve the standard that 98 per cent of patients will wait less than four hours from arrival to admission, discharge or transfer within A&E
- test new ways of working in relation to the development of the combined assessment unit planned for University Hospitals Crosshouse and Ayr and planned for autumn 2015 and 2016, supported by Building for Better Care

#### **Action Taken**

Under ECQIP a number of projects were identified and using PDSA methodology, the service improvement facilitator has supported operational managers and clinicians to identify, plan and implement improvements, monitoring progress and evaluating outcomes.

The outcomes from these projects are reported on an on-going basis via the service improvement plan.

#### Results

An assessment area has been introduced in University Hospitals Ayr and Crosshouse allowing GP referred patients to go direct to the assessment area and be reviewed by a consultant physician who will carry out real-time assessment.

This process of assess and then admit has proved successful and reduced the time for first consult and increased the number of patients being discharged home.

Patients were waiting between two and 20 hours to see a consultant physician. The pilot was trialled using PDSA methodology and introduced as a new way of working in January 2013. With the introduction of continuous real-time assessment, patients were seeing a senior decision-maker in approximately five hours. This new process removed the 'batched' ward rounds and improved the quality of care for patients. This is a more satisfying way of working for staff and the rate of discharge from the assessment area was around 40 per cent therefore reducing the number of admissions and creating capacity within the organisation.

These new ways of working are closely supported by the clinical lead and service improvement facilitator, due to inability to recruit consultant physicians. This assessment area is currently working Monday – Friday 11am – 8pm when possible. It is anticipated to extend the hours and include weekends once consultant physicians are in post.

#### **Efficiency Savings and Productive Gains**

As ECQIP is still in progress, efficiency savings have not been realised as yet. However, it is anticipated that the improvements from this programme for the patient, staff and organisation will be hugely beneficial.

#### **Sustainability**

The sustainability of new ways of working will be supported by the service improvement facilitator and will be continually measured to ensure that the improvements are sustained.

Continuous engagement with medical, nursing and diagnostic staff is imperative to support this initiative and continues on a regular basis.

#### **Lessons Learned**

NHS Ayrshire and Arran has highlighted that the management of this programme through a clinical lead and service improvement facilitator has worked very well and enabled the delivery of a number of changes that have resulted in improvements.

### **NHS Fife: Fracture Pathway Redesign**

#### **Background/Context**

Traditionally, patients with a limb fracture will first attend an NHS emergency department (ED) and most non-operative fractures will then be referred to a fracture clinic for review by a specialist orthopaedic team. Various audits from across the country have identified that current fracture pathways lead to patients having unnecessary visits to hospital, waiting in clinics only to be informed that their problem will resolve without intervention, or ending up on a delayed pathway.

#### **Problem**

Discussion with NHS Fife orthopaedic consultants suggested that there were referrals from ED which were not necessarily required to be seen in an orthopaedic fracture clinic. However there was no current objective data to support this perception.

To establish the size and nature of the problem 125 referrals from the ED department at the Victoria Hospital, Kirkcaldy to the NHS Fife orthopaedic fracture clinics were screened by three orthopaedic consultants during the month of July 2012. The referrals were reviewed to ascertain, based on the information available, the most appropriate pathway for that patient referral. Data collected included clinic date, consultant clinic, patient's name, date of birth, diagnosis, and prospective patient pathway/exit route based on information from the ED referral card and whether the patient was appropriate for orthopaedic fracture clinic.

The analysis identified that 35.6 per cent of patients could potentially have been managed under the care of their General Practitioner or discharged from ED with an advice leaflet. 41.6 per cent were identified as appropriate for further care from an orthopaedic consultant. The results suggested that it was worth undertaking a pathway redesign for

patients with suspected fractures presenting at ED, provided the appropriate infrastructure was in place.

#### **Aim**

Fracture pathway redesign is a key priority area of the Scottish Orthopaedics Services Development Group.

The aim of the pathway redesign was to implement the principles of the Glasgow Royal Infirmary fracture clinic model based on the principles of the Institute of Healthcare Improvement: safe, effective, patient-centred, timely, efficient and equitable. A patient-focused approach to managing fractures in a safe and efficient way.

#### **Action Taken**

We agreed some core principles for the pathway redesign:

- standardisation of the treatment of common injuries with a clear and comprehensive range of management options
- the only reason for a patient to be seen in a fracture clinic is 'for something to be done' either for assessment and/or an action
- many patients can be seen, treated and discharged from the ED with suitable advice, and if appropriate, a removable Velcro splint rather than plaster
- the visit should add value to their management
- the patient should see the most appropriate health professional at the correct time
- there should be an 'open door' for any patient wishing to access the service at any time
- consultant (subspecialist) led agreement of patient protocols/pathways

- prevent unnecessary delays to intervention where required and more efficiently utilise fracture clinics
- eliminate duplication and use technology to streamline the process
- regular audit of the service using a realtime database, including patients' outcomes and satisfaction using telephone standardised questionnaires

#### Method

Our method was to learn from others in Scotland and then start testing and adapting these ideas to our local systems and processes.

#### **Learning from Others**

- conference call with NHS Greater Glasgow and Clyde colleagues
- team meeting with ED consultants/ orthopaedic consultants/outpatient charge nurse/orthopaedic project lead to identify the stakeholders involved in the process
- link with national fracture pathway redesign facilitator
- site visit to Glasgow Royal Infirmary

## Testing and Adapting to Our Local Systems and Processes

- revamping NHS Greater Glasgow and Clyde fracture leaflets, working with NHS Fife orthopaedic and ED consultants
- collaborative working with IT to develop clinical pages
- health records processes
- template changes
- data collection
- set up telephone hotline
- order 'tenner boots' and paediatric splints
- identify phasing and dates

We stratified the patients to test and implement the new pathway.

Testing of phase 1 of the redesign began in November 2012 covering patients with specific fractures such as avulsion fractures of 5th metatarsal head, 5th metacarpal neck fractures, undisplaced radial head fractures, and mallet deformity of the finger, being discharged from A&E with comprehensive advice leaflets, and where appropriate, a removable splint rather than a plaster so that the patient does not need to re-attend for plaster removal.

Testing of phase 2, implementation of virtual fracture vetting, was started in February 2013. From this date patients who have fractures who would normally be considered for attendance at a small fracture clinic are booked into a virtual fracture clinic. The consultant virtual fracture clinic occurs three times a week and consists of a review of the medical record and x-ray. The management plan for each patient is recorded and an experienced nurse then phones every patient to inform them of the plan and discuss it with them.

#### Results

The following results were achieved:

- good training experience for registrars
- team approach to redesign with collaboration across directorates
- good use of 'small test of change'
- developing nursing roles
- presented the 'Fife Experience of Fracture Redesign' at the National Supporting Group

#### **Efficiency Savings and Productive Gains**

The data for phase 1 of the redesign is currently being analysed but there is some indication that there has been a reduction in small fracture clinic attendance.

#### **Sustainability**

Further work on the pathway redesign includes:

- full evaluation of fracture redesign and impact
- development of nurse led foot and ankle dressing clinic
- development of a scaphoid pathway
- evaluation of clinic capacity

#### **Lessons Learned**

Lessons learned include:

- education is important to the concept of reducing variation and standardising treatment pathway
- communication and involvement with all stakeholders is crucial
- small group problem solving meetings with link person create ideas to test
- there is always a solution worth trying
- it takes time to get everyone on board
- baseline data and data collection processes are essential to understand size and scale of the problem
- need a link person to keep change on track and energy up
- you can plan but it is not until you start the process that some issues may surface
- importance of enthusiasm by staff on the 'shop floor' to make changes

## NHS Lanarkshire: Clinical Decisions Unit: Hairmyres Hospital

#### **Background/Context**

Hairmyres Hospital has experienced challenges to deliver against the four hour emergency care standard. Waits for beds had led to congestion in the emergency department (ED) and difficulties with flow within the ED itself.

Providing rapid access to assessment for GP patients and ambulatory care alternatives to medical admissions were identified as interventions which would assist with streamlining the patient journey.

Data analysis identified that a joint assessment area for GP referrals, a clinical decisions unit (CDU), and a short stay facility would vastly improve the pathway for patients accessing acute medical review.

#### **Problem**

Data informed that there has been a 16 per cent rise in all emergency admissions in the past five years at Hairmyres Hospital, which equates to an additional six admissions per day since 2007. All GP referrals were admitted through the ED, causing congestion. Access block was an issue in the ED, with patients waiting prolonged periods for access to beds and delays for GP referred medical patients to be seen by a senior clinical decision-maker. Achieving performance against the four hour standard challenged the site to be innovative in development of a service developed in partnership between two specialties, both concentrated on delivering high-quality care, improved patient experience, and enhanced patient flow.

#### Aim

The overall aim of the project and the new unit was to:

- improve patient access to acute medical services at Hairmyres Hospital
- improve patient experience all care will be patient-centred and no patient will be kept in hospital longer than is clinically necessary
- offer rapid streamlined specialist assessment
- initiate investigation, treatment and a management plan
- provide care for patients who need a period of observation, treatment or a diagnostic test that is likely to lead to a discharge within 12/24 hours
- increase the site performance with the unscheduled care target
- decrease clinical risk
- provide rapid senior clinical decisionmaking support

#### **Action Taken**

A multi-disciplinary project implementation team was developed to open a new unit in November 2012 with:

- A joint assessment bay (JAB) six emergency care trolleys and waiting room for emergency medical and surgical referrals from primary care.
- A clinical decisions unit two four-bedded shared rooms for patients who meet the criteria for the operational clinical protocols in the unit. The unit would commence with four clinical protocols in the first instance: non-traumatic chest pain, DVT, cellulitis and seizure. Pathway documentation would support focused management together with specialist in-reach where appropriate. The unit is jointly run by emergency medicine and medical consultants.
- Five general medical side rooms.

The project implementation team developed a range of workflows to ensure all aspects of opening a new unit were considered and completed as part of an overall project task matrix. These included:

- staff recruitment and training nursing, and admin and clerical
- standard operating procedures (SOPs) developed
- development of clinical protocols for the clinical decisions unit
- development of a new cardiology in-reach service for this unit as well as the acute medical receiving unit (AMRU)
- information services changes to the patient management system (Trakcare)
- support from laboratories and radiology
- support from pharmacy
- support from hospital cleaning and linen services
- medical staff rota
- equipment purchase
- hospital ward moves to facilitate the best location for the new unit
- communication plan to ensure all relevant stakeholders are informed i.e. other ward areas, GPs
- support from the Scottish Ambulance Service
- support from the emergency referral centre (ERC) to direct flow from primary care to the joint assessment bay

#### Results

The new unit was opened in November 2012.

Daily data is being captured within the unit and a database is currently being established to provide effective audit of the impact and performance of the unit.

#### **Initial CDU Data**

Data are available for the first 33 operational days:

- during this time, 169 patients were managed in the CDU
- mean activity five patients per day
- maximum activity 11 patients per day
- staff experience feedback has been very encouraging and this unit has seen a positive impact on the flow within the A&E department. This has been the experience of both medical and nursing staff within the A&E department

#### **Cardiology**

A cardiology in-reach service also formed part of this project and this has proved to be very successful:

- data has shown that over a 51-day period, 163 patients were referred for cardiology review (from both AMRU and the CDU)
- of this total number, only two of these were deemed inappropriate
- 52 per cent of the patients seen by cardiologists were discharged same day in contrast to before the intervention when patients would wait to be transferred to a cardiology ward before being seen

This has led to faster access for patients to a consultant cardiology review and clinical decision-making.

### Sustainability

This unit was opened as a one year pilot and plans are currently in place to provide robust data and information pertaining to the performance of the unit as well as the patient experience.

For the clinical decisions unit, further clinical protocols have been developed and are continuing to be implemented to include a wider range of clinical conditions that can be admitted to the unit. Work continues to increase access to this unit.

#### **Lessons Learned**

- Robust project management was required to bring together the complex workflows.
   Engagement of supporting services was critical to success.
- Protection of the assessment area function is critical in times of increased demand for beds.
- Good communication and an understanding of accountability and responsibility were imperative to the delivery of this multi- functioning unit.
- Effective clinical partnership working was required to deliver a shared model of clinical responsibility.
- At the end of this pilot all aspects of the project will be assessed and evaluated and a detailed account of all aspects of the unit will be developed for continued improvement.

### **NHS Lothian: Outpatient Antimicrobial Therapy (OPAT)**

#### **Background/Context**

For many patients, intravenous antimicrobial therapy needs to be prolonged and thus dictates the length of their hospital stay, e.g. bone and joint infections (BJI), endocarditis, vascular device infections and meningitis. In other patients, admission to hospital is for the sole purpose of administering IV antibiotics, and these individuals are otherwise mobile and self-caring (e.g. skin and soft tissue infections (SSTI), Lyme disease, some HIV-associated opportunistic infections).

It is recognised that a significant number of patients who were being treated as inpatients would be more appropriately cared for in an outpatient setting, with resulting benefits in improved patient experience, efficiency gain through 'bed days saved', and reduction in the risk of hospital associated infection (HAI).

#### **Problem**

Inpatient antimicrobial therapy had been the traditional way of delivering this treatment. It was agreed that an invest to save project, established for one year, would be the best way to test the viability of an outpatient service.

#### Aim

The critical element of this redesign is that wherever possible patients will be treated in an outpatient facility instead of an inpatient setting. There are two strands to the redesign:

- Strand 1 increase in 'avoidance of admission' as part of the ambulatory care programme. Patients are referred directly to outpatient antimicrobial therapy (OPAT) at initial point of contact, and are not admitted to hospital unless absolutely necessary.
- Strand 2 decreased length of stay through the transfer of treatment from inpatient to outpatient at the earliest opportunity.

#### **Action Taken**

The OPAT service was initiated in January 2011 using a non-recurring investment of £359,000 through NHS Lothian's invest to save programme. The service is consultant led and nurse managed.

The investment funds 5.6 WTE nursing staff, two sessions of pharmacy staff time, drugs and consumables, and some patient transport costs. The service is delivered in a modified area within the Regional Infectious Diseases Unit at the Western General Hospital.

#### **Results**

The development of an OPAT service for NHS Lothian has enabled safe and effective management of a myriad of infections, allowing patients to remain in their own home, reducing exposure to healthcare associated infections, improving the quality of the healthcare experience and increasing the number of people with complex healthcare needs receiving care at home.

A recently completed patient satisfaction survey provided the following response (sample of questions asked):

- the overall median satisfaction score was
   95 per cent
- 95.6 per cent strongly agree or agree treatment outcome was good
- 95.6 per cent strongly agree or agree it was better to be at home rather than in hospital to receive treatment
- 100 per cent strongly agree or agree the care given during visits to the OPAT centre was satisfactory

Some direct comments left by patients:

- "The care I received was exceptional and so much better than being admitted."
- "Efficient and helpful. The feeling of expert help is very reassuring."
- "Thanks to the service I have recovered in a much shorter time than previously expected. Thanks again."

#### **Efficiency Savings and Productive Gains**

Performance monitoring is undertaken by analysing the number of patients treated by the OPAT service who would otherwise have been admitted to hospital and treated as an inpatient. The target trajectory applies an average length of stay based on the type of infection identified for each patient. This is measured against the actual number of patients treated and the duration of their treatment. This methodology gives a total number of bed days 'saved' which can be attributed to the most likely hospital site of admission and specialty. The saved bed days are identified on a virtual basis; since avoidance of admission and reduced length of stay does not directly correlate to a reduction in actual bed occupancy, which remains subject to the impact of wider demand factors. Chart 8 shows the projected number of bed days saved (3,276 days), and the actual achieved (4,719 days).

Chart 9 shows the financial evaluation of bed days released. This is the full cost per day for an acute medical admission based on the NHS Cost Book (£360). This figure has been used to calculate both the savings and the original target set against the project. The financial evaluation is used as a performance indicator to reflect the impact of changes to resource utilisation and demonstrate the efficiency gain.

