

QI Awards 2019 Poster Submissions



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Northampton General Hospital NHS Trust
- 32 Increasing leadership capability of the consultants of tomorrow
Northampton General Hospital NHS Trust

Most Inspiring Award

Winner

Gloucestershire Hospitals NHS Foundation Trust

Introduction of influenza point of care testing (POCT) to reduce hospital-acquired flu and bed days lost to flu during 2017/18 season

The judges were impressed with the measures used, the driver diagram and results achieved in reducing hospital acquired flu. It was felt this poster offered some great ideas for other organisations.

Second place

Hampshire Hospitals NHS Foundation Trust

Building a radiology culture of continuous quality improvement

This was considered a great project giving a lovely example of a whole hospital department taking an improvement approach to improve the culture in the department and staff and patient experience.

Commended

Northampton General Hospital NHS Trust

Blood culture contamination

University Hospitals Coventry and Warwickshire NHS Trust

Fracture clinic care pathways

Gloucestershire Hospitals NHS Foundation Trust

An appetite for improvement QI project

Introduction of influenza point of care testing (POCT) to reduce hospital-acquired flu & bed days lost to flu during 2017/18 season

Dr J Boyes, Consultant Medical Microbiologist



THE SAFETY CONCERN

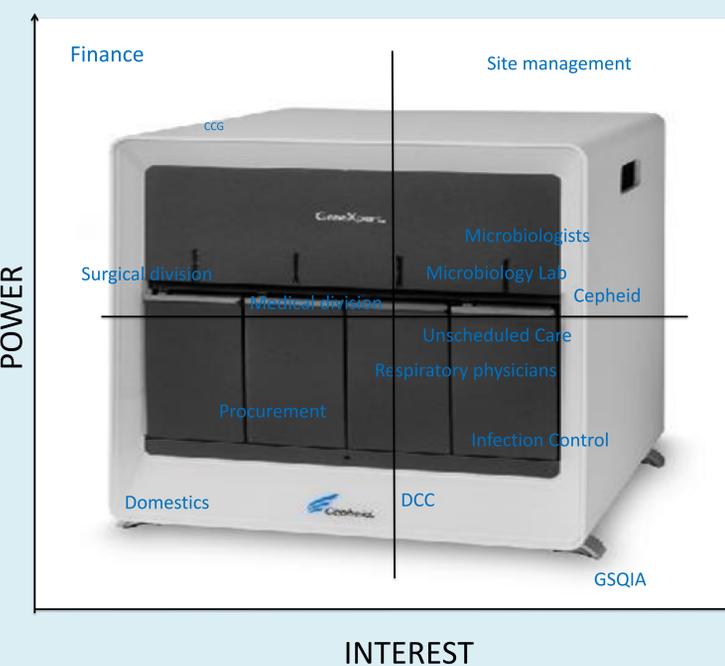
During the 2016/17 influenza season (December 2016 to March 2017) there were a significant number of cases of hospital-acquired influenza (flu +ve ≥5days from admission) and also a significant number of bed days lost to influenza at GRH. This resulted in lost revenue, breaches in ED, additional antiviral costs and of course a degree of reputational impact for the Trust. Hospital-acquired flu at GRH last season was 63 out of 165 total flu positives = **38.1%**. There were **195** bed days lost at GRH over a similar time period. It was felt that this number of hospital acquired cases of influenza and this number of lost bed days was unacceptable!

AIMS

1. To reduce the number of hospital acquired case of influenza by 50% between December 2017 and the start of April 2018
2. To reduce the number of bed days lost due to influenza by 50% between December 2017 and the start of April 2018.

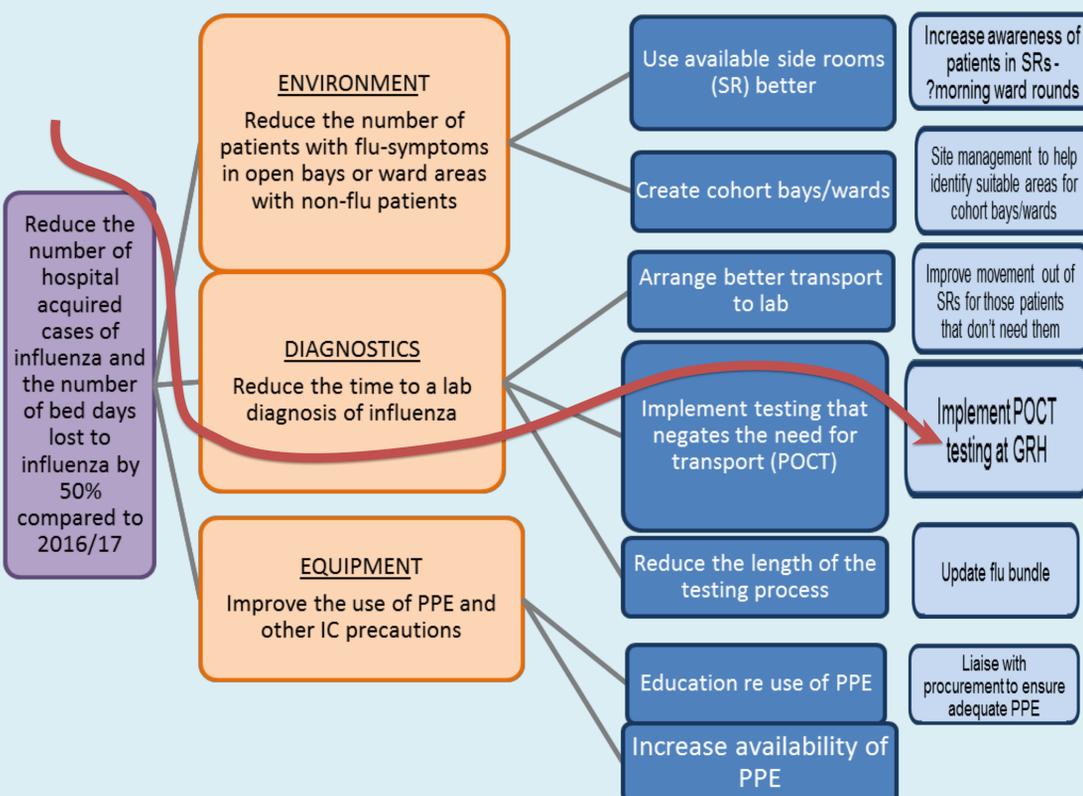
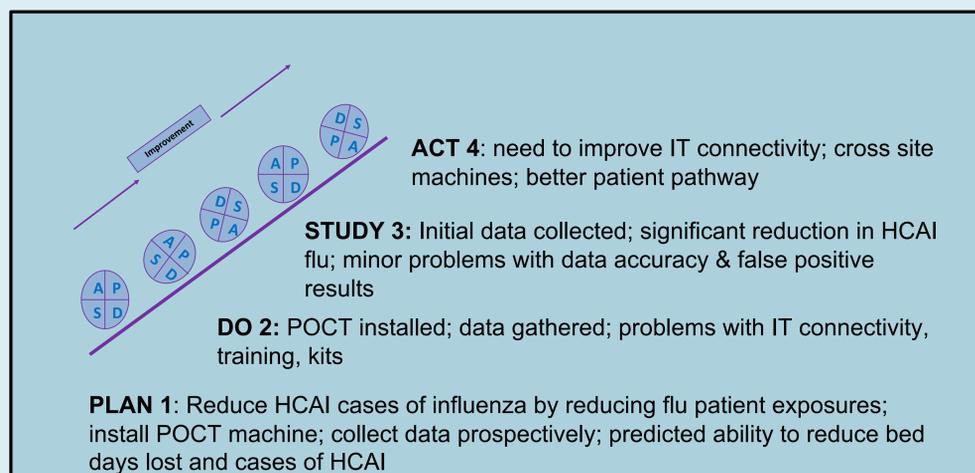
THE QI TEAM (LEAD – Dr John Boyes)

Pathology – Jeff Keast (ChemPath), Jon Lewis (Micro), Gillian Graham (IT support), other CMMs
Medicine – Dr Jeff Meecham-Jones (Resp), Dr Emma Wylie & Chris Custard (Unscheduled Care), ANPs – Lou, Sarah, Jemma, Kate
Infection Control – all the ICNs (and Sue of course!), Dr Rob Jackson
Procurement – Lee Robertson
Cepheid – Alison Tilley & Eric Michel



← Fig 1 Stakeholder diagram: The people and depts. with a vested interest in the project showing estimated interest versus power to enable project to succeed.

Fig 2 → PDSA cycle showing overarching approach of the pilot study at GRH.



RESULTS:

1. Flu diagnosed ≥5days into admission at GRH 2017/18 = 74/543 = **13.9%**
Total reduction in cases of HCAI influenza = **63.5%** (target 50%)
2. Bed days lost at GRH 2017/18 = 5
Total reduction in bed days lost due to influenza = **97.2%** (target 50%)

OTHER BENEFITS:

- Total savings of **£228,188.00** for the Trust
- **196** patients prevented from getting hospital acquired influenza
- **12** deaths from influenza prevented

1. <https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis>
2. Elaine Ross, Martin Connor, Adele Foster 'No sitting ducks' presentation. The impact of point of care PCR testing on admission to hospital. NHS Dumfries and Galloway
3. Reducing HCAI – what the commissioner needs to know. Sarah Mantle NHEngland presentation ppt. March 2015
4. Progress report on the UK 5 year AMR strategy: 2016. Department of Health and Social Care. November 2017. <https://www.gov.uk/government/publications/progress-report-on-the-uk-5-year-amr-strategy-2016>

Building a Radiology Culture of Continuous Quality Improvement

Hayley Connoley, Radiology Performance Manager and Dr Aarti Shah, Consultant Radiologist

Author: Hayley Connoley

1. Introduction

A number of well known key national reports published in England have highlighted significant failings in the quality of healthcare provision in a number of areas; Francis report (2013), Keogh Report (2013) and Berwick Report (2013). Each report recognised the importance of 'Quality Improvement' as a mean of improving care.

2. Vision

'Everyone is an improver'

Our goal is to instil a culture of safety and quality throughout the department and have it become part of daily work for each practice member in each area

3. Aim

To create a culture of continuous improvements in patient outcomes, patient care and staff morale by December 2018.

4. Methodology

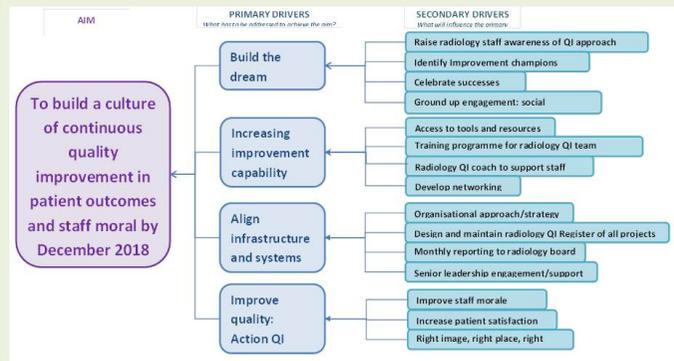
- To build a culture of trust and innovation
- To develop people, providing the forum for staff to learn the quality improvement skills to identify, improve and sustain change
- Radiology QI lead's identified: 1 x Consultant Radiologist, 1 x Radiology Operational Manager.
- A team of in house champions identified. 15 staff members in total from 5 different staffing groups; Nurses, RDA's, Administrators, Sonographers, Radiographers and Managers.
- across all modalities and sites.



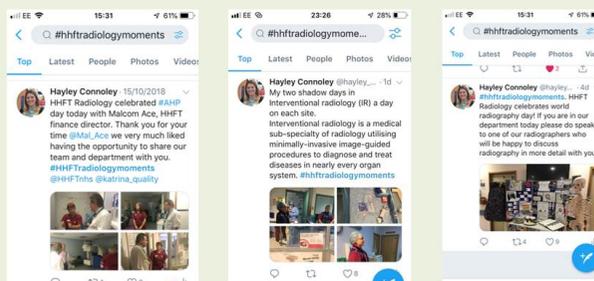
5. Results

5.A Building the dream

- Radiology QI lead to enrol and complete HHFT QI Practitioner, Improver and Coach programme.



- Promote the Radiology department, services, improvements and staff
- Celebrate successes
- Social media utilised to promote - **#HHFTradiologymoments**



5.B Align infrastructure and systems

- Radiology QI strategy agreed
- Alignment of radiology QI with HHFT QI objectives
- Alignment of radiology QI with Radiology Clinical Governance and Radiology board
- Monthly reporting to Radiology board

6. Examples of Improvements

Satisfaction:

- Patient satisfaction survey- Improved understanding of 'our patients' view on the services we provide
- Staff surveys- Improved understanding of 'our staff view on their working team, department and environment

Professional outcomes:

- Improved image quality in MRI via standardization of protocols and delivery of regular feedback and MRI based teaching

Process improvement:

- Implementation of electronic vetting for DEXA- 50% reduction in referral vetting times in DEXA scanning to speed up patient access
- #acuradiology champions- Improved ambulatory patient access and turnaround times into US, MR and CT.

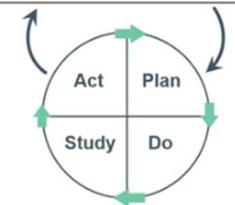
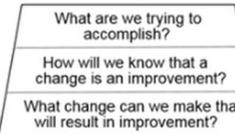
7. Next steps

- Create a visual display area to share learning;
 - The 'Radiology Room for Improvement'
 - The 'Radiology Wall of Fame'

- Develop a radiology wellbeing council
- Hopefully to achieve a transformational change to embed quality improvement into the fabric of everyday care.

- Increase Radiology QI team members
- Design an in-house training programme to ensure all Radiology QI team members have the capabilities to support the wider department and are able to practice and champion the Model for Improvement.

Model for Improvement



Reducing Blood Culture Contamination Rates in a District General Hospital

T. Axelson, E.Trzcinska, B. Alouanti, A. O'Connell, H. Slyne, S. Beech
 Contact: t.axelson@nhs.net

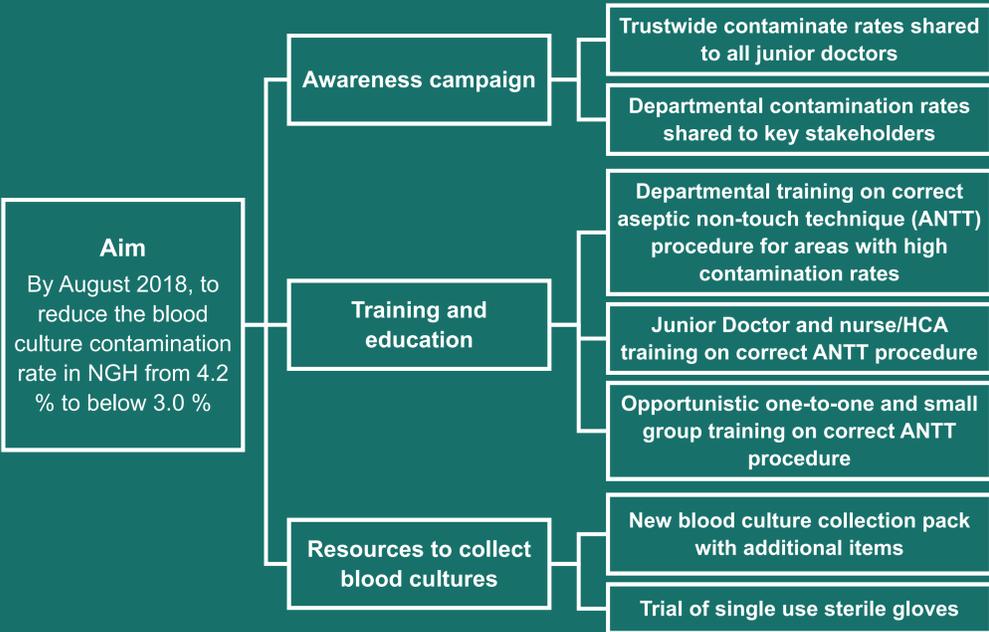
Background

Northampton General Hospital NHS Trust (NGH) is a busy district general hospital which provides general acute services to a population of 380,000 within the East Midlands. This project was led by a junior doctor in collaboration with the quality improvement team, under the supervision of a senior Microbiology Consultant.

Blood cultures are widely accepted as one of the most important investigations in an unwell and potentially septic patient. They allow for confirmation of bacteraemia and identification of the causative organisms involved and whether there is any antibiotic resistance. This is vital to patient care as it allows us to tailor antibiotic therapy as needed.

Blood culture contamination has been an issue in hospitals worldwide and contaminants are often introduced in the sampling of the culture. This can be problematic for a number of reasons. It can complicate patient care, resulting in patients receiving unnecessary antibiotics or longer hospital stays. It may delay processing of samples with true bacteraemia – meaning patients that require tailored antibiotic therapy may be on an unsuitable antibiotic for longer. Contamination is also associated with increased processing costs.

WHAT ARE WE TRYING TO ACCOMPLISH?



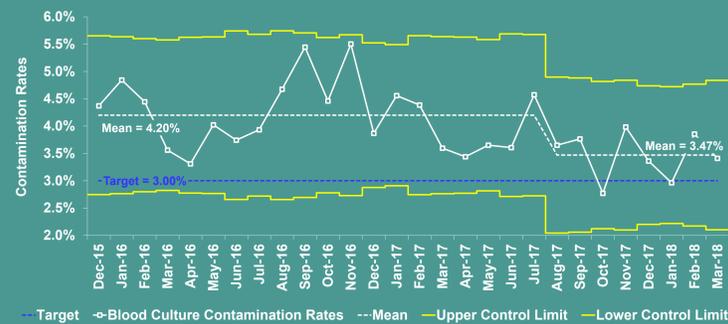
Benefits

- Reduced processing time and cost for blood cultures
- Reduced consumption of antibiotics
- Staff development

HOW WILL WE KNOW A CHANGE RESULTS IN AN IMPROVEMENT?

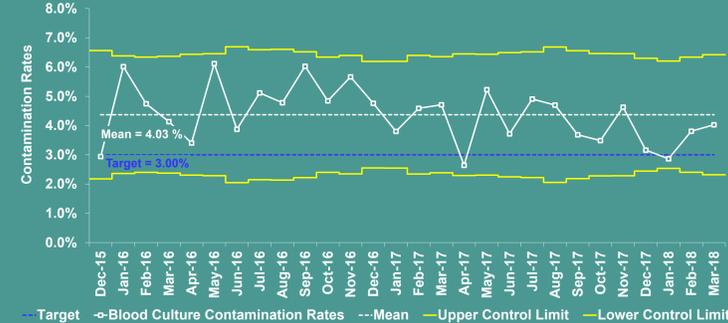
PRIMARY OUTCOME MEASURE:

Blood Culture Contamination Rates (Trustwide)



SECONDARY OUTCOME MEASURE:

Blood Culture Contamination Rates (Emergency Department)



PROCESS MEASURE:

Number of staff trained

Designation	No. Trained
Foundation Year 1	21
Foundation Year 2	18
Anaesthetic Trainee	5
Emergency Department staff	39
Pathology staff	7
TOTAL	90

WHAT CHANGE CAN WE MAKE THAT WILL RESULT IN AN IMPROVEMENT?

PDSA CYCLE 1 (Aug 2017—ongoing)

Awareness Campaign

The high contamination rates were shared and informally discussed with junior doctors in the hospital. Department-specific information was shared to highlight areas of concern.

PDSA CYCLE 2 (Oct 2017—Mar 2018)

Training and Education

Several training sessions were delivered to staff on the high contamination rate in the hospital and in certain departments. This presentation included a refresher on correct aseptic non-touch technique procedure for collection of blood cultures. A selection of slides from the presentation are shown in Figure 1.

PDSA CYCLE 3 (Planned)

New blood culture collection pack

The current blood culture collection packs do not contain all of the necessary equipment needed to take a blood culture. Items missing from the pack include:

- Needles and adaptors
- Single use tourniquets
- Sufficient sanicloths

The new pack (shown in Figure 2) will contain the appropriate equipment as well as the Sepsis Six information and the criteria for identifying septic patients.

PDSA CYCLE 4 (Planned)

Trial of single use sterile gloves

Dependant on the outcome of PDSA cycle 3, we are also planning to trial the use of single use sterile gloves for blood culture collection in a department with high contamination rates.



Figure 1: A selection of slides from the presentation delivered in PDSA cycle 2



Figure 2: A prototype of the new blood culture collection pack

BALANCING MEASURE:

Annual Financial Saving

Metric	Saving
Reduction in processing costs (n=144)	£4200
Reduction in antibiotic consumption (n=144)	£34100
TOTAL	£38300

PROCESS MEASURE:

Staff feedback on training

- “Clear, concise and easy to follow. A good review of appropriate blood culture technique” - FY1 Doctor
- “Good refresher on blood culture taking and to inform us of contamination and its effects” - FY1 Doctor
- “Very useful—information re-costings and technique” - FY2 Doctor
- “I liked examples from practice of sources of infection” - BMS
- “Very informative and will change my practice” - Staff Nurse in A&E

Conclusion

The blood culture contamination rate at Northampton General Hospital exceeded national guidance (at 4.2 % across the hospital site). As noted above, increased contamination rates complicate patient care, resulting in unnecessary antibiotic use and prolonged hospital stays. The financial burden of having raised contamination rates is substantial – as it results in increased processing and patient care costs. Following informal information sharing and interactive teaching sessions, we have managed to reduce overall hospital contamination rates to 3.5%. Whilst this remains higher than national guidance of 3%, it is certainly a step in the right direction.

What's Next?

We hope to further reduce the contamination rate in Northampton General Hospital to below national guidance. We will continue to deliver interactive teaching sessions with front line staff. In addition, we are preparing to bring out a more user friendly blood culture collection pack which contains all the necessary equipment. The pack will be printed with the Sepsis Six screening tool and information on recognising a septic patient. We are also planning to trial single use sterile gloves for blood culture collection. This will be trialled in a department with high contamination rates, such as critical care or the emergency department.

REDUCING THE RISK OF PRESSURE ULCERS UNDER PLASTER CASTS

UHCW PLASTER CAST CARE PATHWAY

BY STEVEN HAYES SENIOR PLASTER TECHNICIAN AND LIZ MOORE
FRACTURE CLINIC MANAGER

Background

Pressure ulcers are a key indicator of the quality, safety and experience of patient care. Despite progress since 2012, in the management of pressure ulcers, they remain a significant healthcare problem, with over 1,300 new ulcers reported each month (Source NHS Digital) and up to 200,000 people developing a new pressure ulcer in 2017/18 (Guest et al 2017). Treating pressure ulcers costs the NHS more than £1.4 million every day (Guest et al 2017).



Problem

Medical devices, such as casts and splints, increase the risk of pressure ulcers developing (Browning and Williams, 2016) and a significant number of ulcers are associated with these. Patient and staff knowledge around these risks was found to be lacking. Joseph and Clifton (2013) identify that nurses need to be knowledgeable of the signs and symptoms of pressure ulcers and use preventative strategies to reduce their incidence. Cornock (2014) and the NMC (2015) state that nurses have a duty of care to meet the needs of and prevent harm to patients while in their care.

Intervention

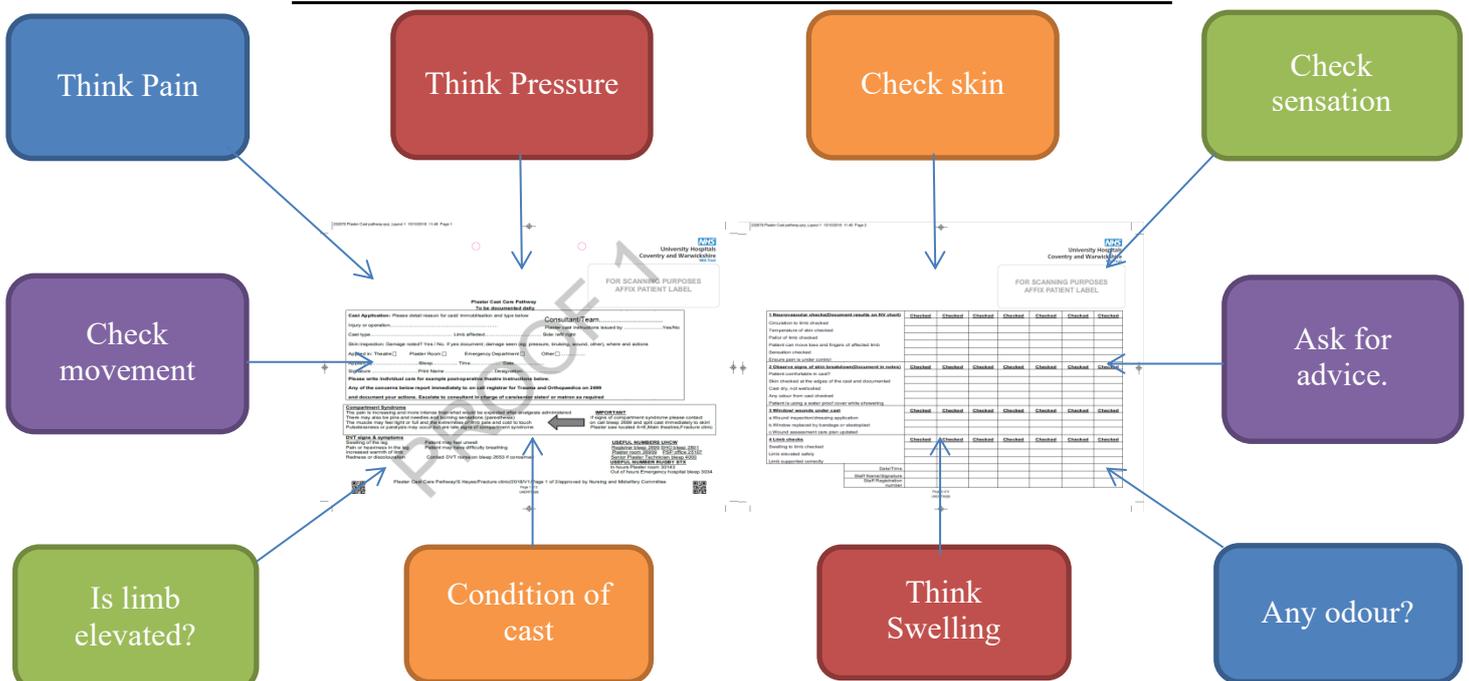
Following serious incident, in which a grade 4 pressure ulcer developed under a cast, and subsequent investigation meetings it was agreed that a checklist style plaster cast care plan would be devised. Bakody 2009 identifies that nurses need to have a good knowledge of plaster casting to enable patient safety and to assist patients in identifying the development of possible complications. The local learning events also showed that ward staff did not all have comprehensive knowledge.

Strategy for change/Next Steps

A Plaster Cast Care Pathway was devised and approved by Trauma/Orthopaedic consultants, Nursing and Midwifery and documentation committees. To be used for every patient with a cast in situ, it involves checking the cast and skin every day.

NEXT STEPS - to provide a plaster room outreach service in order to attend daily clinician ward rounds, carry out required casting to inpatients in a timely manner, assist and teach nursing staff how to manage patients with casts.

IT ONLY TAKES A MINUTE NURSE!



TO CHECK THE CAST!

An Appetite for Improvement; reducing the incidence of bloodstream infections in patients receiving parenteral nutrition via a central venous catheter.

Margaret Collins Specialist Nurse, Nutrition Support Team, Gloucestershire Hospitals NHSFT

A bloodstream infection (BSI) is a recognised risk associated with parenteral nutrition (PN) administered via a central venous catheter (CVC). It can be life-threatening, leads to an extended hospital stay and, for patients reliant on PN, it can mean 7-14 days without nutrition. NICE estimate that the cost of each catheter-related BSI is £9,000.

Aim:

50% reduction in the incidence of BSI associated with a CVC in patients receiving PN in an adult ward by end of 2018.