The net productive gain based on bed days saved and the cost per day for a bed is £1.34 million. This is net of the annual cost of the OPAT service (£360,000).

The capacity which has been released is being used to meet demand for inpatient beds on the acute sites.

#### **Sustainability**

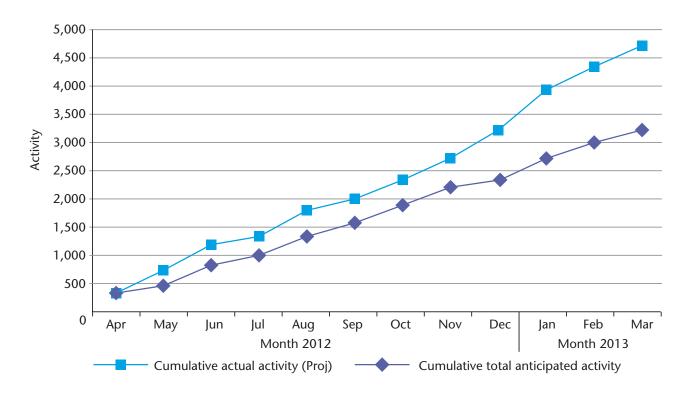
The funding has been agreed on a recurring basis to maintain and further develop the OPAT service. There are further areas, including acute oncology and treatment of bronchiectasis which will be developed during 2013-14.

#### **Lessons Learned**

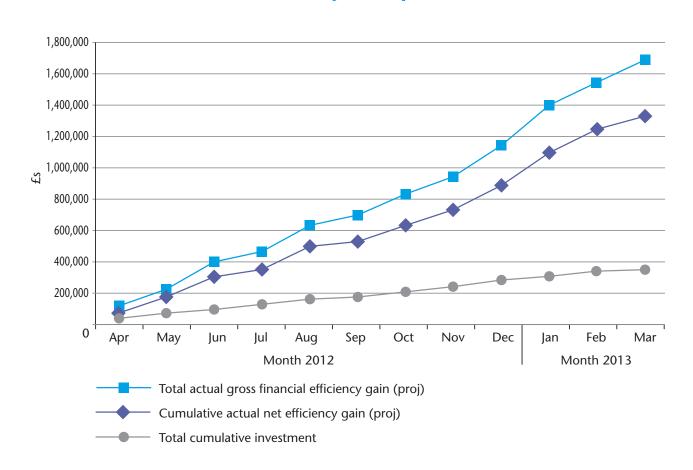
Clinical leadership is critical to success. The development of an OPAT service in NHS Lothian had the benefit of a consultant who initiated and led the redesign.

The success of the redesign was dependent on a steady and increasing flow of patients who would otherwise have been admitted to hospital. Significant work was required to build clinical relationships, and raise both awareness and confidence amongst clinicians across the system.

**Chart 8: OPAT Cumulative Activity April 2012 – March 2013** 



**Chart 9: OPAT Investment and Efficiency Gain April 2012 – March 2013** 



# NHS National Waiting Times Centre Board: Streamlining Job Plans across Surgical Specialties and Anaesthesia

#### **Background/Context**

This work commenced following a review of the current patient flows including bottlenecks and scheduling. We used the job planning review as an opportunity to smooth the activity flows across the week. We also reviewed the requirements for additional/ad hoc theatre sessions and streamlined these into fixed and sustainable sessions. In addition this allowed an opportunity to ensure sufficient protected time for continued medical education requirements.

#### **Problem**

The key problem arose following a review of the existing patient flows and scheduling, where it became apparent:

- there were bottlenecks within the system due to consultant availability working between theatre and outpatient times
- there was also significant variation between surgical and anaesthetic job plans, which needed to be realigned to deliver a more efficient work plan for the weekly theatre slots
- an increasing number of additional theatre sessions being put in place at a premium cost

#### Aim

The aim was to produce a higher quality patient-centred journey by reducing bottlenecks within the patient pathway and reducing theatre cancellations.

There was also a plan to become more efficient with our current resources by reducing the requirement for extra theatre sessions at a premium cost and assess the need to convert these into permanent planned sessions and reduce the level of premium rates paid.

#### **Action Taken**

The revised job plans facilitated the following:

- consultants being in outpatient clinics in the same day as their patients were being pre-assessed for surgery
- better realignment of surgeons and anaesthetist job plans to match theatre schedules
- more flexible sessions were put in place reducing the need for extra theatre sessions at an additional cost
- transferring premium ad hoc theatre sessions into planned sessions

#### **Results**

The outcome of the actions aims to demonstrate a more efficient use of medical time, this is measured through:

- a reduction in theatre cancellations resulting in improved efficiency for the organisation
- any issues at pre-assessment stage can be addressed as quickly as possible which aims to reduce unnecessary hospital admissions
- an improved patient experience with fewer cancellations and a more streamlined approach to pre-assessment and outpatient consultations

#### **Efficiency Savings and Productive Gains**

There has been a reduction in costs as a result of implementing this project which equates to a total saving of £240,000 per annum. This is primarily delivered through a reduction in the premium rate theatre sessions and replacing these with planned sessions with substantive posts. In addition, there is a reduction in cancelled theatre sessions. The productivity savings for medical staff have not as yet been quantified but would be significant.

#### **Sustainability**

The revised job plans have been put in place and supported our workforce plans. The cancellations and theatre slots continue to be reviewed on a weekly basis through the routine performance management processes.

#### **Lessons Learned**

The project has demonstrated improved quality benefits and increased efficiency. In terms of lessons to other NHS Boards the key critical success benefits are: ensure full staff engagement, clearly demonstrate the patient quality benefits and commit time to understanding the current bottlenecks within the system.

## **Mental Health**

# NHS Borders: Analysis of Increasing Referrals into the CAMH Service

#### **Background/Context**

Anecdotal evidence within the NHS Borders Child and Adolescent Mental Health (CAMH) Service reported a consistent increase in the number of referrals over the past few months. Changes had been made to the acceptance criteria, and the change in the number of referrals was being attributed to this. Previously, patients at age 16 were referred to adult services. In January 2012 and January 2013, patients were accepted at 16 years and 17 years of age respectively.

#### **Problem**

Historical data was created and displayed objectively in a run chart to determine the actual pattern of referral activity. Chart 10 displays the proportion of referrals associated with each school age group.

Although we have only looked at two data points (February and March 2013) for an indication of the changes in referral numbers per age group, it is apparent to date that the 16 and 17 years olds have contributed little to the rising referral rates. Chart 11 reveals how the referrals would have increased without the increase in age cut-off.

The data points only cross the median four times in chart 11 indicating a non-random pattern or signal of change. This significant change is occurring regardless of the additional referrals associated with the 16 and 17 year age groups.

The increase in referrals was instead attributed to three possible causes:

- change in referrer behaviour due to uncertainty of appropriate referrals
- change in staff behaviour as patients are accepted for one-off assessment appointments
- genuine increase in appropriate referral

#### **Aim**

To understand the reasons for this change in referral numbers so as to inform the team response to this increase.

#### **Action Taken**

Different responses are required whether the change in the number of referrals was due to the change in behaviour or a genuine increased need for the service. A value stream mapping event was held that invited CAMHS staff and referrers to meet informally and

**Chart 10: Total referrals into CAMHS 2011 – 2013 (includes inappropriate)** 

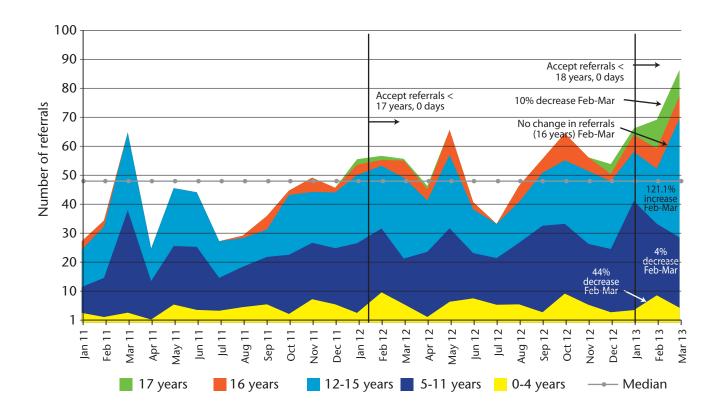
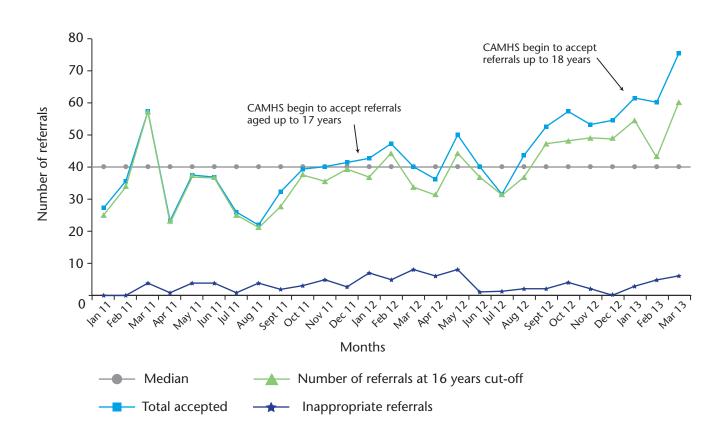


Chart 11: Total referrals into CAMHS according to new and old criteria



discuss the differing interpretations and understanding of the referrals process and what the service has to offer.

One key theme was extracted from this event – clarity of communication through:

- one-click access to well-defined referral criteria on the website
- clear and speedy feedback of referral status to the referrers
- early actions to allocate patients to the correct staff member

The referral process was redesigned from the weekly team meetings to daily monitoring of incoming referrals as shown in figure 4a and 4b. A representative from each profession would meet daily to discuss incoming referrals and mark as inappropriate or accepted. As referrals will be checked on the day, the inappropriate referrals and the justifications will be identified immediately with the referrer. A multi-professional discussion about incoming referrals will reduce the chances of patients being seen as a one-off session with one professional before being forwarded on to a more suitable intervention.

Staff are now being actively encouraged to attend the weekly meetings where all referrals are allocated to the appropriate staff member and discussions are held regarding new referrals and the longest waiting patients. Working through this process as a team has generated a sense of team responsibility for the waiting times target, rather than focus on the individual clinician allocated to the patient.

#### Results

Chart 12 shows a break in the steady increasing of referrals after April 2013. However, we must be cautious in comparing two data points. The referral trend must be monitored over the next few months to determine a lasting result of the small changes made to the referral process.

If this PDSA caused a significant reduction in the number of referrals in the future months, the increase that began in July 2012 could be considered a product of referrer and service behaviour rather than a genuine increase in service demand.

#### **Benefits**

Improved communication has benefited the understanding of the referrers but also the understanding of team members within CAMHS. Discussions between professionals allow for faster access to the correct clinician. Patients will experience a more consistent service as they engage with the same professional. All of these factors benefit the organisation as time is saved via less unnecessary contacts.

#### **Sustainability**

A standard operating procedure has been designed so that a continuous production (chart 12) can be produced to monitor any early changes in the system. Assessing early changes are important to allow for early intervention.

Figure 4a: Old referral process

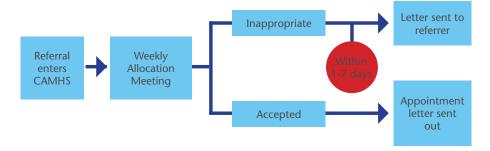
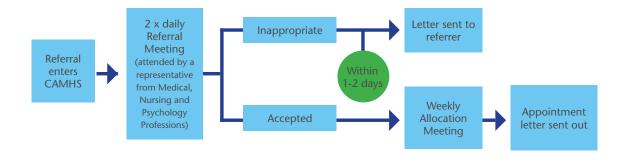


Figure 4b: New referral process



#### **Lessons Learned**

This case study has revealed the importance of consistent data reporting to understand variations in the process. Data reporting is also an important tool for visualising the targets for staff to create responsibility as a team for achieving the results. It is not just important to create these charts for management, but to share them with the team.

Constant vigilance on procedures is required as time progresses to meet changing demands. In this case, clarity in the referral criteria could clear access for only those individuals requiring engagement with the service. Communication with referrers is key to educate in what the service provides and prevent one-off appointments that lead to signposting elsewhere.

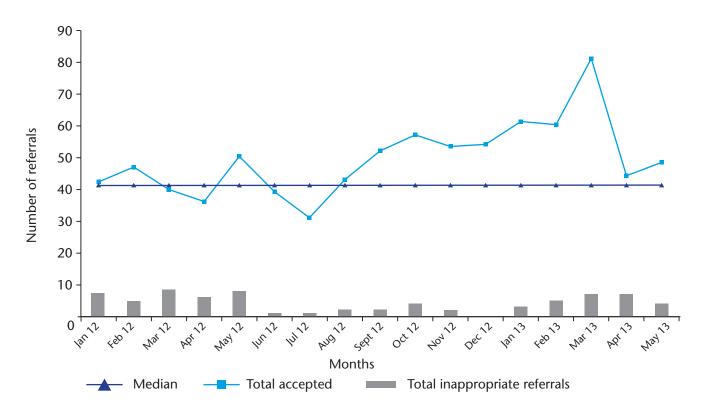
The use of a focus group involving all individuals who have a role to play in the journey of a patient is beneficial to reveal the diversity of opinions and to isolate the frequently occurring concerns.

We have recently been able to replicate the above results in Statistical Process Control charts (SPC). Chart 13 displays eight or more plots above the average indicating a shift in the process average and so special cause variation.

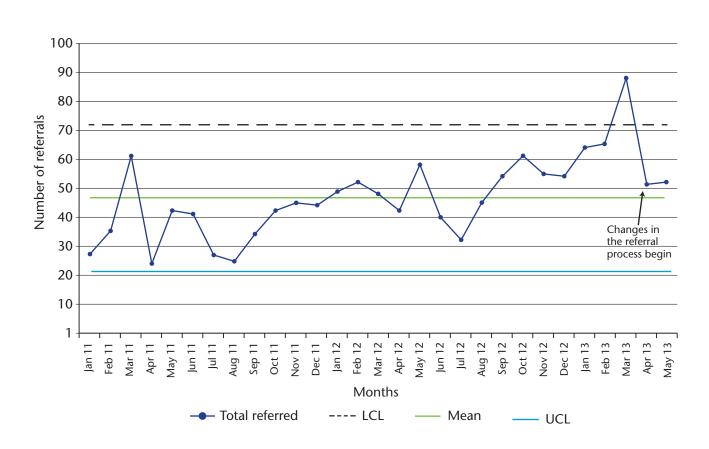
This chart will be used for the monitoring of referrals in the future. Attention needs to be drawn to the months that may breach the upper control limits of 72 referrals suggesting a special cause variation.

Following these small adopted changes, an SPC chart will be produced to assess whether the small changes have contributed to a change in the average number of referrals and upper/lower control limits.

**Chart 12: Total referrals into the CAMHS** 



**Chart 13: Accepted referrals into the CAMHS** 



## NHS Borders: Incorporating Patient Choice in Appointment Allocation

#### **Background/Context**

In one community mental health team, the number of hours lost per week to appointments cancelled by patients was much higher than the other teams. If these appointments were not cancelled with an adequate amount of notice, they could not be allocated to other patients and so valuable face-to-face contact time with patients was lost.

#### **Problem**

The biggest loss of hours was for follow-up appointments. As these were patients that had already engaged with the system, it was important to focus on this. An analysis of the method of appointment allocation raised some concerns. Clinicians were sending letters out once back at the office and after meeting with the patient to assign the date and time of the next session. No patient choice was involved.

#### **Aim**

To decrease the hours lost to follow-up appointments within this community mental health team.

#### **Action Taken**

The main focus was to change the clinician's approach to a patient. The manager discussed the use of appointment cards, which could be given to a patient at the end of a session when the next appointment was mutually agreed upon. Appointment cards were printed and handed out to all staff.