Method:

The BSI rate is recorded each month and the number of days of PN administered each month is used as a balancing measure to allow fair comparison of monthly BSI rates. Monthly infection rates were therefore recorded per 1000days of PN. The actual amount of PN administered per month was 85-216 days.

A root cause analysis tool (RCA) was developed to investigate each BSI thought to be linked to the CVC. Findings from each RCA were reported to the relevant ward manager to highlight areas which could be improved and guide action planning on the ward. Findings from the RCAs were plotted on a pareto chart to identify the most frequently occurring factors where improvements should be focused. A driver diagram was used to plan the improvement process and identify change ideas. Engaging ward nurses, improving their knowledge and understanding of risk factors for developing a BSI and promoting best practice in management of CVCs were key aspects of this project.

Pop-up ward based teaching sessions for nursing staff were used to highlight the risk factors for developing a BSI and clarify best practice for management of CVC and PN. Nurses were invited to complete an anonymous questionnaire to gauge their knowledge regarding PN and care of a central venous catheter. Results of the questionnaire guided teaching topics and provision of posters for wards to highlight specific areas of care.

We worked with the Vascular Access team to switch to single, rather than dual, lumen peripherally inserted central catheters (PICCs) to reduce the number of times the PICC was accessed and so reduce the risk of infection.

In a small number of patients who required PN for more than 28 days, we trailed the use of a protective cleaning cap on the CVC.

Results:

We have made a 49.6% reduction in BSI rates so far in 2018. We are on track to meet our target of a 50% reduction.

Implications:

The RCA findings have shown that there are a number of factors which contribute to a patient developing BSI. This means a number of different strategies are needed to improve BSI rates.

Future work includes

- develop an e-learning module for PN
- trial some ward-based Care of CVC update training for nurses

This improvement programme has focused on BSI in patients receiving PN but it could also be applied to improving the care of all CVCs in all our patients.

References (1) Pironi L, Arends J, Bozzetti F, et al ESPEN Guidelines on chronic intestinal failure in adults. *Clinical Nutrition*. 2016; 35 (2) 247-307.

(2) NICE - Curois disinfecting cap for needleless connectors. Available from:

<https://www.nice.org.uk/advice/mib143/chapter/The-technology> [Accessed 24th August 2018].

The Radiology Digital Pathway



Project team: Beverley Stagg, Hayley Connoley, Tina Deadman, Andrea Sankey and Louise King. Author: Hayley Connoley

Background

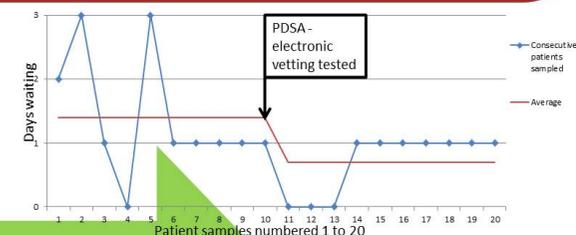
Radiology requests are received by the radiology admin team via ICE (electronic) or paper. All those electronic requests are printed and alongside the paper requests are provided to Consultant Radiologists to vet appropriately. There are evident time lags associated with the paper based processes.

Results

A sample of data pre and post project was taken and reviewed- 20 consecutive patients were audited 10 pre project launch and 10 post project launch.

The variance in days waited pre project was much higher than post project.

On average we have reduced the average wait to **50% < than one day.**



1

Aim: To reduce waiting times and improve turnaround times

Methodology

PDSA testing cycles were carried out throughout the project.



1) 1. Protocol template tested at small scale, amendments made to the template and then retested on 3 separate occasions

2. Electronic vetting process tested on 1 request which ran parallel with the paper based process tested again on 3 then 10, then 30 over a course of 5 days

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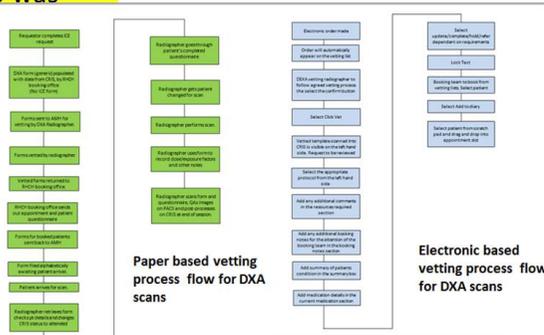
Changes

- * Decision made to utilise the electronic system currently used in radiology.
- * All DXA protocols required review with the need to develop new protocols to upload into the electronic system.
- * System configuration took place with a new electronic process identified

Understanding processes

Process mapping was carried out to ensure every element of the paper based process was captured.

A new electronic process map (Figure 1) was developed encompassing all requirements identified in the paper based process.



6

ACU Radiology Champions

Optimising access and turnaround times for ACU patients and improving morale and communication for all ACU and BNHH radiology staff

Hayley Connoley, Radiology Performance Manager, Zoe Crawley, CT superintendent, Violet Chabooka Sonographer, Lyanne Court MR radiographer, Charles Hungwe SHO Acute medicine, Kayleigh Balchin SHO A&U, James Austin SHO Acute medicine, Dr Tanuj Lad, Consultant Acute Medicine and Critical care.

Author: Hayley Connoley, Tanuj Lad

Problem:

- Lack of understanding of service provision, requirements, and challenges between ACU and BNHH radiology
- Delays to patient pathways due to disjointed requesting, appointing and image acquisition

Aim:

- To improve communication between ACU and Radiology
- To improve requesting and booking process
- To reduce waiting times into CT, US, MR for all ACU patients
- To improve turnaround times from point of request to image acquisition for all ACU requests into CT, US and MR
- To improve staff morale
- To build a culture of Trust and innovation
- For staff to understand and benefit from collaborative working



Methodology:

- Presentation to the radiology department on ACU services, care and benefits to patient pathways
- ACU Radiology champions identified to promote & link Radiology with ACU
- A communication strategy developed
- Twitter utilised to promote #ACUradiology strategy
- Access routes into imaging and methods to achieve agreed
- Experienced radiographer (ACU champions) facilitated discussions with Consultant Radiologists and wider teams

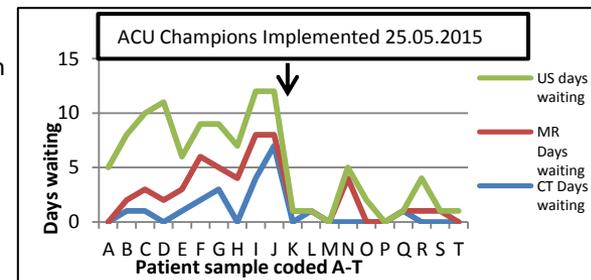


A good #acuradiology meeting today - great to hear the collaborative working is already seeing positive results. #radiologymoments @HFT @trials @cc: hft @stanjlad



Data:

- A sample of data pre and post project launch was taken and reviewed- 20 consecutive patients were audited. 10 pre project launch and 10 post project launch in each modality.



- The variance in days waited pre project was much higher than post project.
- Improvements noted within days of project from patient feedback via Twitter.

ACU Survey question	Yes	No	Total
Faster access to imaging	5	0	5
Better coordination of imaging with ACU clinic times	5	0	5
Quicker clinical decision making	5	0	5

Radiology Survey question	Yes	No	Total
Aware of ACU champions	20	0	20
More authority to fast track patients imaging	16	4	20
Fewer phonecalls chasing patients imaging	14	6	20

- Radiology noted a significant decrease in the number of phone calls received
- 100% of ACU staff noted improvement into access, better coordination of imaging with ACU clinical times and quicker decision making
- Minimal wasted CT slots
- These changes supported Spring/Summer action in '18/19'

Next steps:

- Increase the number of ACU radiology champions
- Meet regularly to transfer information
- Share success stories
- Continue to collaborate to improve patient pathways

Collaborative working



Driving Falls Reduction Using The Toyota Way



Dr Adrian Richardson
Western Sussex Hospitals NHS Foundation Trust, England
email: Adrian.Richardson@wsht.nhs.uk @Ade999



Background

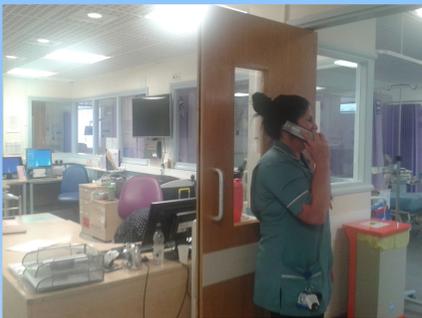
In-Patient falls are the biggest cause of harm to our patients and nationally cost the NHS £2.3 billion annually. In 2014 over 2500 fell while in our care. In 2015 the organisation launched its Patient First Improvement Programme, based on Lean Methodology which originated within Toyota. We set about using this methodology to reduce falls by a third.



MDT Swarms after a fall to identify risk factors



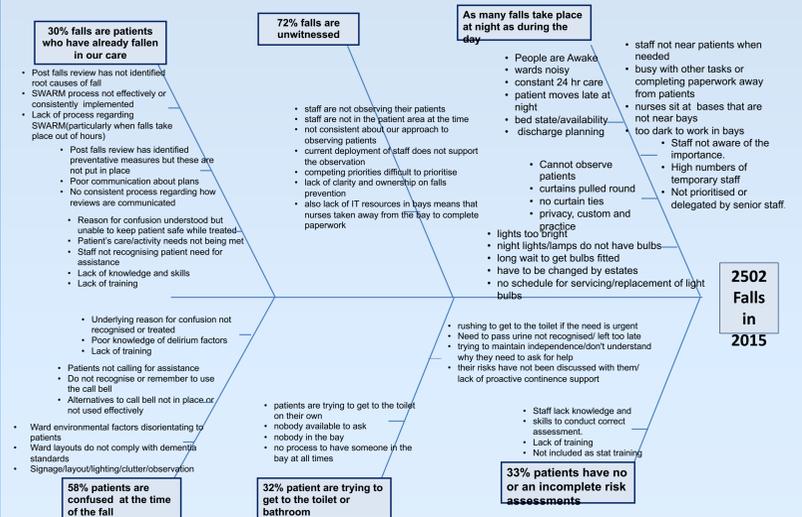
Our Baywatch campaign engaged with all staff allowing continued presence in bays reinforced with social media



Wards were empowered to use equipment to increase presence near patients

Methods

- The ten highest contributing wards were identified and supplied with individual data.
- Using A3 Thinking individual units worked on defining specific problem statements for their areas, and identified root causes using Ishikawa (Fishbone) analysis.



- Visual management was used to show units progress and a central performance board used to identify how improvements were proceeding.

- Coaching and facilitation was undertaken to assist in problem solving and process confirmation.

Baywatch

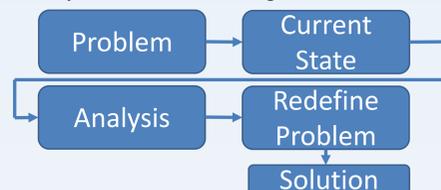
A common finding in all high falls areas was that patient were falling while in un-observed bays. Baywatch was developed as a campaign to highlight the need to work within bays and engage with the wider multi-disciplinary team to encourage working in the bay. The campaign was backed up with a social media campaign including Facebook and a YouTube video demonstrating how different team members could work inside the bay maintaining a constant visualisation of vulnerable patients.

Swarm

When a fall (defect) occurred the line was stopped. The multi-disciplinary team would come together to search out reasons why a patient may have fallen. The look at staff locations, the environment where the patient fell and they undertake a 5-Why Analysis, drilling down the reasons why the patient fell. The location was also entered into a heat map to identify high risk areas within a ward to concentrate further improvement efforts going forward.

A3 Thinking

In healthcare it is very easy to jump to a conclusion of what is causing a problem. A3 Thinking is designed to slow this process down, encourage analysis and where necessary redefine the problem before moving onto a solution.

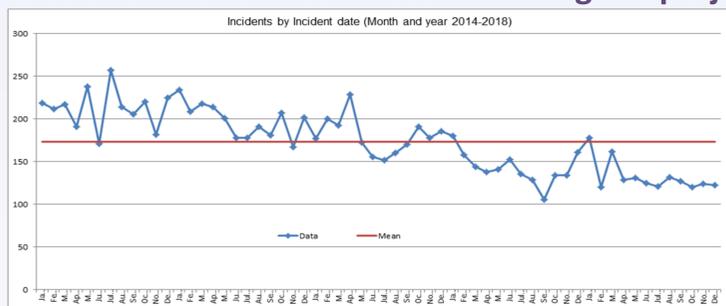


Visual Management

Key to providing support for a project is demonstrating where the improvement is in its journey. 'Blink and Think' allows teams to see if they are winning or what needs to be done to ensure success going forward. Individual wards would use their 'driver' lane to provide historical data, current performance and evidence of their problem solving so that everybody could see what the team was aiming to achieve. This visual management continued with the senior project team who also had their own performance board and would weekly meet and with executive sponsors to see how performance was and agree on actions for the coming weeks.

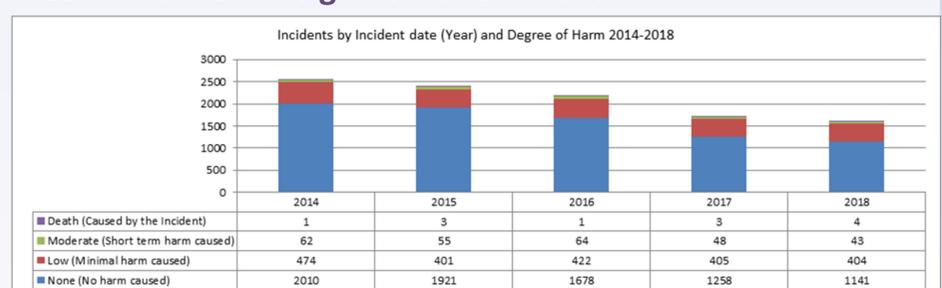
Results

37.5% reduction in falls since commencing the project



Results

25% Reduction in significant harm falls



Conclusion

Lean methodology used in industry can be successfully translated into healthcare to directly benefit and reduce harm to our patients. The use of data specific for each unit and working to empower the staff in those units to work through problem solving leads to significant results and sustainability.

Integrated IBS care pathway with direct-access, dietetic-led refractory IBS service

Impact on patient investigation and outcomes

Oldale C (Nutrition and Dietetics) Hodges P & Di Mambro A (Gastroenterology) Waterman S (Biochemistry)

Introduction

An integrated care pathway with direct access to a dietitian-led refractory IBS (RIBS) service was launched in Gloucestershire in 2016. GPs may refer patients <45yrs with symptoms fulfilling ROME criteria for IBS which is refractory to first line management (as per NICE guidance) and with faecal calprotectin (FC) level less than 150ug/g directly to a dietitian-led clinic. The pathway and service aim to provide effective and expert management for this patient group, whilst reducing invasive investigation and referrals into secondary care gastroenterology clinics.

Methods

- GP requests for faecal calprotectin testing and subsequent referral to the RIBS service were audited over a 2 year period.
- Outcomes from intermediate FC results and referrals for lower GI endoscopy were audited annually over 6 month and 1 month periods in each year.
- Symptom change in patients undertaking dietary manipulation was measured; stool frequency and consistency were recorded, along with responses to the global symptom question 'do you currently have satisfactory relief of your gut symptoms?'

Fig 1: Colonoscopy Audit 2015 - 2017

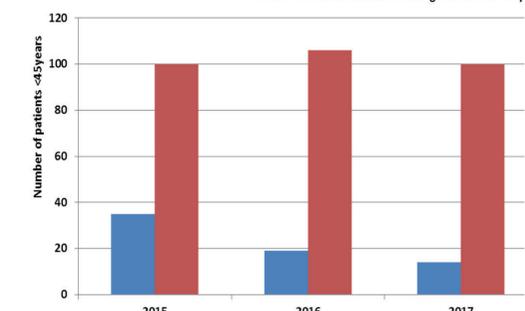
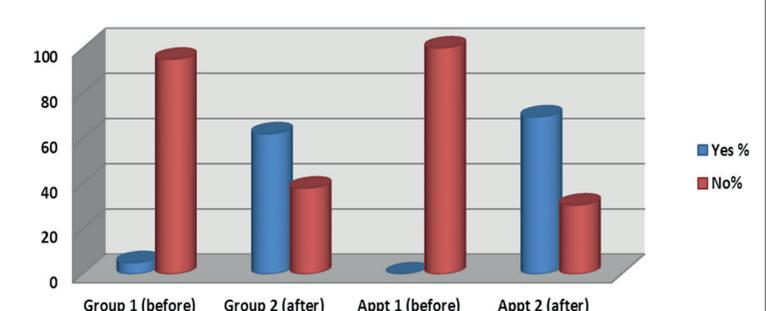


Fig 2: Do you have satisfactory relief of your gut symptoms?



Results

- GP's requested on average 31 FC tests /month in 2016, rising to 54/month in 2017. 76% of these returned a negative (<50ug/g) or equivocal (50-150ug/g) result, with 60% of these patients being referred to the RIBS service.
- Proportion of patients with an intermediate FC referred directly to the RIBS service were similar in both audit periods (2016: 29%, 2017: 29.5%) Seven patients with an intermediate FC result had a high result at re-test 3 months later. These cases were discussed within MDT and referred for lower GI endoscopy as appropriate.
- Colonoscopy audit over a 1 month period prior to service set-up (May 2015) showed 100 patients < 45yrs had lower GI endoscopy, 35% meeting ROME criteria for IBS. Following service launch, repeat audit in May 2016 showed 106 patients < 45yrs underwent lower GI endoscopy with only 18% meeting ROME criteria for IBS. In May 2017, only 10% of patients with ROME criteria IBS were scoped(Fig 1). In all cases where symptoms met ROME criteria for IBS, lower GI endoscopy showed no major pathology.
- Over 500 direct access referrals have now been managed through this pathway to date with 70% patients reporting satisfactory relief of IBS symptoms following dietary manipulation (Fig 2). Patients who do not respond are discussed in a consultant-led MDT with advice, review or investigation arranged as appropriate.

Conclusions

- The integrated care pathway and direct access RIBS service has reduced patients with ROME criteria IBS referred to GI consultants and for costly invasive lower GI investigation.
- Our data supports the validation of a higher negative FC cut off of 150ug/g; no cases of IBD have been missed in this patient cohort to date.
- Treatment within a dietetic-led, direct-access service with an appropriate, policed care pathway and MDT support is a safe and clinically effective management strategy for patients with diagnosed and complex IBS.
- We continue to recommend ongoing education and audit prospectively to ensure optimisation of the service.

Patient & Public Involvement Award

Winner

Camden and Islington NHS Foundation Trust

Active Islington

Our judges were impressed with use of a driver diagram, PDSA cycles and SPC charts. A really inspiring example of patient/service user involvement in planning improvements which should be highly transferable to other areas.

Second Place

Northampton General Hospital NHS Trust

Introduction of a novel junior doctor-led prolonged jaundice clinic to reduce the wait time for rapid access clinic appointments within the paediatric department

With a clear description of the problem, this project showed some great work on patient feedback to test a cost-effective service model.

Commended

George Eliot Hospital NHS Trust

Hand hygiene

Active Islington

Islington Services for Aging and Mental Health

Nicola Ballingall and Marcus Yorke



Background

Through increased physical activity, older adults can reduce the chances and severity of cardiovascular, metabolic and cognitive illness, without the side effects associated with pharmacological treatments. Most residents at Stacey Street nursing home felt they lacked the access, support and motivation to exercise at home or in the community.

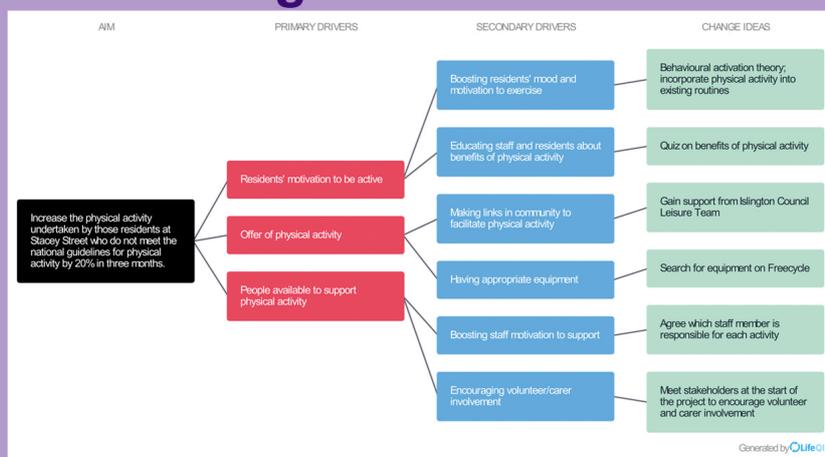


Aim

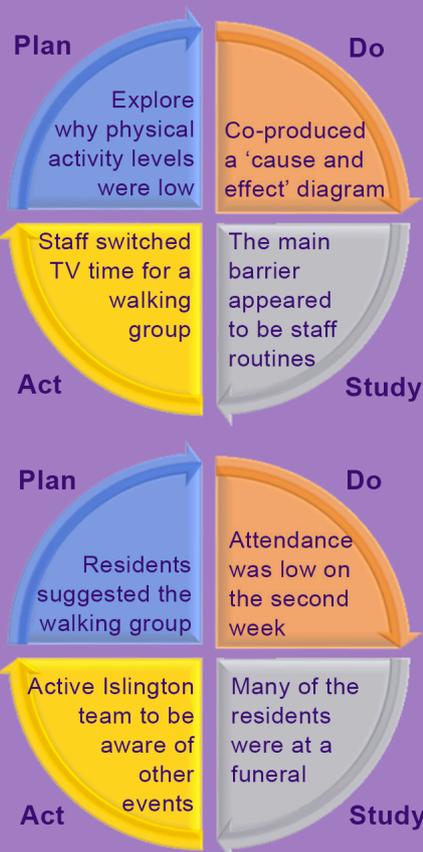
The aim of Active Islington was for older adults in a psychiatric nursing home to increase their physical activity levels by 20% in three months. The Quality Improvement (QI) team worked with those residents who did not meet the NHS guidelines for physical activity levels



Driver Diagram

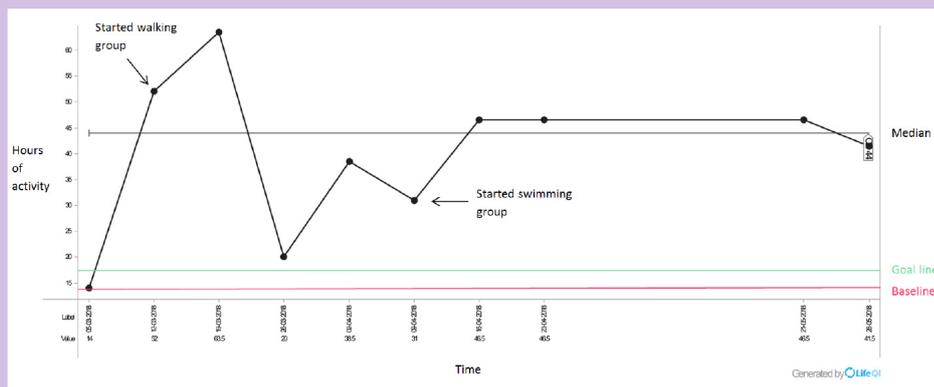


Tests of Change



Data

Residents sustained physical activity levels over twice that of their baseline measures.



Learning

- By meeting with the stakeholders' and recording their aspirations early on, we found that we got their 'buy in' to the project.
- Staff can become institutionalised, so residents can help to identify which tasks are not adding value and can be cut down.
- Senior management must be involved to ensure that change fits with the wider system.



Staff and Service Users' Reflections

- "We made progress by identifying a leader responsible and present for each change idea." (Quality Improvement (QI) staff member)
- "Volunteers, carers and family can help to sustain change." (QI carer member)
- "That is exactly what I wanted! QI is better than the old questionnaires, isn't it?" (QI service user member)

Introduction of a novel junior doctor-led prolonged jaundice clinic to reduce the wait time for rapid access clinic appointments within the paediatric department

B. Bassoy, W. Zaw, C. Warlow, S. Beech

Contact: benjisu@doctors.org.uk

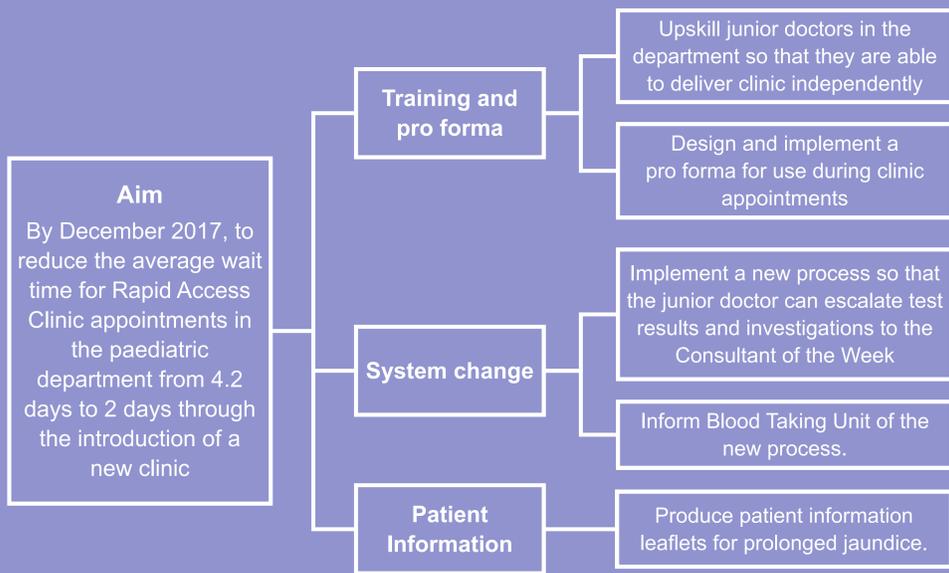
Background

The Paediatric Department in Northampton General Hospital runs a "Rapid Access" Clinic every weekday morning, which is staffed by a Paediatric Consultant, and supported by a Paediatric Nurse. The service is available to GPs and Community Healthcare Providers to refer patients they feel meet the referral criteria. It is intended to prevent admission of patients who although unwell, could be managed in an outpatient setting. Patients are discharged from the clinic with a management plan drawn up by a Paediatric Consultant.

There has been an increasing demand for Rapid Access Clinic appointments over the past 2 years, with no increase in capacity; in 2015, there were 21 patients per month on average, and in 2016 there were 34 patients per month on average. This has therefore led to an increase in wait time for an appointment, with the 2016/17 average wait time of 4.2 days per patient. A typical Rapid Access Clinic appointment should have a wait time of no more than 2 days.

A large proportion of the patients seen in the Rapid Access Clinic are diagnosed with prolonged jaundice, which can be managed by a junior doctor. This project seeks to assess whether the creation of a new junior doctor-led clinic for patients with prolonged jaundice would help reduce the wait time for the Rapid Access Clinic, whilst delivering a consistent standard of care for these patients.

WHAT ARE WE TRYING TO ACCOMPLISH?



WHAT CHANGE CAN WE MAKE THAT WILL RESULT IN AN IMPROVEMENT?

Prolonged jaundice screen proforma

1/2 Jan 2017 Northampton General Hospital

Patient details: _____ Date of clinic assessment: _____

Gestation at birth: _____ Maternal blood group: _____

Any concerns during pregnancy: _____

Delivery Details: _____

Any neonatal issues: _____

Previous rhesus or ABO incompatibility: Yes/No _____ Day of life jaundice first noted: _____

Relevant family history: _____

Method and frequency of feeding: Breast/Bottle _____

Birth weight: _____ Current weight: _____ Stool colour: _____ Urine colour: _____

General progress: Feeding adequately/Thinking _____

Examination

1. Clinically well or unwell: _____ 4. Most mucous membranes: Yes/No _____

2. Active: Yes/No _____ 5. Baby jaundiced: Yes/No _____

3. Alert: Yes/No _____

Investigation

Full blood count: _____ DAT: _____

Liver function test: _____ Conjugated bilirubin: _____

Diagnosis and Outcome

Diagnosis: _____

Outcome: _____

Junior Doctor-led clinic

A new clinic for babies with prolonged jaundice was set up, which is led by a junior doctor, with the support of a consultant.