Scottish Recovery Network ran a training day for the team, which placed emphasis on patient-centred care. This training was used as a tool to encourage clinicians to understand patient choice in their treatment process.

#### Results

Although it was not possible to incorporate this technique with every patient on every occasion, the number of appointment letters sent out weekly decreased from approximately 50 to 20 letters (60 per cent decrease). A reduction in letters has benefited the admin staff by freeing up time for other tasks. The clinicians have greater responsibility and flexibility over their job plans. Most importantly, the change has given patients greater control over their treatment process with a system that does not interfere with their personal commitments.

The organisation is benefiting from this improvement as the reduction in admin time is making the process more financially viable. This change in approach is also helping us to meet the values put in place for NHS Borders of caring and compassionate staff.

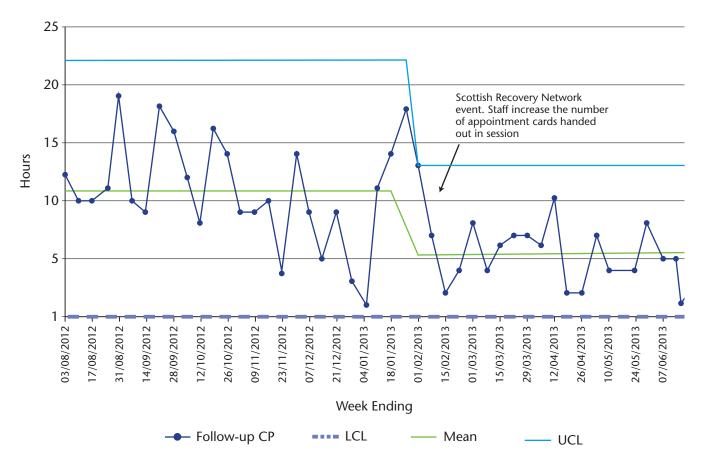
The Statistical Process Control chart (chart 14) demonstrates a clear picture of change. An average of 11 hours a week was lost to follow-up appointments cancelled by patients compared to five hours a week on the introduction of appointment cards.

#### **Sustainability**

Agreeing upon appointment dates and times within a previous appointment has been a long standing practice for other teams in mental health. Although this is not always a good indicator of how effective a system will be in a different team, the data is promising to date.

An SPC chart will be continuously produced to monitor any significant variation in the data. This means that managers can be proactive rather than reactive if any changes occur.





#### **Lessons Learned**

Staff can be very reluctant to change a system that has previously seemed to work so well. Having visual data to indicate how much time is actually lost has provided some concrete support and encouraged action for change.

This study has demonstrated the effectiveness of a PDSA exercise. The introduction of appointment cards has had little effect on the did not attend (DNA) rate; those that DNA may have some other barrier in their way. This must be addressed differently in an alternative PDSA exercise.

# NHS Shetland: Mental Health (Administration Services and Clinical Governance)

#### **Background/Context**

A long term plan to support mental health was introduced in 2011; this project followed on from the first stage and was completed in 2012. However, like most improvement initiatives, the improvements are on-going and continue to this day. An admin team of four staff had been developed over a number of years. Ad-hoc additions of staff had evolved rather than being planned. This resulted in historical working patterns and the funding provided allowed the service to take time to analyse what was in place and what the future could look like.

#### **Problem**

- admin staff were continually working over their contracted hours
- nine separate filing systems for all mental health disciplines resulting in wasted time filing and finding notes – duplication of notes is common
- each member of the admin team was a specialist in only one area of mental health administration – no cross working and resilience
- admin staff were not clear about the admin processes for some areas outwith their own area of expertise
- DATIX incidents identified problems with clinical communication as a consistent factor in errors and complaints
- the patient's paper record had to be sent to Aberdeen if the patient was admitted to Royal Cornhill Hospital. This posed risks to the security of patient identifiable information and risks in treatment because of delays in returning the paper records to Shetland
- psychiatric case notes not available out of hours to Gilbert Bain Hospital A&E or Royal Cornhill Hospital 'on-call' duty psychiatrist

#### Aim

To identify and minimise waste within the mental health admin team and provide a better and safer service to patients.

#### **Action Taken**

The following actions were undertaken:

- implemented a single IT filing system and removed all the physical filing cabinets (FACE (Electronic Patient Record) planned 'go-live' in August 2013)
- issued all clinical staff with iPads to allow remote access/completion of notes and reduce need for daily return to base
- introduced a server based digital dictation system that allows a letter to be typed as soon as it is dictated
- removed six printers and reduced paper/ink costs by introducing a centralised printing service
- all filing cabinets archived to a storage area thereby increasing office space and improving the quality of clinic rooms
- developed written standardised operating procedures (SOPs) to support admin staff flexibility

#### **Results**

It is anticipated that there will be a reduction in the number of 'clinical communication' incidents once FACE is implemented. This will be monitored and audited once the electronic record system is in place. The digital dictation system has already increased the response/ flexibility of the admin staff. Both clinical staff and patients have commented favourably on the improvements in the office/clinical environment due to the removal of filing cabinets.

#### **Efficiency Savings and Productive Gains**

The following achievements have been made:

- reduction in the amount of administrator time required to process clinical files/ records
- electronic notes mean that clinicians can work more flexibly from home or remotely/ out of hours more easily
- clinical letters processed more efficiently and flexibly
- improves clinical communication/safety in and out of hours because of a single shared electronic record
- reduction in the amount of management/ clinician time involved in dealing with the consequences of errors and complaints
- savings equivalent to £28,000 have been achieved as a result of freeing up staff time and the need for fewer admin staff (enabling NHS Shetland to reinvest this time in other areas of work and to release a vacant post as a result of the improvement work)

#### Sustainability

This is a fundamental change in clinical administration processes. It is supported by the eHealth Strategy.

Work is also in progress to establish written standardised operating procedures (SOPs) for admin to support and maintain role flexibility for admin staff.

#### **Lessons Learned**

The work highlighted the importance of understanding and planning small scale PDSA changes in the context of a 'whole system' approach to service redesign. Implementation of larger changes took longer than anticipated due to the interwoven nature of systems and services. Stakeholder involvement was/is a critical success factor.

### NHS Tayside: Child and Adolescent Mental Health Service

### **Background/Context**

Tayside Centre for Organisational Effectiveness (TCOE) was asked to help with this challenge, providing a range of tools and support to get the job done. Our consultants supported the Child and Adolescent Mental Health Service (CAMHS) team in analysing and measuring data to see where changes had to be made to the service, particularly to address staff capacity and patient flow.

A service improvement advisor facilitated the improvement work associated with the introduction of a Choice and Partnership Approach (CAPA) and also conducted pathway development work to map current processes and develop service redesign initiatives. These pathways were then revised in line with the CAPA model.

Meanwhile, an organisational development consultant was commissioned to undertake a systemic 'diagnostic', looking at the culture and dynamics within the service, and to formulate recommended interventions for action. TCOE later backed up this initial work with change management support to help team members embrace the necessary changes to the CAMHS service.

#### **Problem**

Faced with excessive waiting times, the CAMHS team recognised that change was needed. The previously existing model of service delivery no longer met the needs of a much larger service with significantly increased demands placed upon it.

Complaints were common, and a high rate of DNAs exacerbated an already bad situation.

A staff survey at the outset of the improvement work highlighted further difficulties:

- pressurised, stressed staff, with low morale
- inter-professional and team difficulties
- poor communication
- leadership, accountability and management issues
- lack of clarity, and poor understanding of roles, competencies and capacity
- mistrust and avoidance of addressing issues

#### Aim

The CAMHS team committed to a service redesign and to reducing Tayside CAMHS waiting times in line with national targets by March 2013. To achieve this, the service moved to three locality teams and adopted CAPA, a clinical system implemented in many CAMHS teams across the UK.

Hurdles to overcome in reaching this target included:

- a 51 per cent increase in referrals to CAMHS generally from 2006–10
- inequity of service provision and access across the three localities comprising NHS Tayside
- a backlog of more than 100 patients who had been waiting > 26 weeks; 38 of this number had already waited > 52 weeks
- high DNA rate of around 32 per week
- unclear and often ineffectual leadership and communication structures

#### **Action Taken**

NHS Tayside set about redesigning its service around CAPA – a CAMHS system flow management tool designed to reduce waiting lists and enable quicker response times for patients.

In order to address the waiting times issues, a number of initiatives were taken forward by the CAMHS Teams.

These comprised:

- Revision of the referral criteria and distribution to all referrers.
- Mapping of key stakeholders to inform them of the service's adoption of CAPA.
- The weekly referral screening meeting which involved four to five staff was replaced by daily referral screening by one to two staff. This resulted in referrals being allocated more quickly and effectively.
- An opt in letter was sent to patients/ families on the waiting list to ask if they still required CAMHS services. A waiting list 'blitz' was planned to clear the backlog before instituting the service transformation.

'Choice champions' were selected to roll-out the new approach centring on choice appointments. In this approach, an appointment scheduled for around six weeks following receipt of referral aims to establish with the patient and family what they view as the problems they face. The appointment is structured towards a 'choice point' where the patient, family and clinician agree the way forward. Options here include support from CAMHS, from services within the community or a combination of both. Self-supporting strategies are also encouraged, and the patient and family may be directed to a range of media materials for further information.

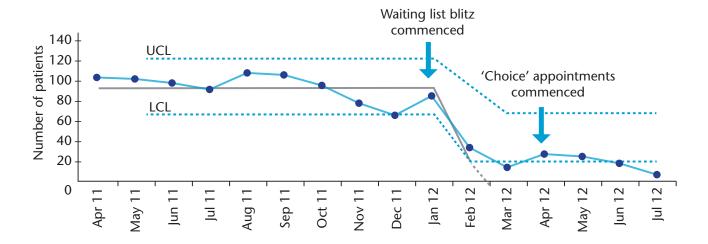
#### Results

After consulting with the CAMHS team, the service structure was revised. Certain meetings were rationalised and/or discontinued, and three locality teams formed to provide better and more targeted service coverage. The staff resource was tailored to meet patient requirements in each locality, while retaining the capacity to flex this resource when required to meet demand.

Throughout this service transformation, a small CAMHS improvement team comprising senior management and TCOE consultants provided invaluable support and

#### **Chart 15: Waiting times**

CAMHS patients waiting > 26 weeks



Measure: Referral to treatment < 26 weeks by March 2013

direction. The team enabled clear lines of communication to be established and ensured that any concerns were addressed swiftly and effectively. Organisational development and leadership development were other key areas of focus, and TCOE's interventions zeroed in on team dynamics and team building.

#### **Feedback for the Team**

"The consultants inspired hope of change and improvement for a system which was struggling considerably in the light of differing expectations and delivery targets. Through comprehensive observations of, and communication with, all parties involved, the resources required for change were mobilised. It was noted that significant investment of time was involved in the early stages of this project – this helped give the consultants legitimacy and respect from the whole staff group in CAMHS – genuine understanding of the systems was achieved. There was also a degree of responsiveness to problems that was refreshing – problems were clearly highlighted as soon as they arose with no opportunity for avoidance. There was also tenacity in terms of problem solving options that helped situations move on much more quickly than would be CAMHS' past experience. Finally, as well as problem solving, the consultants were exceptionally sensitive too and rewarding of progress made – this was always genuine and a refreshing change for all concerned – something to be emulated!"

#### **Efficiency Savings and Productive Gains**

Early results show a demonstrable improvement in waiting times (chart 15) and the service also reports improved patient and carer experience as a result. The introduction of DCAQ through CAPA will continue to support clinical and process efficiency by reducing flows, reducing DNAs and optimising clinical time in patient facing activities.

#### **Sustainability**

Over time, and with backup from TCOE, the CAMHS team developed the knowledge and skills required to deliver improved patient access, care and outcomes.

A year on, in November 2012, the three biggest improvements remarked on by staff were: improved waiting times; improved care, choice and consistency for children and their families; and improved team working.

The majority of CAMHS staff now rated the service's performance as seven out of 10, where previously they had given it just 4.87 on the same scale.

The formation of locality teams – and support for the locality team leader model – appeared to be a major factor in the culture change.

Dr Sheenagh MacDonald feels positive that NHS Tayside CAMHS will continue to develop and build upon what has been achieved.

Says Dr MacDonald: "There will be challenges ahead, but the service is well on the way to fully achieving its redesign goals and it is now much better equipped to deliver the future improvements to which it aspires."

#### **Lessons Learned**

The cultural and change management required cannot be underestimated and needs to underpin data collection and analysis. PDSA testing has supported the organisation to gain the knowledge, experience and clinical champions to allow us to spread the approach within the CAMHS service. The approach gave assurance in the robustness of information supporting future service planning and provides transparency for all concerned in identifying the recurring and non-recurring activity necessary to achieve and sustain waiting time guarantees. The clinicians were engaged throughout the process, and they have supported the findings for the development of solutions and are assured that capacity can be tailored to meet demand.

## **Prescribing**

# NHS Ayrshire and Arran: Pharmacist Led Review of Patients Prescribed Last-Line Antimicrobials

#### **Background/Context**

Resistance to antimicrobials is increasing, and with no new drugs on the horizon and a lead time for development of seven to 10 years, antimicrobial resistance will soon become a major public health problem.

#### **Problem**

There are a number of antimicrobials remaining to which resistance is currently rare and the use of these agents is restricted in Ayrshire, however the use of several of these

restricted agents is still the highest per head of population in Scotland. The vast majority of prescribing episodes are initiated by infection specialists.

#### Aim

To reduce the use of these restricted agents, reviewing all prescribing episodes at Ayr and Crosshouse Hospitals.

#### **Action Taken**

An antimicrobial pharmacist was employed for one year at Crosshouse Hospital to review all patients prescribed restricted antimicrobials, along with the Ayr Hospital antimicrobial pharmacist. All episodes were fed back to the consultant microbiology team daily, along with three multi-disciplinary ward rounds a week and a weekly case conference. The lead antimicrobial pharmacist attended the case conferences along with some of the ward rounds to encourage open dialogue around prescribing practice to minimise the development of resistance.

#### Results

The use of linezolid, a powerful drug against MRSA, was reduced by 82 per cent; bringing Ayrshire back in line with the rest of Scotland. There was a corresponding increase in the use of the first line agents vancomycin and teicoplanin. There was also a reduction in the use of the broad spectrum agent meropenem (which is used to treat Gram negative sepsis in hospital) and the antifungals voriconazole and caspofungin. The resistance to these agents is thankfully very low so it was not possible to measure a reduction in resistance. There was no associated increase in infection rates. The benefits are increased specialist clinical input into patient care and preserving the use of these restricted agents to those patients most at need. By minimising the development of resistance, it is hoped that these agents will be effective for years to come.

## **Efficiency Savings and Productive Gains**

In 12 months, the cost saving was £514,000 from a drug budget of £1.61 million, representing a 32 per cent efficiency saving. This was delivered against a background of increased clinical service, with more individual patient reviews and closer monitoring of outcomes, so there was an increase in both efficiency and productivity.

## Sustainability

On the basis of the above results, the one year pharmacist post was made permanent and a further two sessions of consultant microbiologist time were secured to support this service long term.

#### **Lessons Learned**

This work was only possible through funding provided on a 'spend to save' basis, together with effective clinical joint working and a shared ambition to reduce antimicrobial resistance and deliver the best clinical care for our patients. This also would not have happened without a lead who was prepared to champion the cause. A good business case is also important, as is regular feedback to the funding body of the results and next steps.

## NHS Forth Valley: GP Prescribing Incentive Scheme

## **Background/Context**

In the context of rising costs for GP prescribing, a local prescribing efficiencies group was established. The group has a Board-wide prescribing strategy and one of the key strands of this is the GP prescribing incentive scheme.

#### **Problem**

The problem identified related to the rising costs in GP prescribing resulting in a significant budget overspend of £3.4 million in financial year 2009-10. Additionally NHS Forth Valley was consistently reported as having the highest cost per patient in Scotland.

#### Aim

The aim was to achieve a sustainable reduction in GP prescribing expenditure across NHS Forth Valley whilst protecting patient care.

#### **Action Taken**

The GP Prescribing Incentive Scheme involves General Practices engaging in a range of cost-effective prescribing activities with the outcome measure of reducing their cost per patient towards the comparable Scottish average figure.

80 per cent of the savings generated by the scheme are retained by NHS Forth Valley to manage the overall primary care prescribing budget. The remaining 20 per cent is used to finance achievement payments to General Practices and to sustain a CHP development fund to take forward priorities identified by the CHP.

Monthly finance reports are provided to General Practices to allow them to assess their progress against target.

#### Results

Chart 16 shows the downward trend in cost per patient for NHS Forth Valley and the other NHS Boards in Scotland.

## **Efficiency Savings and Productive Gains**

The scheme generated the following savings, whilst maintaining the quality and safety of patient care in primary care:

Phase 1: £1.5 million
Phase 2: £2.3 million

Phase 3: In progress with a target

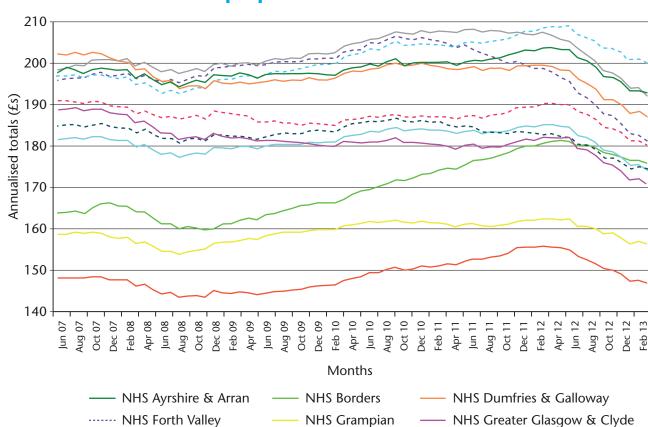
of £1.2 million

The CHP development fund has provided General Practices with back scanning of medical records, freeing up space within premises, improving patient flow/consulting space. The fund has also provided ambulatory blood pressure monitors to improve hypertensive patient care.

#### Sustainability

The contract for each phase of the incentive scheme requires that General Practices maintain their reduced cost per patient for at least one year after the scheme ends or incentive payments will be clawed back.

Phase 3 of the scheme is nearing completion and NHS Forth Valley is considering future developments of the scheme.



NHS Lothian

---- NHS Highland

---- NHS Tayside

Scotland

**Chart 16: Health Boards GIC per patient** 

#### **Lessons Learned**

 Improved finance reporting to General Practices has proved a useful tool to initiate change.

..... NHS Lanarkshire

NHS Fife

- Close working between pharmacy and finance colleagues, together with buy in and ownership from senior management and GPs is key to the success of the scheme.
- The scheme was deliberately nonprescriptive around how the reduction was achieved, leaving the decision to General Practices around which areas of prescribing to tackle. This allowed General Practices to target their efforts in areas of prescribing pertinent to their population.
- Prescribing support team input has proved invaluable to General Practices.

# NHS Greater Glasgow and Clyde: ScriptSwitch Software Implementation across Inverclyde CHCP and East Dunbartonshire CHP

## **Background/Context**

NHSScotland Efficiency and Productivity Programme: Progress Report – 2009-10 reported on NHS North Highland CHP and NHS Tayside pilots of the software. Both organisations reported positive outcomes from their pilot and continued to invest in the software. Given the potential to release savings the decision was made to initially implement the software in Inverclyde Community Health and Care Partnership (CHCP) and East Dunbartonshire CHP.

#### **Problem**

Increasing pressure on primary care services, increasingly tight prescribing budgets and a rising number treatments for long term conditions necessitate a multi-faceted approach to prescribing support. Existing prescribing teams have delivered excellent results in terms of reducing cost per patient and improving patient safety through bridging many interfaces. Prescribing teams review the constantly fluctuating drug market and offer advice to primary care prescribers on safe, cost-effective choices. Teams also assist in advising GPs on problems faced through the growing issue of drug shortages. This ever changing market presents significant risks in terms of drug expenditure and human resource. The ability to actively offer clinicians prescribing decision support during consultations was not addressed by existing strategies. The result was significant time spent retrospectively supporting General Practices in reversing less cost-effective prescribing decisions.

It was judged that ScriptSwitch software offered a tried and tested solution to the above problems while allowing existing teams to concentrate on valuable patient-centred work.

#### Aim

To implement ScriptSwitch software for six months in a CHP with a low level of deprivation within the population and a CHCP with a high level of deprivation to identify if this decision support tool improved cost-efficiency in both.

#### **Action Taken**

ScriptSwitch awareness sessions were run in the two CH(C)Ps. Community Pharmacy bulletins (post script Community Pharmacy) contained articles for awareness. A local database of messages was built and maintained by the central prescribing team. This database consisted of messages relating to patient safety, cost-efficiency and highlighting medicines shortages plus alternatives where possible.

ScriptSwitch software was installed in General Practices serving East Dunbartonshire CHP (practice population 101,436) and Inverclyde CHCP (practice population 86,699).

Two rounds of qualitative user satisfaction questionnaires were completed within the six months. Estimated savings were evaluated using ScriptSwitch analytics software.

## Results

After six months estimated savings are £125,610. The cost of procuring the software for 12 months was 78,000. The six month pilot therefore yielded a six month return on investment (ROI) of 3.1 to 1.

The efficiencies produced were similar across each CH(C)Ps despite the different levels of deprivation across the population.

This is largely in line with the ScriptSwitch reported national average of 3.3 to 1.

The ScriptSwitch user questionnaires indicated positive feedback with 89 per cent of users reporting that the software led to a change in prescribing habits and 89 per cent of users' opinion was that continued investment in the software was worthwhile.

## **Efficiency Savings and Productive Gains**

It is estimated that the use of the software in these two CH(C)Ps released £125,610 in savings in six months. It was recognised that human resource was essential to support the software. Continual development and maintenance of the database is required with on-going funding covered by the efficiencies released by Board-wide implementation of the software.

Based on the six month outcomes, implementation of the software across 260 General Practices was started in March 2013. It is anticipated that this will produce estimated productivity savings for the population of NHS Greater Glasgow and Clyde (1,270,099 patients) in the region of £1.1 million net of an annual investment of £600,000.

## **Sustainability**

ScriptSwitch customers in other areas, particularly in England, continue to invest in the software after many years and report a desirable ROI. The key elements for continued productivity are prescriber engagement and profile maintenance and development. NHS Greater Glasgow and Clyde has committed to a three year contract with ability to terminate this contract after one year if productivity is less than expected or more competitive comparable products come to market.

#### **Lessons Learned**

NHS Greater Glasgow and Clyde found that the building and maintenance of the profile of messages was a considerable piece of work that required dedicated staff that understood both the software and the needs of prescribers.

Involving NHS Board IT personnel was necessary for the smooth roll-out of the software and the on-going maintenance of the systems. Piloting the software on both clinical systems used in NHS Greater Glasgow and Clyde (EMIS PCS and InPS Vision) was highly beneficial from an intelligence perspective.

Good communication with all stakeholders was important and beneficial to ensure timely messages to prescribers and Community Pharmacy colleagues. Obtaining and acting on feedback from users of both systems was essential as fostered building of confidence and relevance in the system. Offering the General Practice the option of using ScriptSwitch use as a GMS indicator encouraged early opt in.

## **Procurement**

# NHS National Services Scotland: Modernisation of Home Oxygen Service

## **Background/Context**

In August 2011, NHS Chief Executives approved a plan to integrate Community Pharmacy cylinder oxygen services with the oxygen concentrator service provided centrally by NHS National Services Scotland (NSS). A home oxygen service project steering board (HOSPSB) was set up to oversee the project. The transition was phased for completion by March 2013.

#### **Problem**

The combined costs of the cylinder and concentrator services were rising at a rate and to a level which the Scottish Government believed would benefit from a fundamental review. Short-term Scottish Government support was agreed but the position clearly had to be addressed.

There was also a clinical concern, whereby it was suspected that many patients were using short burst oxygen therapy for considerable periods of time without adequate follow-up to ensure clinical effectiveness. Also, some patients were using large quantities of static and portable cylinders at considerable expense and may have been better served by another method of supply, such as a concentrator or Homefill system. Some patients were using oxygen who did not need it.

#### **Aim**

The clinical aim was to ensure that patients would be assessed and placed on the most appropriate oxygen system for their needs and their oxygen needs served more appropriately.

The financial aim was to reduce the cost of the services being provided through better understanding and subsequent delivery of individual patient needs. Additionally, the VAT treatment of the service provided an opportunity to significantly reduce costs so this required review by HMRC.

#### **Action Taken**

A programme of patient assessments was carried out, with 3,000 patients being reviewed to ascertain as to whether an oxygen concentrator could be provided, rather than the patient relying on oxygen cylinders. Patients who require portable oxygen were assessed to see if a Homefill concentrator would be appropriate. These concentrators allow patients to fill portable cylinders at home, supporting patient mobility and allowing greater independence.

The cost for doing so is about £2.70 per day, less than 10 per cent of the cost of providing oxygen cylinders, which cost £30 and last only four hours.

Additionally, the contract with Dolby to support provision was renegotiated, resulting in reduced service costs.

Finally, as Community Pharmacies were able to reclaim VAT on their supply from BOC, a case was successfully put to HMRC and this has resulted in VAT now being zero-rated and resultant annual savings of about £1.1 million. As oxygen and oxygen equipment is supplied to some community hospitals and other NHS premises as a general supply, rather than to named patients, HMRC are reviewing whether VAT should apply to this part of the service but it accounts for less than 5 per cent of the total so the risk is modest.

#### **Results**

The benefits are clear to the patient. Portable cylinders allow much greater mobility for patients, being able to refill at home rather than be dependent on new cylinders being supplied. Homefill patients are afforded greater independence and can now manage their own oxygen supplies.

A wider range of equipment is now available, including oxygen conservers, which allow cylinder oxygen to last longer, increasing the time available outside the home for some patients.

Patient satisfaction levels are being monitored and results for all patients and for cylinder oxygen patients specifically, show that about two thirds are very satisfied, with the remainder fairly satisfied – no patients voicing levels of dissatisfaction.

## **Efficiency Savings and Productive Gains**

The new process clearly delivers significant efficiencies with the patient having much more control over their needs, reducing their dependency on much of the previous supply chain.

Supply costs for Dumfries and Galloway have fallen from £36,000 per month to £24,000 per month – a saving of 33 per cent and similar savings may well be replicated elsewhere, the position is being monitored as revised costs become available.

The total cost of the service for 2011-12 was £9.9 million, reducing to £8.2 million for 2012-13. The reduced costs include efficiency savings of £700,000, resulting from the improved service delivery, with the impact of VAT now being zero-rated saving nearly £1 million.

Costs are expected to fall further, to £7.2 million by 2014-15, by which time all of the benefits should be fully realised. The total reduction in cost from 2012-15 is therefore expected to be about £2.7 million, of which nearly £1.6 million relates to reduced costs directly linked to the new processes, with the balance, of over £1.1 million resulting from VAT relating to the provision of service now being zero-rated.

The £0.6 million efficiency recognised by NSS relates to the VAT saving against the oxygen supplies historically provided through NSS.

## Sustainability

The new system will provide visibility of individual patient usage to alert hospitals and so support NHS Boards in providing effective support and in a much more efficient way.

#### **Lessons Learned**

NHS Dumfries and Galloway was used to pilot the new system and this helped greatly when being rolled out in other NHS Boards. In particular, implementation was, unsurprisingly, much easier to deliver to the smaller NHS Boards so the programme was revisited, with smaller NHS Boards being addressed first.

As a result of the lessons learned, NHS Greater Glasgow and Clyde was placed last in the programme along with NHS Highland as it became clear that there were particular challenges posed by the remote and rural communities.

## **Shared Services**

## NHS Borders: Local Forensic Learning Disability Service

## **Background/Context**

A number of clients were being cared for out of area which meant that significant resources were being spent external to Borders to provide a service for them. Clients were therefore placed out of area, away from their families in expensive care settings.

#### **Problem**

High cost service with limited access to Borders services, friends and relatives, and difficulty in assessing the quality of the services provided.

#### **Aim**

To provide a local and easily accessible service for clients with direct access to Borders health and social care staff in a more clinically appropriate environment. To repatriate clients to their local area with access to relatives and friends.

#### **Action Taken**

Working in partnership with social services, a tendering exercise identified a third sector partner to whom NHS Borders sold one of its excess properties to allow it to be refurbished to meet the needs of the clients.

From the resources saved NHS Borders established a local forensic team to meet the needs of the repatriated clients as well as others in the Borders area, providing a quality community based service.

#### Results

Clients are now cared for within the area, with closer access to family and friends. This has allowed clients to live more independently and confidently.

This project has embraced partnership working, led by the Borders joint health and social care learning disability service who have worked in partnership with the third sector.

## **Efficiency Savings and Productive Gains**

The redesign has allowed costs to be reduced by repatriating clients back to the Borders, reinvestment of some of these resources in the establishment of a local team, and has allowed resources that were being spent outwith Borders to be invested in the local economy as well as contributing to recurring savings of £169,000.

## Sustainability

Resource and accommodation has been secured on a recurring basis which gives future sustainability for the service.

#### **Lessons Learned**

Through the productivity and benchmarking process and work with South East and Tayside (SEAT), NHS Borders is continually looking to reduce commissioning costs by repatriating patients back to the area and providing services locally. This working example is key to moving forward and providing more shared services with the local authority and the third sector.

## **NHS Orkney: Contracting Out Payroll Services**

## **Background/Context**

NHSScotland's Shared Support Services (SSS) Programme has led on the vision, development and implementation of efficiencies in supporting functions, often through commonality of various systems and processes.

#### **Problem**

The SSS benchmarking exercise indicated that NHS Orkney's payroll function was significantly more expensive than the national average at £73 per employee compared to £44 per employee on average. A review of the statistics provided by the SSS programme had identified the payroll function as a potential area where significant savings could be made.

There was also a high dependency on two WTEs (three individuals) for the delivery of the in-house payroll service. A review of the services provided by payroll suggested that significant service continuity risks are associated with dependencies on a restricted staff resource. Furthermore, with limited scope to safely reduce staffing, scope for further targeted efficiencies, as targeted through the new ePayroll system, was limited.

#### Aim

The project aimed to:

- reduce payroll cost per employee
- move to at least average on benchmarking
- have more robust service continuity
- be able to see future efficiency savings as the new ePayroll system was rolled out

#### **Action Taken**

The following actions were undertaken:

- reviewed payroll and finance department structure
- evaluated use of remote contractor, then subsequently contracted payroll services to NHS Grampian from April 1, 2012
- redeployed displaced staff within NHS Orkney

#### Results

The following results were achieved:

- efficiency savings of £23,500 per annum
- ability to exploit further savings derived from national move to ePayroll (time records are picked up remotely via the SSTS system)
- move to electronic files

## **Efficiency Savings and Productive Gains**

The following were achieved:

- moved from a cost of £6.08 per payslip to £3.81 per payslip
- expertise and resources of contractor's larger team who managed transitions to new national ePayroll system

#### **Sustainability**

Payroll is now provided by a larger team at NHS Grampian. This ensures expertise and timeous payments and conformity with statutory and legislative requirements. In addition, there is expertise and capacity to manage payroll implications of eESS implementation.

In addition to the existing ATOS disaster recovery of systems, the payroll service provision for Orkney is now incorporated into NHS Grampian's disaster recovery and continuity plans.

#### **Lessons Learned**

The efficiency was delivered by linking the contracting out of the payroll service to a wider reorganisation in NHS Orkney of more

than just the affected (payroll) department. This enabled successful and productive redeployment of affected staff, delivering real cash saving with implementation.