Prolonged Jaundice Screen Pro Forma

A pro forma (left) was designed by the project lead and was agreed by the Paediatric Consultants after several minor amendments. This form is used by the junior doctor running the clinic, and provides a consistent structure to the appointment, whilst also ensuring all appropriate information is documented. All tests and investigations requested during the clinic are followed up by the "Consultant of the Week" on the Paediatric Assessment Unit.

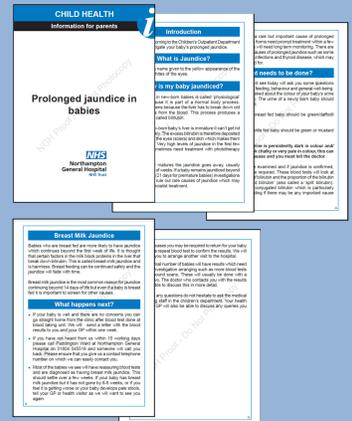
Training

All junior doctors in the department are trained on how to deliver the clinic, and the expectations from the department and support they will receive from the Consultant of the Week.

Patient Information

A leaflet was written for parents attending the new clinic. This provides an overview of:

- The condition
- Why the baby is jaundiced
- Breast milk jaundice
- What needs to be done
- What happens next
- Infant stool charts
- Other resources and information



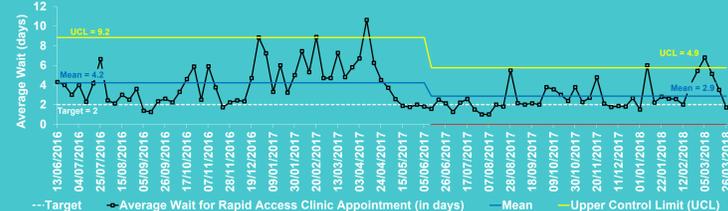
Benefits

- Reduced wait time for urgent appointments
- Development of junior doctors in new clinic
- Better use of hospital funds
- Better patient information on prolonged jaundice in babies

HOW WILL WE KNOW A CHANGE RESULTS IN AN IMPROVEMENT?

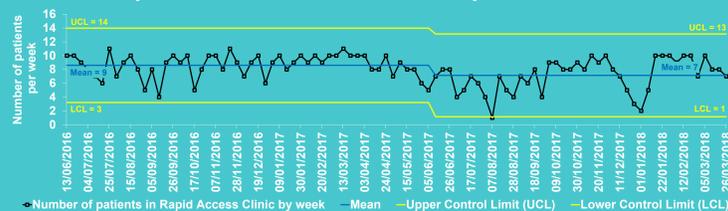
OUTCOME MEASURE:

Wait time for the Paediatric Rapid Access Clinic



PROCESS MEASURE:

Number of patients seen in Paediatric Rapid Access Clinic



PROCESS MEASURE:

Number of patients seen in new Prolonged Jaundice Clinic



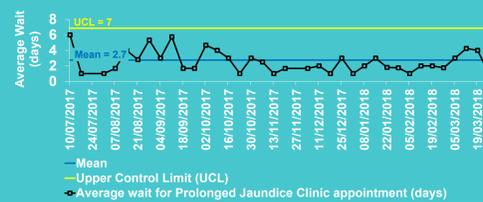
FINANCIAL MEASURES:

Annual cost saving to the Trust

Admission avoidance (ca. 3 patients avoiding admission per annum)	£2,200
Cost saving associated with Junior Doctor seeing patients instead of a Paediatric Consultant	£6,800
Income from additional patients seen in both new clinic and rapid access clinic	£24,500
Total annual saving	£33,500

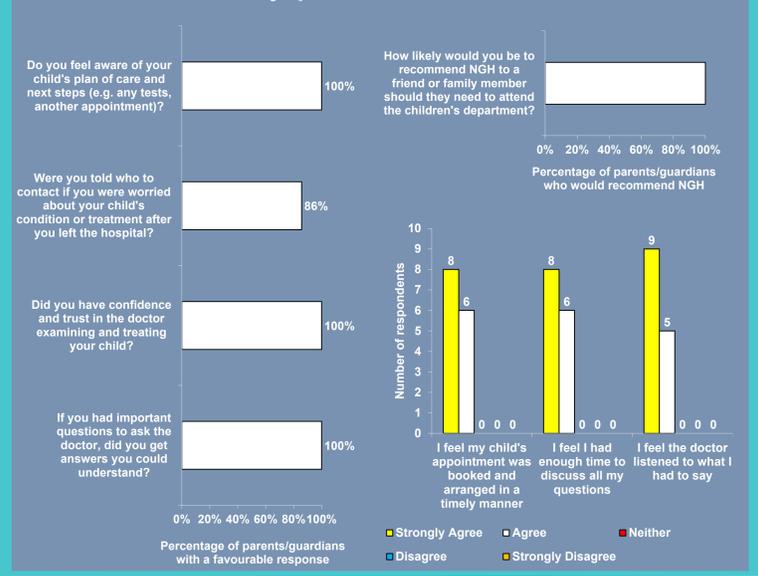
BALANCING MEASURE:

Wait time for the new clinic



PATIENT EXPERIENCE:

Parent feedback on key questions



Conclusion

The average wait time for a patient to be seen in the Paediatric "Rapid Access" Clinic far exceeded the local standard (4.2 days compared to 2 days). A large proportion of the patients seen in this clinic are diagnosed with prolonged jaundice, which can be managed by a junior doctor. Therefore a new junior doctor-led clinic was introduced, which runs 4 days a week in order to see babies with prolonged jaundice. This new clinic has reduced the workload of the Rapid Access Clinic, and we have seen a notable improvement in the wait time for this clinic. (4.2 days to 2.9 days). We hope to see a continued improvement in the coming months, and will review the number of slots in the new clinic to ensure there are sufficient appointment slots throughout the year. The average wait time for the new clinic is 3.0 days, which is in line with our internal standard for the patient cohort. Parent feedback from the new clinic has been very positive, with 100% of parents saying they would recommend NGH to a friend or family member and 100% feeling they had confidence and trust in the doctor delivering the clinic. An additional benefit from the introduction of the new clinic is the indirect financial saving of £9,000, associated with a junior doctor running a clinic in place of a consultant.

Pre-meal Patient Hand Hygiene Improvement Collaborative

Why focus on Hand Hygiene?

The UK Government in 2016 made a decision to cut Gram negative Bacteraemia predominantly E Coli by 50% by 2021.

At GEH we had changed a lot of things but felt we needed to focus on the patient participation, specifically the bed bound, immobile patients.

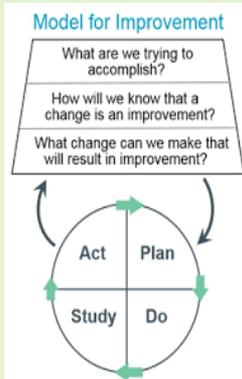
We chose 3 wards because of their patients being strokes, elderly trauma orthopaedics and chest problems. The wards choose their own teams due to enthusiasm, knowledge and commitment.



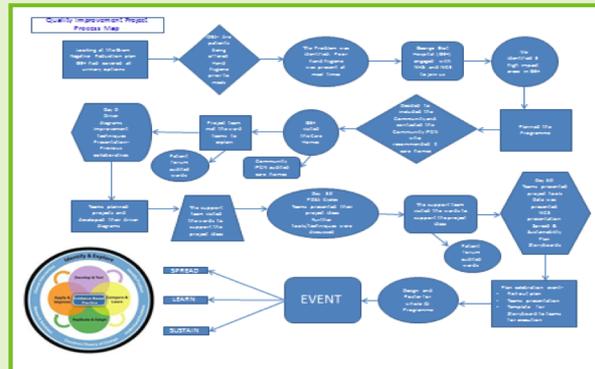
Improvement cycle

The aim of this programme is to:

- Increase in the proportion of patients with an accurate nutritional screen
- Increase in the proportion of patients receiving appropriate nutritional interventions
- Improve patient hand hygiene at meal times
- Increase Quality Improvement skills



The IHI Breakthrough Series Collaborative model provides a framework to enable rapid testing of changes to learn, adapt and plan for scale up and spread of the work.

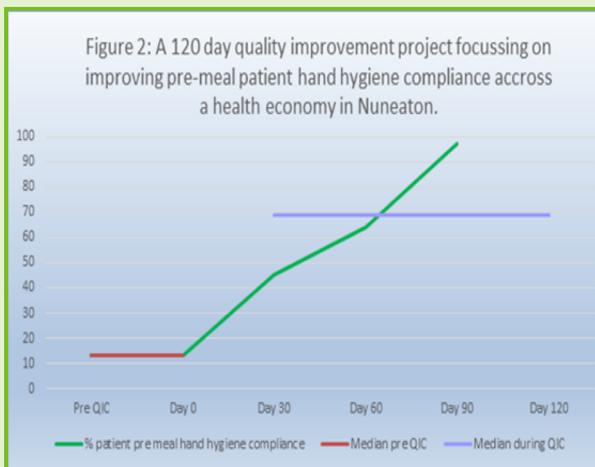


Tests of Change so far:

One ward introduced Tri folded cardboard locker reminders about hand hygiene and tray cloths with hand hygiene instructions and reasons why on them.

Another ward purchased a hand stamp to mark on the nutrition sheet that hand hygiene had been carried out assigned a daily hand hygiene champion to carry this out. They used a badge to identify the Champion.

The third ward are looking at packets of wipes on each locker to ensure all their patients who are mostly elderly, bed bound, trauma orthopaedics are offered hand hygiene throughout the day not just at meal times.



What have we learnt?

- Patients were not being offered hand hygiene prior to meals on any of the wards in the trial
- Wipes were being provided on the trays at lunch and evening meals but no assistance was being given
- Wipes were left on the trays, unused after meals and then thrown away
- Patients or relatives did not realise the importance of clean hands
- Staff were not always washing their hands before serving meals
- Families love the idea of their poorly relative being offered hand hygiene at meal times
- We need to put two wipes on every tray, one for pre meal and one for after meals

The tests we are planning next:

- Look at the use of packets of wipes on the patients locker prior to admission to allow use after toileting also
- Introduce hand hygiene into breakfast service also
- Look at the best three options by seeking the advice and experience of the patient forum and introduce these into the whole trust, giving wards a choice of what suits their patients best
- Try wall mounting a box of individual wipes in a holder in every bay, to cut time down for staff and enable families to assist if they wish

PATIENTS' COMPLIANCE AND EXPERIENCE USING CHLORHEXIDINE CLOTHS PREOPERATIVELY FOR REDUCING SURGICAL SITE INFECTIONS IN HIP AND KNEE ARTHROPLASTY

Dr Ella Shalit, Dr Annie Ratidzo Makoni, Mr Turab Arshad Syed, Mr Muhammad Saleem Shahid
Royal Free Hospital Trust, London, UK



INTRODUCTION

A growing body of evidence suggests that preoperative bathing with Chlorhexidine Gluconate (CHG) is a well-accepted practice for reducing skin flora burden,¹⁻³ and decreasing Surgical Site Infection (SSI) incidents in joint arthroplasty.⁴⁻¹³ However, little is known about the compliance of patients with CHG self-bathing protocols prior to their surgery.



PROBLEM

Pre-operative CHG body wash was issued but was not being used by patients. This was seen as a potential risk for increased SSI. We aimed to improve patient compliance regarding its use.



ASSESSMENT OF THE PROBLEM AND ANALYSIS

We were using Chlorhexidine Body Wash which had poor patient compliance due to its texture and aesthetic reasons.

- This was discussed at our SSI Committee
- A QI Project was initiated where different forms of pre-operative chlorhexidine delivery considered to improve patient compliance, ease of use.



INTERVENTION

CGH Cloth / Wipes packs instead of body wash



STRATEGY FOR CHANGE

An audit was conducted to measure compliance and seek patients' experience after new practice was embedded.

Our new CHG protocol includes inviting all elective hip and knee joint replacement patients to an educational meeting 4-6 weeks ahead of their surgery, when they are provided with a pack of CHG cloths and educated about its use. The CHG cloths are intended to be used independently by patients themselves on the evening and again on the morning prior to surgery.

MEASUREMENT OF IMPROVEMENT

This was measured by a questionnaire studying compliance, ease of use, efficacy and whether they would recommend its use to others.

- All 49 patients used the chlorhexidine cloths preoperatively.
- 97% of the patients understood the rationale for using the cloths and 90% used them as instructed.
- 10% of the patients reported 1 pack of cloths was non-sufficient and 16% needed assistance of a second person due to access-limitation.

This recognized two potential challenges with the current CHG protocol:
1) One CHG pack (i.e. 8 cloths) is non-sufficient for large BMI (>30). We recommended 2 packs of cloths for those individuals with BMI > 30.
2) It is difficult access to certain body parts (e.g. back) when washing with the cloths. Most patients tackled accessibility limitation by being helped by a second person. However, accessibility still remains a problem for this patients' cohort.