## **Support Services**

## **NHS Ayrshire and Arran: GP IT Support**

## **Background/Context**

The existing GP IT support contract with a third party had been in place since April 2004 and had been extended a number of times under the OGC Buying Solutions (now the Government Procurement Service) IT managed services framework. A decision was taken to re-tender the contract in 2011 and a request was also made to benchmark against the potential costs of providing the outsourced IT support service with internal resources, therefore bringing the service in-house.

#### **Problem**

The existing support contract was due to be re-tendered as the services had been provided by the same supplier for considerable time.

#### **Aim**

To provide a value for money and improved, efficient service.

#### **Action Taken**

During 2011 the existing support contract was re-tendered. Three external suppliers responded to the Invitation to Tender (ITT) which were then evaluated by a group of stakeholders. The evaluation group agreed that an in-house option should also be costed. This further analysis indicated that significant savings could be achieved by bringing the GP IT support in-house.

## Results

It was proposed by the evaluation group to bring the GP IT support service in-house. The in-house GP IT support service is now delivered by a new team of four dedicated eHealth support officers reporting to the existing primary care eHealth support manager and a dedicated infrastructure technical specialist. In addition, all service desk staff were trained in the software used in General Practices so that a more tailored first-line support service is offered leading to more calls being resolved at the first point of contact. Three members of staff from the existing contractor were subject to transfer under TUPE regulations and these staff formed the core of the new in-house team along with existing internal NHS eHealth staff that applied to be part of the new team.

## **Efficiency Savings and Productive Gains**

Since June 1, 2012 the team has delivered a high-quality service with improved response and resolve times while lowering the overall cost of the service provision.

The in-house costs delivered a saving of £131,000 per annum compared to the contract that was in place and was also £105,000 less costly than the leading tender. A small proportion of the savings has been used to fund an annual PC refresh programme for which there had been no sustainable funding previously.

Additional savings have also been made with the roll-out of 478 new PCs to General Practices which has been carried out by the in-house team. This development work would have been charged separately under a third party contract at a cost of £71,700.

## **Sustainability**

The funding to continue the in-house support is committed on an on-going basis within the primary care budget.

#### **Lessons Learned**

There have been significant savings from an in-house support service as demonstrated by the costs proposed by external providers during the recent tender process. In addition, there are other savings from costs that would be incurred through work not covered by the third party contract. This type of work has been incorporated within the overall costs of the in-house service.

Taking the support service in-house has given more flexibility and control to manage any change as and when it occurs.

User satisfaction surveys carried out since the transfer of the services suggest high levels of customer satisfaction.

## **NHS Borders: Support Services Efficiency Schemes**

## **Background/Context**

NHS Borders' efficiency programme commenced in April 2010 and by March 2014 will have reduced its support services costs by 20 per cent, which equates to over £4 million over the period.

#### **Problem**

NHS Borders committed to achieve savings in support services, leading by example by increasing efficiency of its services.

## **Aim**

Support services were challenged with achieving a 20 per cent saving of their overall budget which includes estates and facilities, finance, HR, pharmacy management, procurement, public health and other corporate services.

#### **Action Taken**

A very clear annual target, with key milestones, was set prior to April 2010 enabling managers and service leads to identify opportunities and

actively plan on how this target could be met over the four year time period. Each service was supported by finance and efficiency to identify opportunities which involved linking in with the national efficiency programme, benchmarking support services and working both across SEAT and nationally.

#### Results

This approach resulted in a significant number of smaller schemes within each support service being taken forward which included the following:

- increased use of technology eExpenses, SSTS
- use of Lean driven process change within and across support services which identified duplication and areas of waste
- review of staffing skill mix
- increased use of national contracts and more cost-efficient provision of supplies
- introduction of discretionary spend controls
- renegotiation of support services contracts as well as improvement in payment terms

- income generation by providing services to outside bodies
- review of space utilisation within support services resulting in the sharing of offices/ accommodation including with partner bodies
- laundry rationalisation following the introduction of Sleep-knit
- rationalisation and centralisation of catering facilities including a menu review and the limited introduction of the use of cook chill

## **Efficiency Savings and Productive Gains**

The services have not been compromised and a high-quality service is still provided by monitoring spending and reducing costs where appropriate and safe.

Savings have been made using productivity and benchmarking to ensure services have appropriate workforce models, implementing generic working and cross directorate working.

## **Sustainability**

Processes have been put in place to ensure the savings achievements are sustainable. Support services continue to work efficiently and will be reviewed by productivity and benchmarking on an on-going basis.

#### **Lessons Learned**

A number of smaller schemes achieved a great deal of savings by reducing waste where possible and working more effectively and efficiently. It allowed a number of support services to come together and outline tasks and processes that were being carried out that could be streamlined.

# NHS Dumfries and Galloway: Review of Admin Services in light of Mental Health Property Strategy

## **Background/Context**

Due to a new build mental health hospital, and the property strategy moving staff from outlying buildings into the vacated space released through staff moving to the new building, an opportunity arose to review admin procedures and rationalise the use of existing staff.

#### **Problem**

Cash releasing efficiency savings (CRES) were expected from all managers including the Quality and Admin Manager over three years.

#### Aim

To use new technologies to introduce new, more efficient ways of working.

#### **Action Taken**

A review was undertaken of each post that became vacant through retirement or staff leaving. New technologies were introduced e.g. Winscribe (digital dictation system). Merged teams now offer better admin cover and support whilst reducing staff hours.

#### Results

Cash releasing savings as well as productivity gains were achieved through new technologies and ways of working together with a change in skill mix.

## **Efficiency Savings and Productive Gains**

Nearly £80,000 has been saved over three years. One team has been reduced by 25 per cent without loss of productivity. Both admin and consultant staff recognise the effectiveness of the new technologies.

## Sustainability

As this has been a stepped process over three years and still evolving, the sustainability would seem to be in place. Staff shortages have still been covered. Using a 'test of change' approach allows sustainability to be built in. We also recognise when something is not working and are prepared to change course.

#### **Lessons Learned**

- short term money needs to be in place to enable the change process
- take a stepped change approach rather than trying to do everything at once
- dedicated IT support is essential. Allow one system to properly 'bed in' before introducing another one

# NHS Highland: Delivering a Person-Centred and Efficient Microbiology Service

## **Background/Context**

As NHSScotland moves to implement the *Quality Strategy* (safe, effective and personcentred care) it is essential that laboratory services are fully engaged in what this means for patients and staff.

Timely access to the right test, with the right result, at the right time, are all essential to support high-quality care.

#### **Problem**

The following factors were identified:

- outlier in terms of cost, skill mix and productivity
- outdated repertoire in terms of methods and tests
- management structures and staff arrangements not integrated

#### Aim

To develop a more person-centred and efficient service.

#### **Action Taken**

#### Method

As part of the Highland Quality Approach we applied Lean tools including:

- outside eyes external review and benchmarking (Keele)
- staff engagement and stakeholder feedback
- skill mix review
- methodology review (including new equipment and refresh of old)
- monitoring of sample carry over
- developing and testing ideas for future state

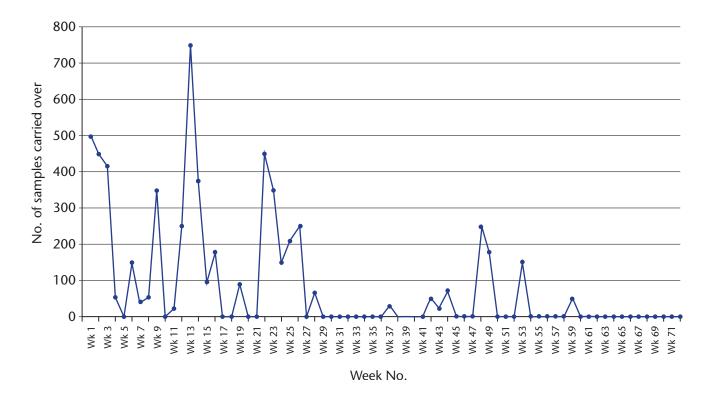
#### **Future State**

- re-profiling of skill mix
- integrated management provided by one service manager
- from five to three operational sections with integrated staff
- redefine departmental structure based on methodology instead of historical discipline based boundaries

#### **Results**

Significant reduction in samples carried over (chart 17).

Chart 17: Samples carried over each week 2012-13



## **Efficiency Savings and Productive Gains**

Skill mix redesign is underway and has already achieved pay savings of £200,000 per annum. An additional £250,000 is forecast once skill mix review and redesign is complete. This work needs to be supported by new equipment and staff training.

Through the Highland Quality Approach we have facilitated new ways of working which are more person-centred (responsive, flexible and clinically relevant), professionally rewarding and cost-effective.

#### **Lessons Learned**

"The separation of laboratory clinicians from having a direct connection with patients runs the risk of the service not being as focused on patients as it could and should be. A combination of taking laboratory staff to meet patients, hearing patient stories and drawing fellow clinicians into the laboratory were all used to good effect. This all took place during a time of significant re-profiling of the workforce. It's not been easy and requires on-going support and leadership".

Dr Emma Watson

# NHS Lanarkshire: Improving Efficiency in Monklands Medical Records Department

## **Background/Context**

Under the terms of the admin and clerical review there was a requirement to review the efficiency of medical records processes and the baseline staffing for medical records staff to identify areas for savings.

#### **Problem**

The following factors were identified:

- significant number of staff breaching NHS Lanarkshire policy on return of medical records due to historic and cultural practices
- poor workforce design built around the need to cover for breaches of procedure by other staff
- inefficient layout design due to expansion of space required to store medical records without cognisance to efficient workflow
- flexible and rotational nature of staff made roles and responsibilities unclear and created difficulty in tracking and managing performance through the various sections
- data collecting for reporting but no history of predictive or real-time data to understand

demand and capacity and support performance management of staff

#### **Aim**

To improve workflow, process and workforce efficiency through all sections, introduce data for performance management and ensure that medical records are available on day of outpatient appointment.

#### **Action Taken**

Table 3 details the methodologies, tools and techniques used. Changes made:

- policy for return of missing records enforced across the hospital
- WTE required by each section established to support predicted demand
- internal processes stabilised and redesigned to maximise efficiency through each section
- pulling and prepping section relocated and department layout redesigned to support efficient workflow and improve supervision
- demand data via a whiteboard introduced to ensure that daily demand was understood and being met
- changes in some staff start/finish times and days worked to level load the work and deal with peaks of activity

#### Table 3

Strategy for change, methodology used				
Lean awareness training/ DCAQ	Stakeholder interviews	Analysis of policies and procedures		
Individual operator observations	Workflow analysis	Data analysis		

Tools and techniques used					
Time value analysis	Circles of work	Spaghetti diagrams			
Takt time calculations	SIPOC diagrams	Force-field analysis			
Waste spotting	Voice of the customer	Data analysis			

#### **Results**

A summary of results is as follows:

- clearer roles and responsibilities
- improved workforce and capacity planning
- better demand management
- improved productivity and efficiency through the sections – performance management introduced
- reduction in costs

A summary of the benefits:

- patient medical records fully prepped and delivered on time
- staff roles and responsibilities clear and tasks/performance required understood
- organisational benefits improved efficiency and productivity leading to cost reduction of circa £84,000 per annum

## **Efficiency Savings and Productive Gains**

Mean number of case notes pulled and prepped per day = 440, therefore a time saving of  $440 \times 0.99$  minutes = 7.26 hours per day. Table 4 shows the mean pulling/prepping time before and after redesign.

Based on known demand for case notes, staffing levels could be set on a daily basis to cover the demand if the pulling and prepping section delivered the required hours of pulling and prepping activity, however, an examination of productivity showed that there could be up to 12 individual operators pulling and prepping case notes on any one day, delivering less than

the WTE hours required to meet the daily demand (table 5).

6.5 WTE staff were supposed to be ringfenced against pulling and prepping activity producing 42.25 hours of 'useful work', however interruptions to the workflow meant that staff were taken off this section to cover other work while multiple staff from other sections were brought in to cover the shortfall. As per the table above, the 12 people on pulling and prepping function on the day shown, between them only managed to produce 30.2 hours of useful work i.e. the work of 4.6 WTE staff whilst disrupting the workflow in the sections affected.

By genuinely ring-fencing the 6.5 WTE staff on this section, redesigning the workflow through other sections and introducing visual performance management, staff capacity could be realistically set to meet daily demand and ensure maximum productivity (table 6).

The staff time released helped to standardise workflow and improve quality through the other sections in medical records.

Improved productivity and efficiency within the department facilitated a reduction in five WTE permanent Band 2/3 staff with associated costs of circa £84,000 whilst maintaining and/ or improving service quality.

**Table 4** 

Monklands pulling/prepping section	Before redesign	After redesign	Per cent reduction
Mean pulling time/case note (mins)	1.97	0.98	50
Mean prepping time/case note (mins)	3.38	3.38	N/a
Total time (mins)	5.35	4.36	18

Table 5

Individual operator breakdown						
Date pulled	Clinic date 1 June	No of CR	Time (mins)	Time (hrs)	ave p/p time (mins)	
25 May	OP1	90	410	6.8	5.46	
25 May	QP13	56	260	4.3	4.64	
25 May	OP7	43	245	4.1	5.70	
25 May	OP6	39	145	2.4	3.72	
25 May	OP2	38	150	2.5	3.95	
25 May	OP3	31	140	2.3	4.52	
25 May	OP10	30	115	1.9	3.83	
25 May	OP8	29	75	1.3	2.59	
25 May	OP14	22	120	2.0	5.45	
25 May	OP4	17	60	1.0	3.53	
25 May	OP9	15	70	1.2	4.67	
25 May	OP12	4	20	0.3	5.00	
		414	1,810	30.2	4.37	

A total of 4.6 WTE spent on the pulling and prepping process (based on 6.5 hrs work)

**Table 6** 

Agreed performance						
	Mon	Tues	Wed	Thurs	Fri	Mean
Expected demand	476	483	486	424	333	440
Mean pull/prep time (mins)	4.37	4.37	4.37	4.37	4.37	4.37
Mean pull/prep time (secs)	262.2	262.2	262.2	262.2	262.2	262.2
Daily secs available	23,400	23,400	23,400	23,400	23,400	23,400
Total secs required	124,807.20	126,642.60	127,429.20	111,172.80	87,312.60	115,472.90
Staff required	5.3	5.4	5.4	4.8	3.7	4.9
21%	1.120065	1.136536	1.143595	0.997705	0.783575	1.036295
Total staff required	6.5	6.5	6.6	5.7	4.5	6.0

NB: Expected demand based on 80 per cent demand variation

Calculation based on 6.5 useful hours i.e. 23,400 secs available per operator/per day

## Sustainability

Sustainability and continuous improvement ensured by means of:

- regular team meetings
- more proactive supervision with one-toone discussions with staff
- extended use of the whiteboard to include:
  - which staff are allocated to each duty
  - staff on annual leave
  - midday status update regarding case note pulling and prepping performance
  - scheduling and staffing of trolley runs to departments
  - continued use of performance data to analyse issues and identify areas for process improvement

#### **Lessons Learned**

 Engaging with staff and ensuring buy-in and ownership of changes during what is essentially a cost/staff reduction programme is challenging. You need to be absolutely up front and transparent with both staff and trade unions about

- the expected outcome of the work and how you will go about it, and be available to talk to staff at all times.
- Using data to understand and manage performance is daunting for both managers and staff. It is important that managers understand the few key metrics they need to monitor and control performance and have the confidence to use them and that staff understand the benefits of performance data in terms of improving the quality and reliability of the service they provide. It is therefore vital when setting up such a system that staff understand that performance relates to the processes within which they work, and not initially to the performance of individuals.
- Changing culture i.e. persuading staff
  who had previously decided to 'opt out' of
  agreed procedures for returning case notes
  prior to a clinic date, is very difficult to
  achieve. You need to plan for a prolonged
  period of resistance to a required change in
  culture and working practices and hold the
  line/reinforce the message on a daily basis.

# NHS Tayside: Blood Sciences Automation Development: Managed Services Approach

#### **Background/Context**

As a result of a review of the delivery of laboratory services within NHS Tayside an objective was set to transform the delivery of the service by amalgamation of the Departments of Biochemical Medicine, Haematology and Immunology into a single Blood Sciences Department. This was linked with the procurement for laboratory diagnostic managed service contracts and installation of automated analytical solutions that deliver Lean approaches to workload delivery, encourage cross disciplinary working, consolidation of workloads, significant revenue savings and transfer of risk to third parties.

The 'blood sciences' model of laboratory services delivery is predicated on taking a Lean, process driven approach to all aspects of service. The model capitalises on commonalities of process, generic skills, knowledge and competencies that transcend traditional laboratory discipline boundaries and exploit the use of emerging and existing technologies to enable knowledge, skills and other resources to be applied to maximum clinical effect.

The key elements for delivery and realisation of benefits from the model are outlined below:

- Definition of a management structure to reflect the proposed model of service delivery. This mandates delivery of a remodelled staffing structure.
- Delivery of a fit for purpose analytical configuration. The primary requirement for delivery of analytical systems and supporting processes to enable delivery of the blood sciences concept was presented as an essential requirement to suppliers wishing to tender for the major laboratory equipment procurement to replace existing equipment at the end of life.
- Exploitation of cost-effective delivery of service based on introduction of state-ofthe-art analytical and information technology should result in improved cost profiles, efficiency gains and have an impact on effectiveness, all of which provide opportunities for further investment in service resilience and development.

#### **Problem**

The need to transform laboratory services to enable delivery of a service model that addresses current pressures within an evolving healthcare delivery model that is increasingly challenged by rising workloads, that is target driven, that is demand led, and which is resource constrained. There was a need to replace old technology with new analytical and information technology, but the technological solutions with potential to address the drivers for change and pressures require new approaches to delivery and funding because of the cost and complexity of the solutions. Systems have evolved to a level that a significant partnership is required with a global diagnostics partner in order to assemble and develop the necessary infrastructure to capitalise on the latest developments in order to deliver the goals of the NHS Tayside laboratory review.

#### Aim

To seek a partner in the form of a global diagnostics provider to deliver a tailored managed services solution for blood sciences core workload to enable delivery of the NHS Tayside vision for laboratory diagnostics services.

#### **Action Taken**

- Structured review of services with guidance from NHS Tayside's organisational development teams.
- Key objectives identified to the acute unit executive management team.
- Progression of a tendering exercise in which the NHS Tayside vision for laboratory diagnostics were presented to potential vendors who were invited to propose a solution that would enable this to be delivered. We effectively invited the companies to tell us how the most recent advances in analytical and information technologies could be brought together to deliver our goals and address our drivers for change, and deliver our aspiration to deliver a leading edge, world-class service to the population of Tayside.
- The award was made to Siemens Diagnostics in November of 2011 for delivery of a managed service to include the provision of the APTIO automation system. This is an advanced automation solution that enables integration of seven large biochemistry analysers, four haematology cell counters, two coagulation systems, robotic centrifuges, online sample storage and retrieval, and automated capping and de-capping of specimens all linked by a tracking system.

The system was the second, but largest, system installed in the world and the first in northern Europe. The installation was undertaken as part of Siemens Diagnostics' development programme for this technology

with the Ninewells site being one of six global controlled roll-out sites. As a consequence Ninewells is now a global reference site for this technology and has hosted visiting teams from the USA, Singapore, and across Europe.

The system was introduced ahead of commercial launch internationally and continues to be developed against the controlled roll-out programme. In consequence, a very fast pace of initial change took place in the first six months of 2012 with laboratory refurbishments, equipment validation, automation builds, IT builds, staff training and process investigation redesign and implementation. Phase 2 in November of 2012 enabled integration of haematology analysers with the track to deliver a truly integrated multi-discipline automated facility.

Teams from Siemens Heath Care Solutions have worked with NHS Tayside staff to redesign the process to deliver a highly effective and efficient sample reception process that involves Lean process and single piece workflow to manage the workload from primary workflow and secondary care.

Additional services including provision of an onsite engineer and inventory management through a Siemens contracted service were also adopted. The education and training packages provided by Siemens in the form of online, and on and off site hands-on provision have been integrated into the new department's service delivery model.

#### **Results**

The analytical systems within blood sciences on the Ninewells site are amongst the most advanced in the world and the second of its type globally while being the first in northern Europe. The managed service contract has enabled delivery of these systems using a cost per test approach that includes the accounts for the capital investment by Siemens in equipment to enable delivery of a facility that

addresses the objectives of the NHS Tayside review enabling a focus on reduction of waste, variation, and harm in provision and use of laboratory diagnostics. The service contract with associated VAT savings amounts to approximately £500,000 in year one as assessed against previous costs.

The advanced automation is providing a platform for further transformation in working practices, impacting on skill mix and roles, access to repertoire, workload prioritisation, improvements in turnaround times and potential for new approaches to diagnosis and management of patients.

Workload from primary care has been consolidated onto the Ninewells site enabling a uniformity of same day access to the full repertoire of the laboratory testing for the first time to primary care patients in Perth and Kinross (400 additional requests per day). This is made possible as result of new electronic ordering linked to new Lean sample reception processes.

The systems enable prioritisation of workloads form critical areas through automated routing controlled by IT.

## **Efficiency Savings and Productive Gains**

The efficiency savings and, more importantly, the effectiveness gains and impacts on downstream process (e.g. impact on flow and capacity in acute receiving wards as a result of delivery of a more comprehensive repertoire of testing within a more uniform and reduced turnaround time) remain to be assessed.

Turnaround times on the system are impressive. 97 per cent of creatinine measurement received by the lab is reported and available electronically to users within two hours (median circa 50 minutes, previous target time would have been 95 per cent in four hours).

Inventory management means that we do not have senior staff unpacking pallets of reagents and rotating stock.

The systems provide the opportunity for cross disciplinary training that will enable more efficient use of HCPC registered staff supported by other staff groupings. The sample inputs are blind to traditional boundaries and as such the workloads will be processed through the various analytical boxes to deliver valid data to terminals that can be manned remotely anywhere in the world. A piece of work is to begin to determine the optimal staffing profile for the facility.

The approach is driving us towards paperless/ paper light operation. Specimens received by the laboratory request order electronically are no longer accompanied by paper request forms. The tubes are labelled and barcoded at source. The median time from presentation of a request from the time of receipt acknowledged by the lab to initial processing on the track is circa seven minutes. The track can manage 3,600 samples per hour. Sample inputs and output units process 2,400 samples per hour (differences allow capacity for on track transactions with various modules). The laboratory process 5,500 to 6,000 tubes of blood and urine per day. The capacity of the system greatly exceeds that of previous systems installed thus enabling the take on of additional work from the Perth laboratory and providing capacity for future growth.

## Sustainability

The partnership with Siemens is contracted for seven years. We are working closely with the company to capitalise on the potential of the system to improve workflows and increase impact of services. The involvement of the Health Care Solutions services and further development of tools to enable good stewardship of the services with robust contract monitoring and demand management strategies will ensure costefficiency and effectiveness of the development.

#### **Lessons Learned**

Significant advantages arise from working with providers with shared vision. Developments of this type will enable delivery of systems that allow a refocusing of laboratory medicine professionals on the clinical effectiveness agenda as a consequence of releasing senior staff time to focus on quality and clinical issues and a shift in skills and role development across the professional groups.

The move to latest generation multidisciplinary platforms and combining of departments is challenging as the transformation challenges many barriers and requires cultural changes to enable maximum benefit of the approach to be realised. This has been a significant challenge and much more work requires to be undertaken at the start of the project to engage all members of the multi-disciplinary team.

The project implementation was fast tracked as and this caused significant operational difficulties which are still being worked through. The implementation would have benefited from dedicated project management support.

The team spent considerable time in negotiation of the managed service contract and the importance of this cannot be understated.

## NHS Tayside: Laundry Sleep-knit Project

## **Background/Context**

Increasing costs and pressure on resources/ staff time in both bed making and the laundry processing of sheets was recognised as an issue that should be addressed by NHS Tayside.

#### **Problem**

All patient beds were made using traditional non-fitted sheets, requiring lengthy bed making procedures for staff, and a lengthy laundry process involving specialist sheet pressing machinery that was due for replacement due to age.

#### **Aim**

To find an effective solution that both improved staff resource requirements, patient experience and enhanced laundry efficiency.

#### **Action Taken**

A multi-disciplinary project team was set up to seek out and evaluate potential solutions, and following option appraisal selected the Sleep-knit bedding system. This was based on an assessment of both quality and financial benefits. Whole life cost models were developed to inform the business case, taking into account the costs and associated improvements and demonstrating the payback periods involved.

The new bedding was procured and distributed to wards and patient areas with appropriate training and a specific organisational wide communications exercise.

New laundry drying equipment was procured to support the new bedding system, in place of the obsolete and labour intensive pressing and folding machinery.

#### Results

Patient feedback on the new bedding has been extremely positive; it has eliminated the 'crumpling' effect that traditional sheets suffered over time. After adapting to the change, staff are reporting reduced time spent on bed making, releasing more time to care for patients. The organisation has benefited financially, and the laundry has been able to enhance productivity without any additional staffing requirement.

## **Efficiency Savings and Productive Gains**

Efficiency savings of £100,000 per annum were achieved through the introduction of the new system, relating only to direct laundry costs. The programme also led to a cost avoidance of replacing the sheet press laundry equipment.

## Sustainability

The transition to the new bedding was supported by staff training, and a phased roll-out across sites to ensure sufficient support was targeted to areas on changeover.

All bedding supplies have now been replaced with the new bedding.

#### **Lessons Learned**

The project achieved recognised success with positive feedback from patients and staff.

The diligent work in ensuring effective communication of the change to ward staff and provision of sufficient support during the roll-out of the new products was seen as a key part of the successful implementation, and a lesson for other projects.

# NHS Health Scotland: Efficiency Savings made by the Events, Publishing and Web Team for NHS Health Scotland

## **Background/Context**

The events, publishing and web (EPW) team is a team of 30 professionals who are expert in the fields of managing events, producing publications, and web and digital channels and associated procurement.

The EPW team is responsible for designing, delivering and evaluating strategic marketing communications outcomes to support and equip NHS Health Scotland to achieve the ambitions outlined in *A Fairer Healthier Scotland*. The team works with colleagues from across the organisation to identify tailored communication channels and products for specific target audiences.

#### **Problem**

NHS Health Scotland is operating under the constraints of reduced budget and had a 5 per cent efficiency target.

#### Aim

The EPW team was tasked with maximising cost efficiencies to help NHS Health Scotland achieve its 5 per cent efficiency target. We also had a target of £86,000 efficiency savings made in 2011-12.

#### **Action Taken**

Utilising staff's professional expertise to find ways to maximise efficiency savings through the following methods:

- utilising in-house skills wherever possible to minimise the need to outsource
- operating within Scottish Government approved procurement frameworks and competitive tenders processes
- examining the specification/supplier for every project to ensure the most cost-effective solution

- utilising technology to minimise cost
- rigorously reviewing stock holding and consolidating in a single warehouse

#### Results

Overall financial savings of £123,151 achieved.

## **Efficiency Savings and Productive Gains**

Efficiency savings made through:

- Changing existing supplier to achieve a competitive price. Mainly delivering the same specified print product using a more competitively priced supplier, in some cases a lower price is achieved through using a different size print press. Total saving £33,301.
- Changing existing specification to reduce costs without negatively impacting overall quality. For example, reducing paper weight, changing format and reducing the cost of print finishes such as varnishes. Total saving £25,847.
- Consolidating and reviewing stock holding. The number of warehouses used was reduced from three to one and stock was recycled where no longer required. Total saving £20,005.
- Using technology. Using a free online event registration tool and more effective use of video conferencing. Total saving £15,948.
- Bringing previously outsourced work in-house. For example, bringing the creative development for the *Healthy Working Lives* direct mail campaigns inhouse; we previously used an agency to develop concepts. Total saving £28,050.

## **Sustainability**

The EPW team will continue to adopt a rigorous approach to delivering projects in the most efficient and effective way possible. We will continue to use Scottish Government established frameworks and seek to maximise cost efficiencies on a project-by-project basis. These changes have been embedded into our standard procedures.

#### **Lessons Learned**

The EPW team has a key role to play in questioning and challenging colleagues and partners, where appropriate, to ensure that products and services are specified and developed to be effective and efficient. Sharing examples of cost efficiencies across the organisation helps to share the knowledge of what can be achieved.

## **Estates and Facilities**

## **NHS Borders: Hawick Inpatient Facilities**

## **Background/Context**

Within the community of Hawick, NHS Borders worked across two inpatient facilities. A review was carried out to establish patients' needs and requirements for their care.

#### **Problem**

The two sites were within a mile of each other, and one of the buildings required major refurbishment to ensure it was fit for purpose; this would have incurred significant financial input. Working across two sites was not an efficient way of providing inpatient care.

#### **Aim**

The aim of this project was to consolidate the two buildings as appropriate whilst ensuring quality services for all current and future patients. Another aim was to provide enhanced community based services more efficiently.

#### **Action Taken**

During 2012-13 facilities within the dementia inpatient setting in Hawick were redesigned to allow services to be provided in a community setting. In addition, acute inpatient services were reconfigured to allow for inpatient care to be consolidated on one site.

#### **Results**

This has resulted in a reduction in the amount of resource tied up in buildings. In addition, it has enabled dementia services, which are provided on a community basis, to be involved with an increased number of clients thereby helping to tackle the increased demand for services. Feedback from patients, relatives and support groups is very positive about this model of care for this client group.

This redesign has allowed NHS Borders to enhance the quality of its community based services within this area and realise efficiencies through buildings.

## **Efficiency Savings and Productive Gains**

This review has delivered a number of efficiency gains including:

- reducing the resource tied up in buildings
- benefits of economies of scale of providing inpatient facilities on fewer sites
- better utilisation of remaining inpatient facilities
- opportunities for reviewing skill mix across staff
- increased activity
- improved quality of care for dementia services
- recurring savings of £700,000

## **Sustainability**

This will allow community and inpatient services to continue to be developed and delivered.

#### **Lessons Learned**

This has enabled NHS Borders to consider similar models across other sites.

## **NHS 24: Facilities Management Contract**

## **Background/Context**

A report was written proposing options for consideration for the delivery of facilities management (FM) services to NHS 24 properties from June 2012 (to align with the current BT FM contract extension which ended on May 31, 2012).

An analysis of the new strategic front-line application (SFLA) contract scope confirmed that it did not extend to facilities management services and therefore a facilities management contract from May 31, 2012 was a requirement in any case for at least two NHS 24 properties; Norseman House and Riverside House.

#### **Problem**

FM services comprise:

- facilities management (provision of advice, guidance and contract performance reporting)
- maintenance services (statutory/planned/ reactive mechanical/engineering/fabric and minor works)

- building cleaning (offices/washroom/ prestige/periodic e.g. carpet cleaning/ upholstery)
- catering (food and drink vending/ hospitality)
- office services (pest control/waste management/interior plants/ reception, etc.)
- security
- helpdesk

The services outlined above are in a large part essential and practical to support the smooth and effective delivery of core NHS 24 front-line and non-front-line services and to ensure NHS 24 complies with its health, safety and welfare obligations.

The problem for NHS 24 was that this was no longer going to be included in the Board's infrastructure contract with BT and therefore an exercise had to take place to ensure these services were provided and at best value.

#### **Aim**

An analysis of current service provision concluded that the current service did not provide best value.

Proposed options which could offer better value than the current arrangements, with financial benefits of around 100,000 per year (over 15 per cent year on year saving), were developed for appraisal.

An option appraisal scoring matrix was developed in line with Scottish Government Health and Social Care Directorates guidelines to enable NHS 24 to assess and score the non-financial benefits against each option.