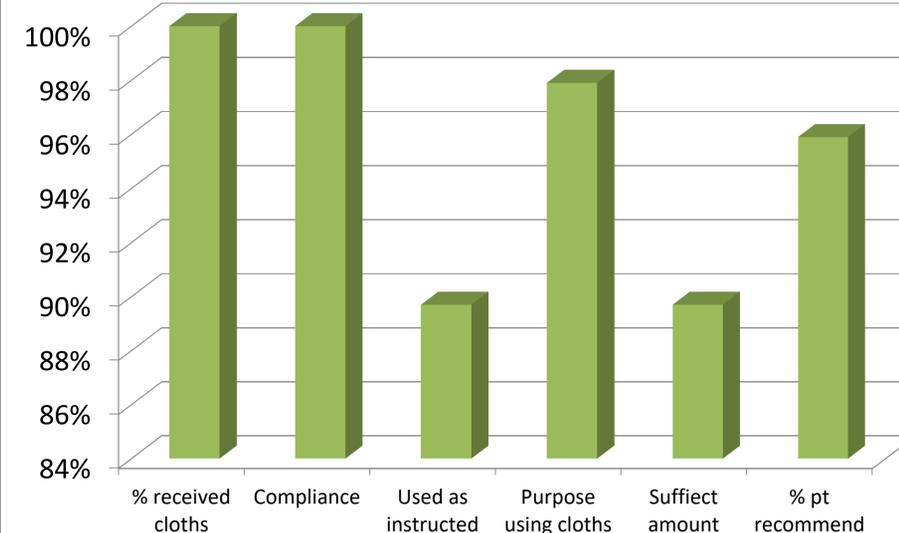


Figure 1: Patients adherence and experience using the CHG protocol at the Royal Free Trust hospitals. Data collected from patients questionnaires post-operatively.



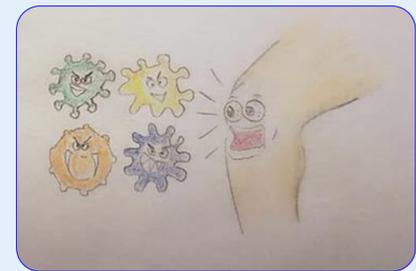
EFFECTS OF CHANGES

We studied whether patients were following our newly introduced CHG protocol and identified ways to improve their experience. We also reviewed the implementation of patients' education regarding the use of the cloths preoperatively and assessed their understanding of its usage. This showed not only good compliance but resulted in further Quality Improvement by providing 2 packs for increased BMI.



MESSAGE FOR OTHERS

Pre-operative CHG body wash was issued but was not being used by patients. This was seen as a potential risk for increased SSI. We aimed to improve patient compliance regarding its use.



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A Dietetic-led Coeliac Service incorporating group education

NICE Guideline NG20: Coeliac Disease (2015) shared learning initiative

Claire V Oldale RD ¹Dept. Nutrition and Dietetics

Background

Recently published NICE guidance for the recognition, assessment and management of Coeliac Disease (NG20)¹ recognises that there is a lack of dietitians in the NHS nationally, and specifically a lack of dietitians who have a specialist interest in coeliac disease or gastroenterology. This can lead to variation in the provision of specialist dietetic advice to patients for a condition entirely managed through challenging dietary manipulation. Following publication of NG20, NICE requested organisations share innovative models of care for coeliac disease for release alongside the guidance as exemplars of good practice.

We described our service redesign undertaken in 2010; aimed to increase patient capacity within existing dietetic provision for coeliac disease, whilst also aiming to improve service quality.

Key Findings

- Implementation of group education for new diagnosis resulted in an increase in capacity for new referrals of 42%, along with 38% increase in capacity for one-to-one follow-up.
- Time between referral and 1st appointment in group education was reduced, with the majority of patients attending within 8 weeks. This result has been sustained.
- Evaluation of group education sessions has shown an overwhelmingly positive response over the last 5 years.² Specific feedback demonstrates that in addition to becoming further informed about coeliac disease and gaining knowledge on the intricacies of its dietary management; the social and emotional benefits of shared experience and practical tips between group members are rated equally important (Fig 1)
- One to one clinics allow individualised review, more structured assessment and monitoring and provision of specific advice for those with known coeliac disease; support with co-existing conditions e.g. diabetes mellitus, osteoporosis, and an alternative option for newly diagnosed patients for which a group setting may be inappropriate.

Group Session Patient feedback

“Very interactive and informative – very worthwhile.”

“It has made things clearer and I feel more confident to start.”

“I’d recommend the group - by being with others in the same situation, knowing you’re not dealing with it on your own.”

“I did quite a bit of research on the internet, but I found that the session with the dietitian gave me a more clear understanding.”

“I’d recommend the group because it was informative and very friendly.”

“Really friendly relaxed atmosphere, interesting to listen to, very informative - thank you”

Aims and Objectives

Our aim was to provide an efficient, timely, expert led service for those with newly diagnosed and existing coeliac disease

- To increase patient capacity and reduce waiting times for new patients within existing service funding
- To ensure patients obtained all relevant work up and monitoring following diagnosis
- To allow sufficient time to provide detailed and practical advice for patients newly diagnosed with coeliac disease
- To provide individualised assessment and review of all patients
- To act as an expert, local point-of contact for HCP colleagues and patient groups requiring further advice or information on the condition.

Learning Points

For those with a confirmed diagnosis of coeliac disease, provision of a dietetic-led coeliac service incorporating both group education and one-to-one review is a successful model of care.

Group education is a successful, cost-effective means to optimise capacity and a clinically efficient way of ensuring comprehensive provision of detailed information on the condition and its dietary management, whilst providing practical support for patients.

One-to-one appointments provide opportunity for individualised review, advice and nutritional assessment, also discussion of any other results or possible complications.

Practical considerations for success include

- Confirmed support from Gastroenterology teams with a regular opportunity to discuss patient cases.
- Appropriate space and facilities to hold group education sessions.
- A clear protocol for service with auditable outcome measures.
- Good communication with relevant local colleagues, CCG and local support groups.

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Perseverance Award

Winner

Northampton General Hospital NHS Trust

Protecting patients from infection: improving topical prophylaxis. Compliance on surgical wards in Northampton General Hospital

The judges commented on the multi-professional approach to directly improve safety. The results are impressive with SPC charts showing the impact of changes. The willingness of the team to test new ideas and approaches clearly show great determination.

Second place

Western Sussex Hospitals NHS Foundation Trust (submitted via video)

Lean management systems and cultural change

An Excellent whole Trust QI programme. This project demonstrated great commitment and support to staff, with both staff and the QI team showing perseverance over a 3-year journey and achieving measurable improvements to pathways.

Commended

Hampshire Hospitals NHS Foundation Trust

QI journey

Protecting Patients from Infection: Improving Topical Prophylaxis Compliance on Surgical Wards in Northampton General Hospital

H. Slyne, N. Clews, E. Smillie, S. Beech

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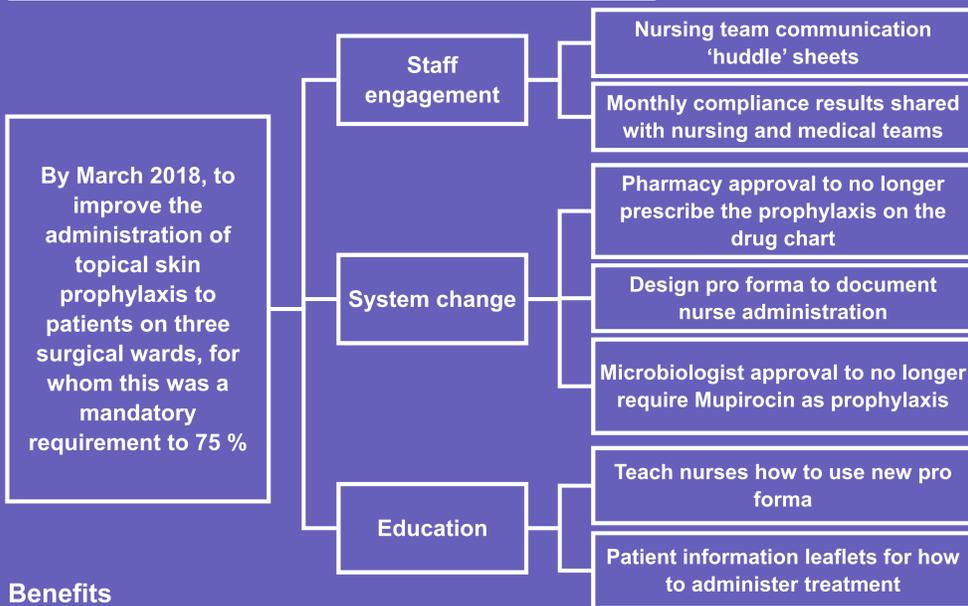
Background

Staphylococcus aureus and Meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia continue to challenge healthcare organisations and protecting patients from these infections remains a priority for NHS Trusts in the UK. One intervention to prevent such infections is to administer topical prophylaxis to patients, typically an antimicrobial nasal ointment and body wash.

This project has been undertaken at Northampton General Hospital NHS Trust, a medium-sized district general in the heart of England. It has been led by two Infection Prevention & Control (IPC) Nurse Specialists and supported by the Matron for Surgery and the Quality Improvement Team at NGH.

Prior to this project, hospital policy mandated that junior doctors prescribe the topical prophylaxis prior to nurse administration, despite this not being a prescription-only medicine. The administration rate of the topical prophylaxis on three surgical wards was less than 25 % prior to this project commencing in January 2017. The low compliance was primarily attributed to the launch of an electronic medication prescription record. In order to protect patients from developing MRSA colonisations, surgical site infections and associated bacteraemia, the aim was to improve the administration of topical prophylaxis to patients on the three surgical wards to at least 75 % by March 2018.

WHAT ARE WE TRYING TO ACCOMPLISH?



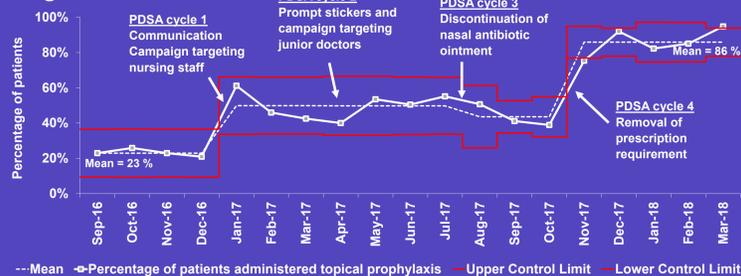
Benefits

- Reduced risk of healthcare associated infection
- Increased antimicrobial stewardship
- Reduced workload for junior doctors

HOW WILL WE KNOW A CHANGE RESULTS IN AN IMPROVEMENT?

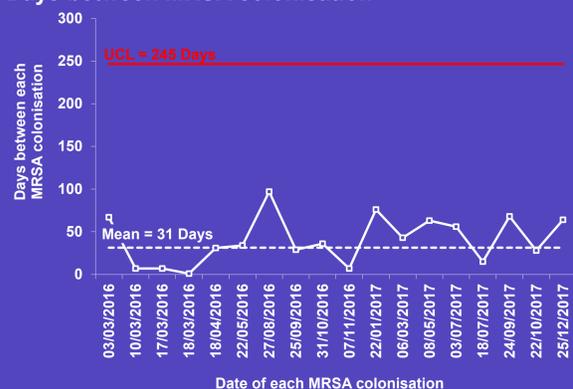
OUTCOME MEASURE:

Percentage of patients administered topical prophylaxis on three surgical wards



BALANCING MEASURE:

Days between MRSA colonisation



FINANCIAL MEASURE:

Indirect cost saving associated with junior doctors no longer needing to prescribe Mupirocin

Time taken for a junior doctor to prescribe Mupirocin per patient	93 seconds
Number of new patients per week	58
Total time taken to prescribe per year	78 hours
Junior doctor hourly salary (FY1) including on-costs	£16.63
Total annual saving	£1300

WHAT CHANGE CAN WE MAKE THAT WILL RESULT IN AN IMPROVEMENT?

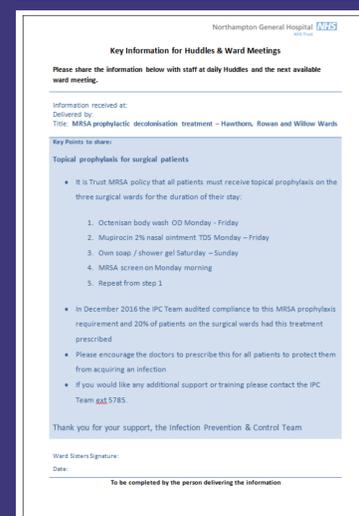


Figure 1: Communication huddle sheet

PDSA 1 (January 2017)

Communication 'huddle' sheets (shown in Figure 1) were given to the three ward managers to communicate the importance of topical prophylaxis in protecting surgical patients from infection to their teams.

Training was delivered by the IPC Team to the nursing teams on the three wards to reinforce this.

PDSA 2 (April—July 2017)

Weekly compliance audits were completed by the IPC nurses and prompt stickers were inserted into the medical notes for patients who were found to be non-compliant to ask the doctors to prescribe the prophylaxis (shown in Figure 2). Posters were displayed in the doctors' offices with the treatment required to be prescribed (shown in Figure 3). Whilst this PDSA cycle increased compliance from the

baseline to over 50% consistently, it was too time intensive for the IPC Nurses and deemed an unmanageable long term solution.

PDSA 3 (August 2017)

Discontinuation of the nasal antibiotic ointment (Mupirocin) element of the treatment. It was thought that this would increase compliance as there would only be one item for the junior doctors to prescribe, but perhaps as it also coincided with a new rotation of junior doctors onto the wards, compliance actually fell following this test of change.

Doctors please prescribe prophylactic decolonisation for this patient, to continue whilst an inpatient:

- Octenisan body wash OD
- Mupirocin 2% nasal ointment TDS

Figure 2: Prompt sticker inserted into the medical notes



Figure 3: Poster placed in the doctors' office

PDSA 4 (November 2017)

The IPC Team gained approval from Pharmacy, the Consultant Microbiologist and the Infection Prevention Steering Group for the nursing teams to be able to administer the prophylaxis without it being prescribed on the electronic prescription charts as it is not a prescription only medicine. Therefore for this PDSA a new administration record pro forma was implemented for the nursing staff to document the supply and administration of the prophylaxis treatment (shown in Figure 4) and the junior doctors were no longer required to prescribe it.



Figure 4: Administration record used by nursing staff on the surgical wards to document the supply and administration of the topical skin prophylaxis (Octenisan)

Conclusion

The impact of this quality improvement project is multifaceted. The compliance of prophylaxis administration increased consistently throughout the project and consequently the days between MRSA colonisation reduced from 41 days before the study to over 90 days (n=0 to date) following the project. This has a significant outcome on our patients as they are better protected from a healthcare associated infection and associated sepsis when receiving topical prophylaxis. Therefore this project has enabled improvements in the quality of care that patients receive and enhanced patient safety. The financial outcome has provided junior doctors more time to care for their patients. There is also an impact on antimicrobial stewardship as the discontinuation of the Mupirocin prophylaxis contributes towards the prevention of antibiotic resistance.