A short life Facilities Management Option Appraisal Group, consisting of support service team managers from each site and a finance representative, met to undertake the option appraisal and thereafter make recommendations to the NHS 24 Executive Team on the preferred option.

#### **Action Taken**

The current service provision was analysed in terms of what is currently provided, the strengths and weaknesses of this and the overall cost. Based on this, a list of options for consideration was generated.

These options were:

- current service with re-tender (i.e. a strategic/operational model with same specification and lease arrangements)
- in-house (direct employ with revise specification e.g. improve cleaning productivity)
- outsource (revise specification e.g. improve cleaning productivity and full FM package for all sites/outsource some lease services e.g. cleaning)
- joint NHS Board partnership

An option appraisal process was followed. This involved establishing a 'weighted scoring method' for this exercise.

It involved the following steps:

- identification of all the non-monetary factors relevant to the project
- weighting the factors
- scoring the options to reflect how each option performs against each factor
- calculate the weighted scores
- test and interpret the results

#### **Results**

By applying the scoring matrix above the following scores were collated:

- Option 1 237.5
- Option 2 248.75
- Option 3 407.5
- Option 4 260

As a result the preferred option is Option 3 – outsource with revised specification as one packaged facilities management contract for all NHS 24 sites.

## **Efficiency Savings and Productive Gains**

Each of the options evaluated is anticipated to provide savings ranging from 9.5 per cent to 16 per cent when compared to the current cost of the combined facilities management services.

The preferred option, while not the cheapest, is anticipated to deliver cost savings of around 15 per cent per year.

## **Sustainability**

The FM Framework Agreement used provides NHS 24 with access to a model contract and detailed specification covering the services required (and can be adapted to suit our needs). The contract period is for three years with an option to extend for a further two

years commencing from June 1, 2012. The procurement process meets the Scottish Government's sustainable procurement standards.

#### **Lessons Learned**

It is important to follow advice received from the Government Procurement Service (formerly Buying Solutions) and with the agreement of the Director of Finance and Technology, the FM contract was procured by accessing the Government Procurement Service FM Framework agreement.

A thorough procurement process needs to be undertaken following Framework guidelines and Scottish Government Procurement best practice including a robust and clear procurement and evaluation process and option appraisal.

Workforce implications, such as TUPE, need to be carefully considered.

## Healthcare Improvement Scotland: Accommodation Rationalisation

## **Background/Context**

Healthcare Improvement Scotland (HIS) was primarily based in two sites in Edinburgh and Glasgow. Both of these were commercially leased premises with impending lease breaks, January/March 2011 for Glasgow and September 2012 for Edinburgh. It was accordingly identified that an opportunity for both rationalisation and cost savings was evident.

#### **Problem**

In order to comply with Scottish Government guidance the driver was to move either, or both, office bases out of the commercial rented sector into NHS/Scottish Government estate whilst also achieving cash efficiency savings where possible. Success would, of course, be largely dependent on identifying suitable alternative accommodation at an acceptable cost within the timescale.

#### **Aim**

The clear aim was to solve the problem outlined above. Could suitable alternative accommodation be identified within the time constraints of the lease breaks, could the physical move(s) be accomplished within those timeframes, were the outcomes deliverable within existing budget frameworks

and to what extent could cash efficiency savings be derived from the result?

#### **Action Taken**

The first critical timing related to the Glasgow base (Delta House) where the lease break was to occur in January/March 2011. The first action was to commission an option appraisal in June 2009 to consider the project options, carry out a financial appraisal and make recommendations. These were adopted by the Board and the appropriate representations were subsequently made to the Scottish Government. However, this gave rise to a significant timing difference as the preferred option involved moving to alternative commercial accommodation due to the lack of suitable NHS/Scottish Government estate being available. In the event a short term solution to assure business continuity was employed that involved extending the lease on Delta House with break points in March 2012 and 2016. This effectively provided a respite for a further 12 months.

This gave rise to two further critical timing points, March 2012 in respect of Delta House and September 2012 for Elliott House in Edinburgh. In response a comprehensive office accommodation option appraisal was prepared covering both sites. This was

adopted by the Board on June 29, 2011 and submitted to the Scottish Government for approval. The recommendations involved relocating the Edinburgh base from Elliott House to Gyle Square which is held on a long lease and forms part of the NHSScotland estate and remaining in Delta House, Glasgow after rationalising the space requirement and renegotiating the lease costs.

#### **Results**

The move in Edinburgh achieved the objective of both relocating into NHS/Scottish Government estate and producing cash efficiency savings. In addition the organisation is now accommodated in a modern facility with a space design tailored to meet its needs.

In Glasgow unfortunately no suitable NHS/ Scottish Government estate was available but occupation of Delta House was reduced from six floors to five and significant cost reductions were delivered.

#### **Efficiency Savings and Productive Gains**

In Edinburgh the annual lease costs of the Memorandum of Terms of Occupation (MOTO) were negotiated to provide for an annual reduction of £95,452 (part year 2012-13, £49,426), a value that continues during the term of occupation.

In Glasgow the savings result from reducing the number of floors occupied by one, freezing the level of service charge until March 2016 and negotiating a rent and service charge reduction of 50 per cent in the first two years. This produces savings of £332,848 in 2012-13 and £312,714 in 2013-14. The savings from the floor reduction of £149,043 per annum will continue for the remaining period of occupation.

In terms of productivity the purpose built nature of the design layout in Gyle Square can be expected to enhance productivity; the accommodation is located on one floor rather than the four at Elliott House and is of an open plan nature thereby promoting easier and more effective communication and interaction.

In addition, HIS was the subject of a comprehensive organisational restructuring and is committed to continue to embrace the concept of generic working for staff wherever possible and to reviewing and improving work processes and business practices wherever possible.

## Sustainability

The premises at Gyle Square, Edinburgh are the subject of a MOTO that runs from September 24, 2012 to June 14, 2029.

The premises at Delta House, Glasgow are commercial leasehold expiring in March 2021 but with a lease break in March 2016. It is anticipated that a further option appraisal will be carried out prior to 2016 to consider afresh the possibility of relocating this office into NHS/Scottish Government estate.

#### **Lessons Learned**

This has proved to be a fruitful area from which both cash efficiencies and productivity savings can be realised.

Timing is crucial and the reality is that the process is likely to take significantly longer than might be originally anticipated. It is very important to identify at an early stage the critical points in the timeline as failure to meet any of these deadlines can have serious implications for the process as a whole.

There is a need to satisfy the requirements and aspirations of a variety of different interested parties beyond the Board itself. These include the Scottish Government, staff, Central Legal Office, possible commercial landlords and external agencies.

It is important to take expert advice where appropriate. This will generally mean the involvement of the Central Legal Office and might take the form of property consultants in relation to the option appraisal.

## **Prevention and Early Intervention**

## **NHS Lanarkshire: Inpatient Falls Project**

## **Background/Context**

NHS Lanarkshire's Quality Hub has identified inpatient falls as one of the top five priorities. The Quality Hub has supported the funding of a small team of subject matters experts to examine this area of work in patients aged over 65 years, using SPSP improvement methodology over a six month period in the first instance. This commenced in October 2012 and has been extended to March 2014. The improvement team consists of physician, senior nurse (full time secondment) and clinical quality manager along with front-line nurses, AHP, physicians and overseen by a quality improvement advisor.

#### **Problem**

NHS Lanarkshire reports 5,000 inpatient falls per year and this has been constant for the last three years:

- 2010-11 4,572
- 2011-12 5,026
- 2012-13 4,732

Falls can cause serious injury, both physical and psychological. Falls also increase healthcare costs and increase hospital stay.

#### Aim

The project aim is to improve assessment and introduce preventative measures to reduce the number of inpatient falls using the evidence based FallSafe bundle, previously piloted in England and Wales:

- to have 95 per cent compliance against the falls bundle measure by April 2014
- to decrease the rate of total falls (measured by all falls in a month over total occupied bed days) by 50 per cent in April 2014 (October 2012 base line)

 to demonstrate a trend of an increase of the days between a fall with moderate or major harm by October 2013

#### **Action Taken**

Using patient safety methodology the bundle was first tested in a medicine for the elderly rehabilitation ward in Hairmyres, whose cohort of patients are at high risk of falls.

Background data was collected by the project team, shared and displayed. Stakeholder interviews were undertaken with staff, patients and carers.

A quality improvement approach was taken:

- identify where changes could be made
- establish the measures
- select the change
- test the change through PDSA cycles
- implement/spread changes

Weekly feedback was provided to staff, and there was visibility of the team in the clinical area.

Monthly meetings, including all members of the project team, were held.

The concept of falls champion in each ward was already established through the existing inpatient falls group, but there was a lack of structured education and support.

Monthly educational and supportive meetings with falls champion, chaired by senior nurse and medical consultant leads commenced April 2012.

Education in quality improvement methodology is also included to front-line staff.

An additional element was added to the existing bundle – the nurse confirms via a sticker on the medicine cardex that the full medicine cardex review has been carried out in relation to risk of medication that contributes to falls.

#### Results

The compliance with all elements of the FallSafe bundle in November 2012 was 0 per cent and moved to 95 per cent by April 2013 for the pilot ward. Spread to the second ward results mirrored the pilot ward.

We are at phase 2 spreading to six additional wards. The falls champion along with the senior nurse collected background data, rather than the senior nurse completing this section alone. Phase 3 commenced in June 2013 and Hairmyres implementation was completed by August 2013.

The spread to the second and third acute site is planned, enabling the completion of spread by end March 2014.

The data in charts 18-20 is for the pilot ward.

## **Efficiency Savings and Productive Gains**

Efficiency is improving the patient experience and over time demonstrating, through the monitoring and support and education of the multi-disciplinary team, that inpatient falls, causing moderate and serious harm will reduce

In time, reducing length of stay will improve efficiency and quality.

## **Sustainability**

The commitment of senior management, on-going support for clinical staff to have the time for education, and on-going development in this subject is included within our older people strategy.

A designated person is available on each hospital site to support and provide on-going development and education to the falls champion to spread good practice in their team.

Clinical quality staff will continue to be visible and accessible to clinical staff.



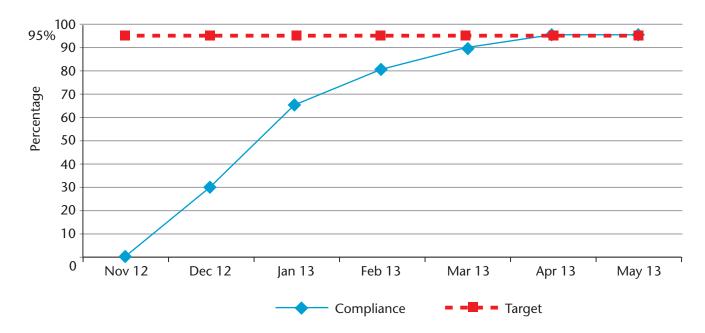


Chart 19: Falls rate per 1,000 bed days (injury only)



Chart 20: Percentage of falls resulting in injury



#### **Lessons Learned**

For the senior nurse on secondment, this has been a great opportunity to consolidate previous education on Lean/PDSA methodology and enable concentrated work, focused on a specific topic.

This model of having clinical quality as part of the project team rather than from afar providing data has been exceptional. The multi-disciplinary team having equal involvement from the beginning has been pivotal to the progression, and in the timeframe suggested.

Clinical staff feel supported and confident to discuss test of change with peers.

## Older People's Collaborative

## NHS Grampian: Older People in Acute Care Collaborative

## **Background/Context**

Older People in Acute Care is now a national improvement programme which also fits with the national Dementia Strategy. There is also a national inspection programme around Older People in Acute Care. The local collaborative between NHS Grampian and NHS Tayside has informed the national programme and our local team have worked to support this.

#### **Problem**

There is a need to ensure consistent, standardised, high-quality care for older people in acute care.

#### Aim

To improve the experience of older people in acute care through the delivery of a personcentred approach by November 2013.

#### Goals include:

- 95 per cent of patient satisfaction scores are excellent
- 300 days between formal complaints
- 95 per cent of appropriate patients receive a standardised screening on admission to hospital

#### **Action Taken**

A driver diagram has been developed with an associated measurement plan.

#### Results

Achievements in patient experience, standardised screening, multi-disciplinary working, safety briefs and board rounds leading to enhanced communication. Other areas include open visiting, use of volunteers, nutrition, comfort rounding – supporting data is shown in charts 21-25.

## **Efficiency Savings and Productive Gains**

The following have been achieved:

- patient experience issues are dealt with at the time of issue allowing for better communication between patients and staff and therefore improved experience
- consistent, standardised screening of patients over 65 ensuring patients are positioned on the right care pathway enabling access to appropriate services in a timely manner
- enhanced communication between multidisciplinary teams ensuring less repetition for patients, enhancing experience

#### **Sustainability**

A leadership meeting is planned in July 2013 to discuss sustainability and spread of the collaborative. Formal plans will be drawn up. The collaborative is being funded through third year funds in order to ensure sustainability. The fourth learning set is planned for December 2013, jointly with NHS Tayside.

#### **Lessons Learned**

The collection of data has been a challenge for teams and we need to look at a new way of collecting data that is more effective and less of a burden for teams. Early testing is underway using case note review to collect data relating to the patient journey. This involves looking through a patient's record, tracking the journey of care and collecting relevant data. The aim is to make this process multi-disciplinary and real-time so the team can ensure everything that needs to happen for the patient happens at the right time. The outcome for patients being that this will reduce the risk of harm and they will have a good experience of care.

The collaborative team are also looking at simplifying the measurement plan, by reducing the number of measures and ensuring that there is a balance when the teams report on the measures. An example of this can be seen with the complaints measure, which has a target of 300 days between complaints. Some areas have achieved this target; however, for other areas this may seem like an impossible target.

Building the 'dream team' to drive sustainable improvements to care is critical.

Give permission to teams to lead improvements in their areas.

Chart 21: Overall NHS Grampian patient experience – percentage with excellent rating

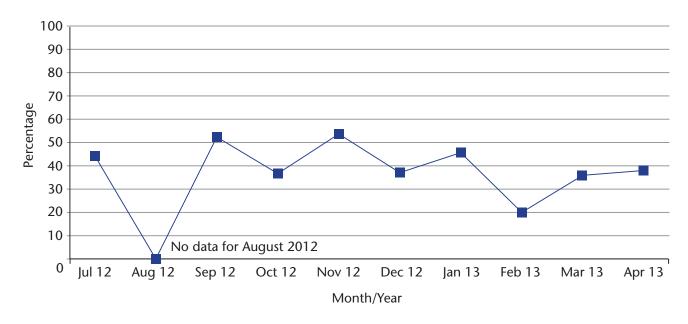


Chart 22: Percentage of patients screened using a standardised screening tool

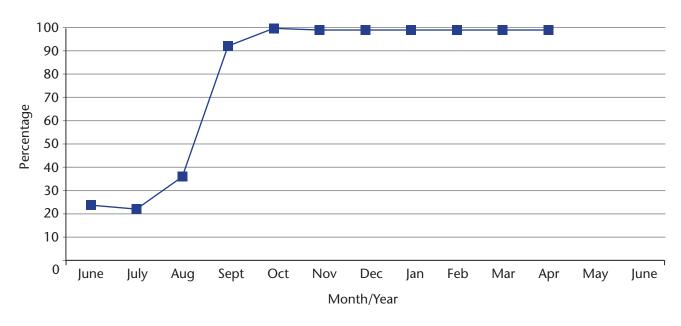
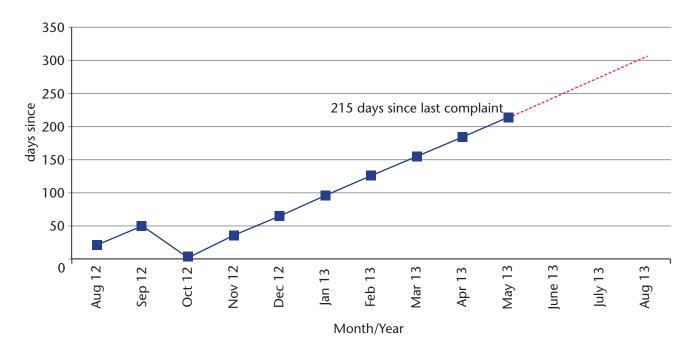


Chart 23: Ward 44 ARI, complaints information



## Chart 24: Ward 11/12 Older People in Acute Care Collaborative

Change 8: Education of staff using the Promoting Excellence Skills Framework

Change 7: Introduced 'Tuck Shop' to wards 11/12

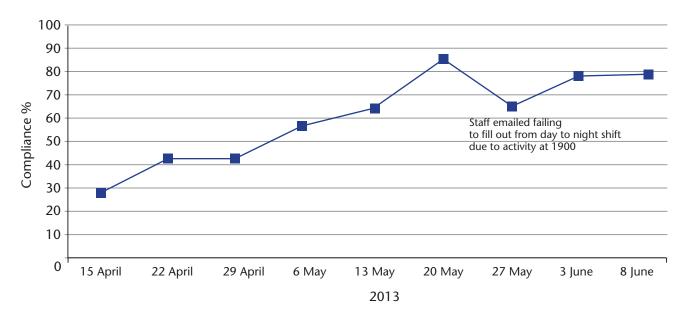
Change 6: Introduction of comfort rounding Change 5: Introduction of the Board Round Change 4: Introduction of safety briefing

Change 3: Patient experience

Change 2: Introduction of standardised screening for all patients over the age of 65

Introduction of the Butterfly scheme for all Change 1:

Chart 25: Safety Brief Paper Copy. Observation ward day and night shift



## Workforce

## **NHS Lanarkshire: Admin Improvement Programme**

## **Background/Context**

NHS Lanarkshire made a commitment to improve productivity and efficiency in acute admin services as one of the avenues to reduce costs without detriment to patient care. Health records were included to ensure costs were not being 'shunted' from one area to another.

The programme started in 2011-12, after scoping work. The intention from the outset was to reduce waste, so that cost savings were accompanied by improved processes and improved service levels.

In 2011-12 savings of £627,000 were achieved in year. In 2012-13 the target was to achieve in year savings of £500,000 and recurring savings of £1.25 million across the two year programme.

#### **Problem**

From a service perspective, there was a need to resolve typing queues. These varied significantly – in some areas there were backlogs of 10 weeks. Coding also needed to be brought under control. Backlogs of several months had accrued. Understanding typing queues and workloads was difficult. It was done through counting tapes awaiting dictation.

There were inconsistencies in staff deployment when resource was assessed in relation to patient flows through the three hospitals in Lanarkshire. There were also inconsistencies in the way staffing levels were understood, due to historic cross-charging arrangements and use of vacancies, non-recurrent money etc. as funding sources.

The primary service goal was to achieve 48 hour turnaround on typing. In reducing waste it was also planned to save £500,000 in 2012-13 and £1.25 million across the two year programme on a recurring basis.

#### **Action Taken**

The following actions were taken:

- financial controls and workforce monitoring every month
- process mapping of secretarial work to eliminate problems
- implementation of digital dictation
- development of performance measures from digital dictation
- development and implementation of a common process for managing the return of case records – using Trakcare and saving **10 WTE**
- secretarial staffing re-aligned to match workloads across the three hospitals (small changes made, mostly as staff left the service)

#### Results

The following results have been achieved:

- costs savings of £1.25 million achieved on a recurring basis (assuming current staffing levels maintained)
- average typing turnaround is now four days (still work to do to achieve 48 hour turnaround)
- coding backlog eliminated and coding being achieved within six week target

## **Efficiency Savings and Productive Gains**

£1.25 million achieved as an efficiency gain over two years. £500,000 in efficiency gains in 2012-13.

Some productivity benefits on top of this, coming from the removal of typing and coding backlogs but these are hard to quantify because part of the original problem was a lack of measurement.

## Sustainability

Measures are in place to control core processes:

- typing
- coding
- case record management

Further work is being done to ensure new technology will be used consistently and efficiently e.g. WardView, scanned patient records, patient portal, order communications for radiology and laboratories.

Establishing consistent processes with these new technologies should underpin the efficiency gains made and lead to further improvements in the quality and reliability of service standards. There is much still to do.

#### **Lessons Learned**

The following lessons were learned:

- it is important to tie down basic measures at the outset (e.g. staff numbers). Managers have to be measuring like with like
- staff are often very aware of what needs to be improved but feel powerless to make changes
- effective use of measures from digital dictation does lead to significant productivity increases
- clinical staff have a large part to play in admin efficiency, based on the way they work
- paper case records are complex to manage as healthcare journeys are shortened and often take place over multiple locations

## The State Hospital: Nursing Skill Mix Savings 2012-13

## **Background/Context**

The State Hospital developed a new clinical model which set out the principles for delivery of services in the new hospital – the build programme for which was completed in September 2011. This helped to influence the skill mix which was required for nursing to fit in with the integration of multi-disciplinary team working.

#### **Problem**

Nursing is a high cost service and is the principal cost within the budget of The State Hospital. The historic skills mix included a higher proportion of trained nursing staff than was necessary.

The Psychological Therapies Service worked in parallel with the clinical teams before the opening of the new build, but then became fully integrated into the newly-created ward Hubs – these staff also being trained.

In addition, the services provided are located more closely together in the new build, allowing patients to be cared for in the centrally-located facilities for more time during the day.

#### Aim

To have a trained/untrained skills mix set at acceptable levels. With multi-disciplinary teams in the hospital following the new build, this also highlighted the lower demand for trained nursing staff.

#### **Action Taken**

Worked in partnership to recruit an increased number of untrained nurses (in line with the agreed Workforce Plan and Local Development Plan) – as trained staff left through natural wastage or planned retirals.

#### **Results**

From the resources saved, this allowed reinvestment in other areas for patient activity, in line with the KPIs included in the LDP.

## **Efficiency Savings and Productive Gains**

The planned skills mix has allowed resources to be spent more effectively as well as contributing to recurring savings.

Savings of around £140,000 have been achieved, which have been reinvested in enabling more patient outings, increased music therapy sessions, and new art and drama therapy sessions. In addition, it has allowed for more activities in the purposebuilt recreation centre.

New practices have adopted new ways of working in place of more costly historic practices.

## **Sustainability**

Further skills mix savings are planned with the aim that – by the end of 2014-15 – the desired skills mix will be achieved.

#### **Lessons Learned**

Workforce planning and an integrated focus through the LDP enables the identification of the potential better use of resources.

## **Organising for Quality and Efficiency**

## NHS Education for Scotland: Activity Based Costing and Benefits Realisation

## **Background/Context**

NHS Education for Scotland (NES) has undertaken activity based costing reviews across the whole organisation to seek areas for improvement and efficiencies. All eight directorates have received an activity based costing report outlining recommendations for improvements.

#### **Problem**

NES has had to deliver significant cash releasing efficiencies over the last three years and it has therefore been increasingly important for directorates to understand how their activities consume resources. This allows directorates to make assessments around whether the correct level of resource is being applied to support various aspects of their business. The activity based costing reports have indicated several consistent themes:

- duplication of effort
- standardisation of approach
- resources available
- technology advancement
- opportunity for integration as areas that directorates and NES should concentrate on as part of their improvement plan

#### Aim

The aim is to identify improvement opportunities, including benefits realisation plans, within each directorate and areas where collaboration and integration will be most effective.

#### **Action Taken**

NES has used activity based costing methodology as an initial approach to identify directorate activities (tasks) and associated resource costs. From these reports, each directorate has produced a benefits realisation and improvement plan. NES monitors progress being made and the realisation of benefits through its organisational performance improvement programme.

#### Results

The activity based costing reviews have enabled benchmarking and comparison of resource to outputs that have enabled areas for savings to be identified that would not otherwise have been possible.

## **Efficiency Savings and Productive Gains**

Directorates have categorised their benefits realisation in the following ways:

Cash releasing – this has been achieved through organisational change responding to the recommendations particularly around duplication and standardisation of business processes. As a consequence some NES staff have taken the opportunity to apply for voluntary severance and directorates supported this through

- organisational change and redesign. Around £750,000 was released as a result of this process. In addition, £44,000 has been realised across NES as part of directorate improvement plans.
- Quality improvement several Lean events have taken place during 2012-13 and introduced streamlined business processes, removing waste and improving efficiency.
- Productive gain NES has been able to take on additional work without additional resources, using the capacity created from the activity based costing reviews.

## **Sustainability**

NES has put in place a small organisational performance improvement team with the responsibility of providing an overview of all directorate improvement/benefit plans. The team work closely with all directorates providing improvement support, facilitation and monitoring of milestones within the plans. The NES Organisational Performance Improvement Board meets every eight weeks to review the plans and shares best practice/ deliverables. This Board is chaired by the Deputy Chief Executive and has representatives from all directorates as the nominated 'improvement lead', the Employee Director, Deputy Head of Human Resources and Head of Organisational Development.

#### **Lessons Learned**

Having a team responsible for oversight of all performance improvement activity across the organisation ensures that directorates respond to the recommendations in the activity based costing reports. Close partnership working is crucial along with human resources and organisational development support. Developing, and delivering, clear benefits plans has been the most challenging aspect for directorates.



## Appendix 1

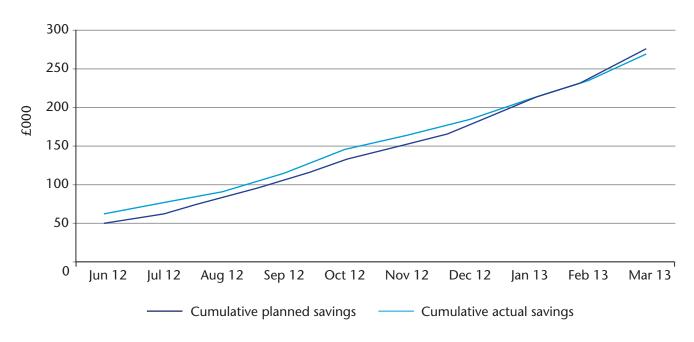
## **Efficiency Savings 2012-13**

## **Planned v Actual Efficiency Savings**

NHS Boards are required to identify planned efficiency savings as part of their Local Delivery Plan (LDP). The achievement of these savings is monitored on a monthly basis.

Chart A1 illustrates the planned and the reported actual efficiency savings achieved by NHSScotland during 2012-13.

Chart A1: NHSScotland planned v actual efficiency savings



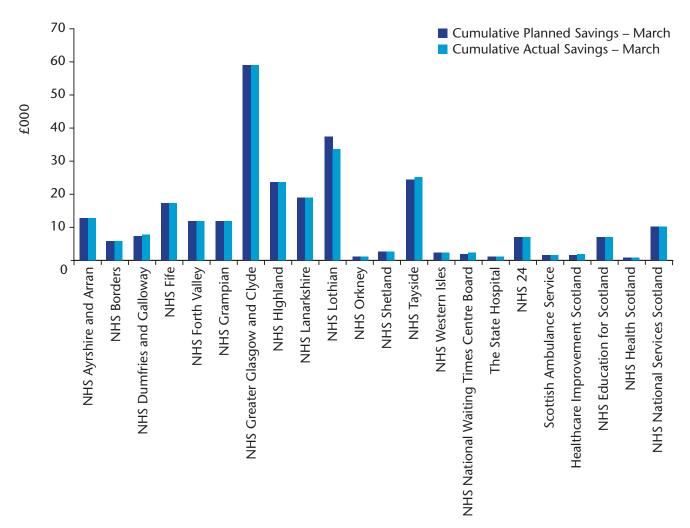
Overall the achievement of actual savings has been slightly ahead of those planned throughout the year. However, by March 2013 actual savings were in line with those planned at £270 million (£264 million target).

In the majority of cases the reported savings were in line with, or greater than, those planned per NHS Boards' LDPs. Chart A2 shows the planned and actual savings per NHS Board.

## **Savings per Efficiency and Productivity** Workstream

The efficiency and productivity workstreams align to the savings categories in NHS Board LDPs and monthly monitoring returns as outlined (table A1).

Chart A2: Planned v actual efficiency savings per NHS Board



**Table A1** 

Efficiency and Productivity Workstreams	Categories per LDP
Prevention and Early Intervention	
Outpatients, Primary and Community Care Acute Flow and Capacity Management Evidence Based Care	Clinical Productivity
Prescribing	Drugs and Prescribing
Procurement	Procurement
Shared Services	Support Services Estates and Facilities
Workforce	Workforce

Chart A3: Efficiency savings per workstream

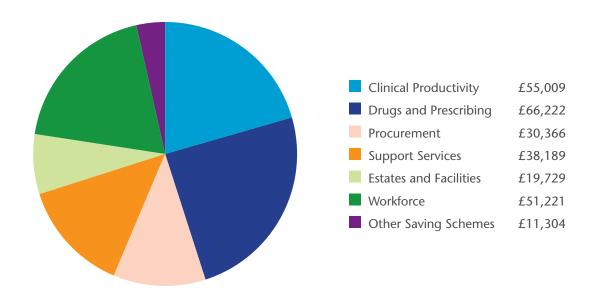


Chart A3 details the proportion of reported savings achieved through each of the workstreams.

- A quarter of efficiency savings achieved in 2012-13 relate to prescribing. This is a significant increase in both absolute (2012-13, £66 million; 2011-12, £33 million) and proportionate terms (2012 13, 25 per cent of total; 2011-12, 10 per cent of total).
- Workstreams associated with clinical productivity delivered 20 per cent of the savings total amounting to £55 million. There is a decrease in the proportion of savings delivered as a result of improvements in clinical productivity (2011-12, 28 per cent of total amounting to £89 million).
- Workforce workstreams delivered 19 per cent of the savings total (2011-12, 17 per cent of total).

- Procurement, Support Services, and Estates and Facilities each delivered between 7 per cent and 14 per of the savings total. This is broadly in line with the previous year.
- A small proportion (3 per cent) of savings was delivered through other local saving schemes.

## Recurring v Non-Recurring Savings per **Efficiency and Productivity Workstream**

Recurring savings are those which once achieved recur year on year from that date (e.g. savings on staff costs as a result of streamlining processes). Non-recurring savings are those which are one-offs (e.g. receipt from the sale of a fixed asset, such as a building). It is important that savings are recurring to ensure sustainability of the financial position and to reduce the risk of non-achievement of savings targets in future years.

**Chart A4: Recurring v non-recurring** savings per efficiency and productivity workstream

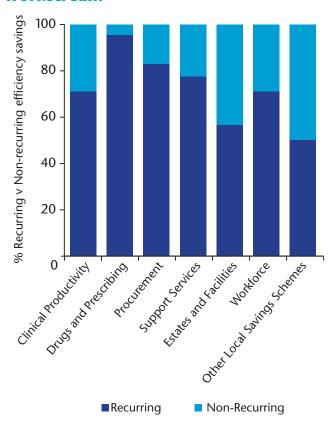
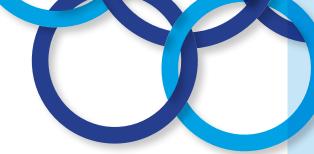


Chart A4 details the proportion of recurring and non-recurring savings achieved through each of the workstreams.

- £211 million (78 per cent) of savings across all workstreams are recurring; this is in line with 79 per cent recurring savings in 2011-12
- 96 per cent of prescribing savings are recurring (2011-12, 99 per cent)
- Estates and facilities have the lowest proportion of recurring savings (57 per cent)
- Where NHS Boards have made savings classified as other local saving schemes almost half of these are non-recurring (49 per cent)
- The remaining workstreams have achieved recurring savings of between 72 per cent and 83 per cent



## Appendix 2

## **Executive Lead Contacts**

Below are the Efficiency and Productivity Leads in 2012-13. For the current list click here

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NHS Dumfries and Galloway	Chris Sanderson	Efficiency and Productivity Manager	csanderson@nhs.net
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