It is acknowledged that the rate of surgical site infection would provide an additional outcome measure for this project, but this data is not collected consistently throughout the year and the resource required to provide that data was beyond the scope of this project.

To conclude, this project has evolved from a process that demanded a doctor-led prescription to one that facilitates a nurse-led supply in order to improve the compliance of the administration of topical prophylaxis to surgical patients on three wards consistently. It is innovative because it has challenged a deeply historical process to adapt and progress in a manner that reflects current evidence and practice, to the benefit of our medical staff, nursing staff and our patients.

1. Know the problem and why it matters

Developing People – Improving Care

A national framework for action on improvement and leadership development in NHS-funded services

NHS Improvement (2016)

This national framework identifies improvement skills as one of the critical capabilities in need of further development among NHS organisations. It states that trusts rated as 'outstanding' by the CQC credit established QI methods for their

improvement in operational performance, staff satisfaction and quality outcomes.

HHFT had no visibility of improvement work. No clear methodology or capability programme meant opportunities to maximise and show improvements were being missed.

2. Have an aim and vision

Vision – 'Everyone is an improver'

Aim - To build a culture of continuous improvements in patient outcomes and care, at HHFT, by 2020.

3. Adopt a method and gain support

➤ Adopt a method: **Model for Improvement**

(Langley et al (2009) The Improvement Guide)

➤ Develop a 'Theory of Change' (figure 1).

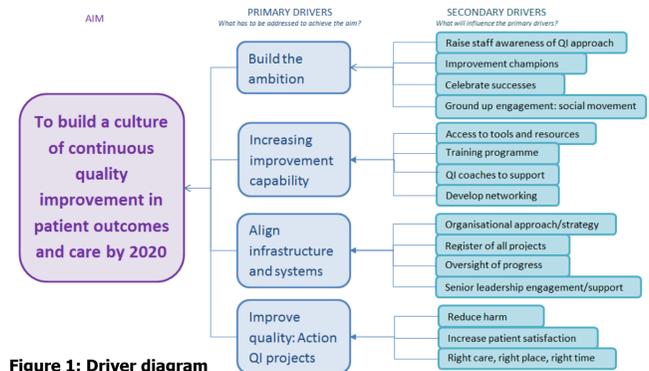
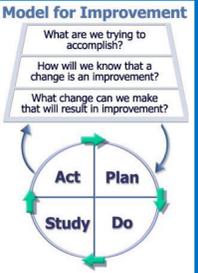


Figure 1: Driver diagram

- Develop and test a Trust QI **strategy**
- Secure **Board engagement**
- Give QI an identity: create a logo



4. ACHIEVEMENTS SO FAR

4.1 Build the ambition

- Hold **networking** events: 2 QI conferences with a total of **66** staff improvement initiatives presented



Figure 2. Examples of poster presentations



- Increase QI **engagement**: Twitter followers **290** @QI_HHFT
- Wall of fame: Poster display areas to **share learning** (Poster examples, figure 2)
- Recognise and **celebrate successes**: **4** QI projects shortlisted for national awards.



4.3 Improve quality: Action QI

- Registered QI ideas: **151** (figure 5)
- Improvements: **65%** of completed QI projects (101) have shown measureable improvements
- QI methodology now used for 55% of initiatives: **20%** increase this year.

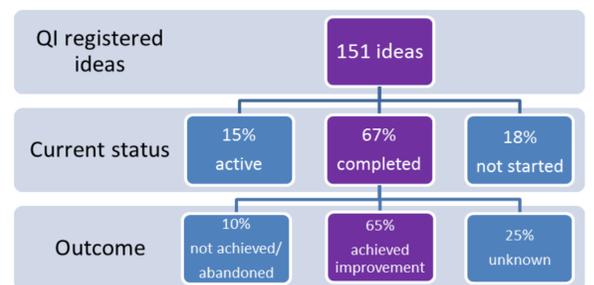


Figure 5. QI projects summary

- **Examples of improvements:**
- ✓ 21% reduction (2.6 days) in length of stay of patients over 75 with frailty;
- ✓ 220 days pressure ulcer free on an elderly care ward following introduction of safety huddles;
- ✓ 3 fold increase in admission avoidance, in ED, following introduction of therapies at the front door;
- ✓ 75% reduction in interruptions for medications, reduced delays in special care baby feeding times;
- ✓ 50% reduction in referral vetting times in DEXA scanning to speed up patient access.

4.2 Increase improvement capability

- Launch a **QI Academy**: testing a 3 tier training programme (figure 3)



Figure 3. QI Academy framework

- ✓ **Gold**: QI coaches **13**
- ✓ **Silver**: QI practitioners **70**
- ✓ **Bronze**: Improvers **150**

- Recognise the growing **community** of QI champions (figure 4)



Figure 4. QI Academy graduates

5. Summary

- An improvement culture requires a clear strategy, improvement capability and staff engagement.
- Increased staff awareness and engagement generates increased staff-led improvement initiatives
- A capability programme helps to increase the use of QI methods and improved patient care outcomes.
- Finally, **keep going!** Work continues to increase capability and embed an improvement mind set.

Appropriate management of disease related malnutrition in GP practices improves nutritional status & reduces healthcare use, with potential cost savings

G. L. Fry¹, F. Brown¹, A. L. Cawood², J. Cotton³ and R. J. Stratton²

¹Gloucestershire Hospitals NHS Foundation Trust, Cheltenham, Gloucestershire, GL53 7AN, ²Medical Affairs, Nutricia Ltd, Wiltshire, BA14 0XQ, ³Jacqui.R.Cotton Ltd. Wiltshire, SN13 8JZ, UK.

BACKGROUND and AIM

- Disease related malnutrition is a major public health problem with overall costs amounting to ~15% of the total public expenditure on health and social care¹.
- NICE^{2,3} highlights the need for screening and management of malnutrition and implementing these guidelines has been assessed as high impact for producing savings (estimated savings of £324,800-£432,300 per 100,000¹).
- The multi-professionally endorsed 'Malnutrition Pathway'⁴ supports community healthcare professionals (HCP) to implement appropriate management in accordance with NICE, but research showing the benefits in practice is required.
- This project aimed to assess the effectiveness of a Dietitian implementing the 'Malnutrition Pathway' in older adults (≥65 years) in the community, on nutritional outcomes and healthcare use, including admissions, length of stay, GP contacts and use of antibiotics.

METHODS

- In 5 GP practices in Gloucestershire, 163 patients (80±9years; 58% female) with a range of primary diagnoses (24% respiratory; 16% cardiovascular; 14% musculoskeletal; 12% endocrine) were screened ('MUST') by a Dietitian over the telephone.
- All patients were commenced on the appropriate malnutrition risk pathway (*low risk group* (n50): no further management; *nutrition support group* (n113): included medium risk (n41) (dietary advice (DA) based on local 'food first' diet sheet); and high risk (n72) (DA plus two 2.4kcal/ml energy dense high protein oral nutritional supplements (ONS) (1 serve: 300kcal; 18g protein, 125ml).
- At each dietetic review (6 weeks, 3 months and 6 months), weight, 'MUST', compliance and patient satisfaction were recorded. Nutrition support was stopped when patients were no longer at risk. Healthcare use was collected from patient records for the 6 months before and after implementation of the pathway.
- Statistical analysis was undertaken using SPSS, and a simple cost analysis completed (cost of nutrition support, dietetic and GP time and reductions in healthcare use) using unit and prescribing costs^{5,6}.

RESULTS

- Significant improvements in weight (p<0.001) (Table 1) were seen in the nutrition support group over time.
- Healthcare use significantly reduced following nutrition support (Figure 2).

Table 1. Improvements in weight following nutrition support

	Week 6 (n=94)	3 Months (n=72)	6 Months (n=46)
Weight Change (kg):	0.97 (±1.95)	1.36 (±2.50)	2.22 (±2.88)

- The proportion of individuals at risk of malnutrition reduced, with a 30% reduction in patients at risk remaining on the pathway at 3 months, maintained at 6 months (Figure 1).

Figure 1. Reduction in malnutrition risk over time ("MUST")

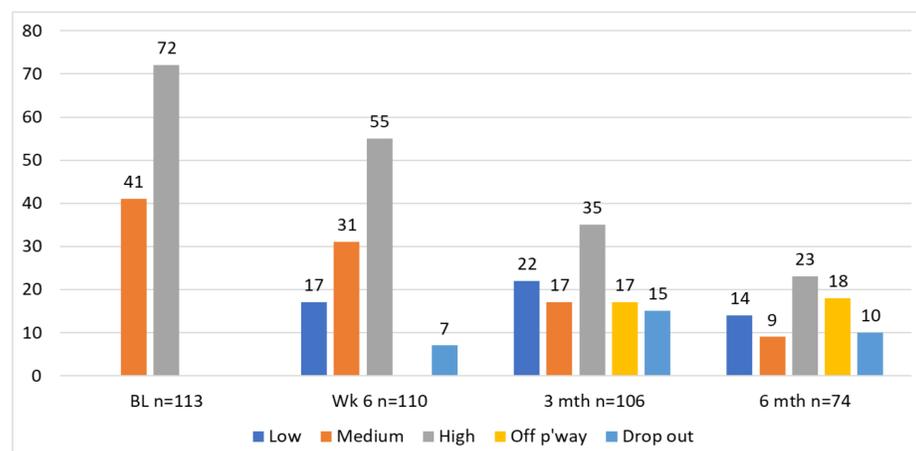
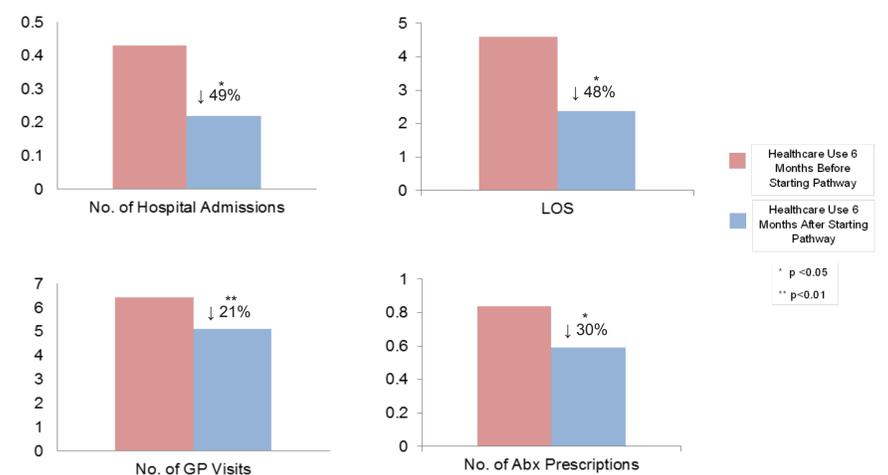


Figure 2. Significant reductions in healthcare use following nutrition support



- Patients reported being satisfied with DA (97%) and ONS (96%).
- Compliance to ONS prescription was 90%.
- Over 6 months the associated reduction in health care costs (-£744.72 per patient) were more than offset by the costs to implement the pathway (ONS, DA and HCP time; +£349.08 per patient), with an overall cost saving of -£395.64 per patient for 6 months.
- No differences were seen in the low risk group.

CONCLUSIONS

- This pragmatic project implementing appropriate nutrition support in older malnourished patients in the community led to significant improvements in nutritional status, reductions in malnutrition risk and reductions in healthcare use, with an overall cost saving in a 6 month period.
- Managing malnutrition effectively in the community represents an opportunity not only for improvements in patient care but also cost savings.

Appropriate management of disease related malnutrition in GP practices improves nutritional status & reduces healthcare use, with potential cost savings

G.L. Fry¹, F. Brown¹, A. L. Cawood², J. Cotton³ and R. J. Stratton² *Gloucestershire Hospitals NHS Foundation Trust, Cheltenham, Gloucestershire, GL53 7AN, 2Medical Affairs, Nutricia Ltd, Wiltshire, BA14 0XQ, 3Jacqui.R.CottonLtd. Wiltshire, SN13 8JZ, UK*

Overview

Malnutrition is common and costly, with health and social care costs estimated to be ~15% of the health and social care budget. 5% of the UK population are at risk of malnutrition, most living in the community (93%) with a large proportion being older (45% ≥65 years.) Malnutrition has significant negative consequences for both the individual and economy as it increases complications, delays recovery, increases GP visits, hospital admissions and readmissions.

Malnutrition should be identified using a screening tool and managed according to national guidance (NICE CG32) and implementing these guidelines has been assessed as high impact for producing savings (£71,800 per 100,000.) As most malnutrition originates in the community, if detected and treated at an early stage it could prevent admissions or readmissions to hospital with potential cost savings as highlighted by NICE To support community healthcare professionals a National professionally endorsed 'Malnutrition Pathway' (malnutritionpathway.co.uk) has been produced. Although there is evidence to support nutrition support strategies, there is limited evidence of the impact of implementing both the appropriate identification and management of malnutrition in practice using this pathway.

Aim

The aim of the service evaluation was to improve nutritional care and reduce healthcare use, by appropriately managing those at risk of malnutrition in the Gloucestershire community. This was achieved through greater understanding of the effectiveness of implementing appropriate management of malnutrition in older adults (≥65 years) in General Practice based on the 'Malnutrition Pathway' therefore befitting the patient and healthcare economy. Our work is the first service evaluation to assess this in practice.

Implementing the 'Malnutrition Pathway' included, establishing a Dietetic clinic within each surgery whereby patients were offered an appointment (telephone for medium risk and face to face for high risk) and then reviewed at 6 weeks, 3 months and 6 months. Nutritional outcomes were measured at each review whilst healthcare use was measured for 6 months before and 6 months after implementation of the pathway. Patient satisfaction and experience was collected via an anonymous and voluntary questionnaire after the patient's last appointment.

Training and education was a key strand whilst implementing the 'Malnutrition Pathway' in ensuring that all HCP's working at the GP surgeries were well supported in continuing to appropriately manage malnutrition beyond the end of the pilot project. Training sessions on screening for malnutrition and how to use the 'Malnutrition Pathway' in practice were provided throughout the implementation of the project both formally, at designated education sessions and ad hoc, via individual case discussions which led to greater engagement and positive feedback.

With no community Dietetic service within Gloucestershire, stakeholders within primary care were extremely important to engage with. Key to enabling this project included; local GP surgeries (patients, practice managers, GP's, practice nurses, pharmacists and district

nurses), Gloucestershire NHS Foundation Trust (R&D service and Dietetic Department) and Gloucestershire CCG

Results

This service evaluation practically demonstrates the impact of nutritional interventions in the community, where the majority of malnutrition exists. Implementation of the 'Malnutrition Pathway' locally led to significant reductions in malnutrition risk, reductions in healthcare use, with an overall positive budget impact in just 6 months. Managing malnutrition effectively in the community therefore represents an opportunity not only for improvements in patient care but also significant cost savings.

There was a significant improvement in weight ($+2.22\pm 2.88\text{kg}$ at 6 months) and the proportion of individuals at risk of malnutrition reduced, with a 30% reduction in patients at risk remaining on the pathway at 3 months (maintained at 6 months).

There were significant reductions in healthcare use following nutrition support; hospital admissions reduced by 49% ($p=0.028$); length of stay by 48% ($p=0.05$), GP visits by 21% ($p=0.007$) and antibiotic prescriptions by 30% ($p=0.05$).

For the patients at high risk of malnutrition (who received face to face contact with a Dietitian and appropriate ONS) the improvements in nutritional status and reductions in healthcare use were even greater.

Over 6 months the associated reduction in healthcare costs (-£744.72 per patient) were more than offset by the costs to implement the pathway (ONS and HCP time; +£349.08 per patient), with an overall cost saving of -£395.64 per patient for 6 months. If scaled up, for a population the size of Gloucestershire, savings are estimated to be in the region of £3,671,143, consistent with NICE findings.

97% of patients were satisfied with dietary advice, 96% were satisfied with their ONS and 91% rated their experience with the service as good or excellent which suggests that the pathway is acceptable to patients.

Summary

Since the results have become available, this work has been recognised and awarded Highly Commended by The Health Service Journal, December 2018. Results have been shared locally with the participating GP surgeries, Gloucestershire NHS Foundation Trust and with the Medicines Management team within our CCG. Nationally this work has been presented through a poster presentation and panel discussion at the BAPEN Annual Conference, at a study evening symposium aimed at healthcare professionals and submitted for a best practice award via the 'Malnutrition Pathway' website in order to help others replicate this work.

A full scientific publication is planned and ultimately we would be seeking support for establishing a community Dietetic team to roll the 'Malnutrition Pathway' out on a larger scale.

This pragmatic service evaluation clearly demonstrates that significant improvements for both the patient and healthcare economy can be made if malnutrition is identified and managed appropriately. We hope that this will lay the foundation for the 'Malnutrition Pathway' to be adopted throughout Gloucestershire and the wider NHS community.

Managing Atrial Fibrillation in the Emergency Department

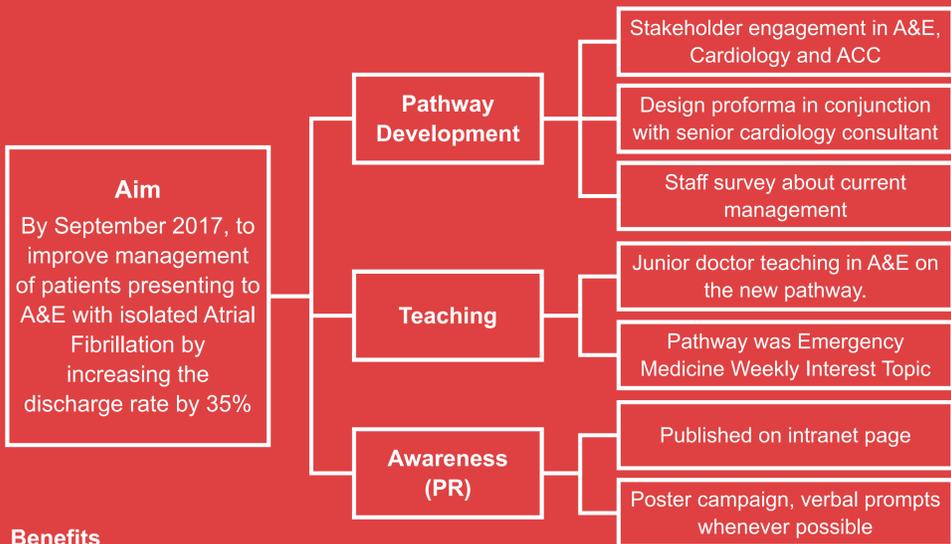
R. Miller, A. Morais, J. Timperley, T. Dyer, T. Odbert, M. Pearce, F. Poyner, J. Trenfield, S. Vince, J. Weatherill, L. Subramanian, C. Warlow, E. Smillie, S. Beech
 Contact: rachel.miller7@nhs.net

Background

Northampton General Hospital (NGH) is a busy acute hospital that provides general acute services to a population of 380,000. There are typically 350 attendances to the emergency department (ED) every day, with 70-100 admissions to the hospital on any given day. Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia, and estimates suggest its prevalence is increasing. If left untreated atrial fibrillation is a significant risk factor for stroke and other morbidities. Men are more commonly affected than women and the prevalence increases with age.

In NGH there are between 30 and 50 patients presenting with isolated AF every month. Prior to the start of this project patients presenting to A&E out of hours were typically admitted, despite no further inpatient treatment being necessary. The justification for this practice was attributed to local policy mandating a cardiology consultant review was required before the patient could be discharged. It is well recognised that patients presenting with AF can be safely managed in the outpatient setting.

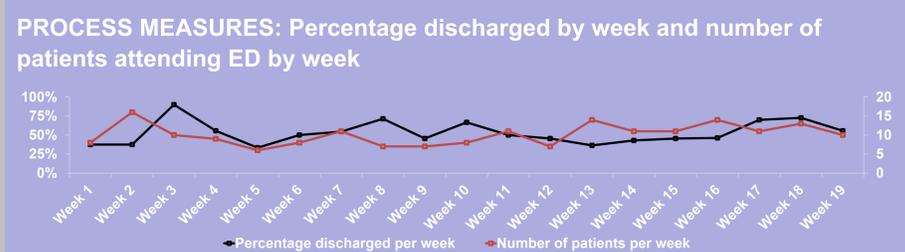
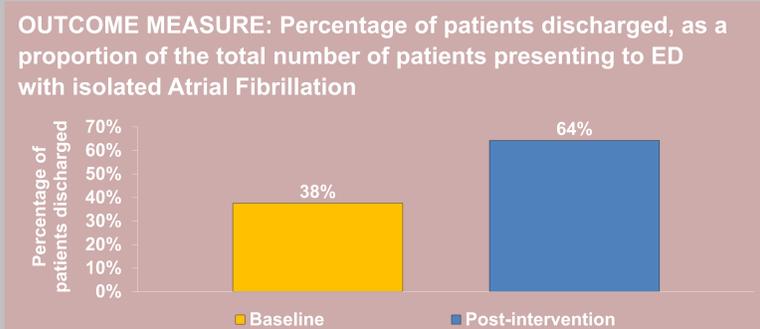
WHAT ARE WE TRYING TO ACCOMPLISH?



Benefits

- Reduced admission rate
- Increased junior doctor knowledge and confidence in managing isolated AF
- Better use of hospital funds
- Better patient experience
- Reduced caseload for Cardiology department

HOW WILL WE KNOW A CHANGE RESULTS IN AN IMPROVEMENT?



FINANCIAL MEASURE: Cost saving to the Trust (Annual)

Number of patients avoiding admission	140	Average cost to treat patient in ACC	£814
Average daily cost for cardiology inpatient	£1167	Total cost to treat AF patients in ACC	£114,000
Total cost to treat AF inpatients	£163,000	Total Financial Saving	£49,000

ENVIRONMENTAL MEASURES

Annual reduction in inpatient days	140
Reduction in water usage (m ³)	8400
Reduction in greenhouse gas emissions	5 tons
Reduction in waste (kg)	450



WHAT CHANGE CAN WE MAKE THAT WILL RESULT IN AN IMPROVEMENT?

PDSA CYCLE 1 (May 2017)

Ambulatory Emergency Care Pathway: Atrial Fibrillation and Flutter

This Ambulatory Emergency Care Pathway (AECP) has been developed with the involvement of consultants and junior medical staff in Cardiology and Emergency Medicine. It is well-recognised that recognition and management of atrial fibrillation is of significant importance in prevention of stroke and other morbidity, but this can be done in the outpatient setting.

The pathway is designed to be used by the ED medical team, and gives guidance on the initial assessment and management, safe discharge and onward referral of appropriate patients with confirmed atrial fibrillation or flutter. It is also important that other underlying conditions are treated separately, as indicated in the pathway.

This pathway is not designed for general management of supraventricular tachycardia, for which a separate pathway is available.

PDSA CYCLE 2 (June 2017)

Teaching

Attended mandatory foundation programme doctor teaching to inform them of the new pathway and provide a brief education about AF and management.

PDSA CYCLE 3 (July 2017)

Emergency Medicine Weekly Interest Topic (EM-WIT)

Daily brief teaching for all staff at handover to educate about the indications of the new pathway.

PDSA CYCLE 4 (2018)

Further teaching at next junior doctor induction

Teaching at the new cohort of junior doctors in August 2018 to inform them all about the pathway and to provide a brief education about AF and management.

PDSA CYCLE 5 (2018)

Ratification of final pathway at guidelines committee

Collect final feedback on the pathway, in order to produce a final document that will be ratified by the hospital's guidelines committee in 2018.

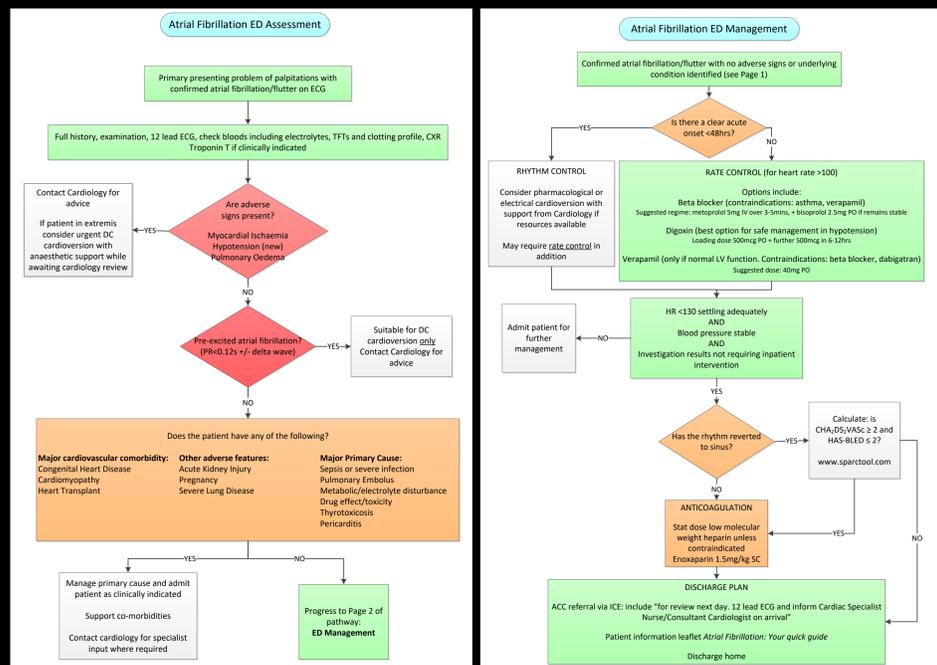


Figure: Ambulatory Emergency Care Pathway: Atrial Fibrillation and Flutter

Conclusion

Prior to the start of this project, the majority of patients presenting to Northampton General Hospital with isolated atrial fibrillation were admitted, despite no further inpatient treatment being required. In order to increase the discharge rate for this patient cohort, a new pathway was developed, the Ambulatory Emergency Care Pathway for Atrial Fibrillation and Flutter. To support the introduction of the pathway, teaching sessions were provided to foundation programme doctors, and the pathway was the weekly interest topic in the department to increase its profile.

Following the introduction of the new pathway, the percentage of patients with a diagnosis of atrial fibrillation discharged from the emergency department increased from 38% to 64%. We anticipate a further improvement in the outcome measure following the planned interventions (teaching sessions during junior doctor induction and ratification of the pathway).

Workforce Award

Winner

Royal Free London NHS Foundation Trust

ICU joy at work

The judges were impressed with the impressive results, simple messaging and the application of QI methodology. This project offers lots of learning for other sites in both approach and improvements.

Second place

Hampshire Hospitals NHS Foundation Trust

Administrator super user support group

With so much focus on clinical workforce it was fantastic to see QI being adopted to support such a vital and often forgotten part of the NHS. The use of pareto methodology to highlight the key issues in this project has much to be proud of. A great poster with some excellent messaging.

Commended

Northampton General Hospital NHS Trust

Dr tool box

Reducing Nursing Turnover in ICU by Improving Joy in Work

Rebecca Longmate, Director of Nursing, RFH; **Ragini Patel**, Deputy Director of Workforce; **Jaqueline Sinclair**, Divisional Director of Nursing RFH; **Susan Tierney**, Divisional Director of Nursing BH; **Sean Carroll** and **Sinead Hanton**, ICU Matrons RFH; **Deborah Kirby**, ICU Matron Barnet; **Maggie Maxfield**, Nursing Education Lead; **Jasmina Davies**, Nursing Recruitment Lead; **Sharon Churchley**, Workforce Information Manager; **Natalie Ware**, Head of Workforce RFH; **Ian Hewitt**, Head of Workforce Barnet. QI Coach: **Karen Turner**, Therapy Service Lead- Oncology.
With Special Thanks to all Nursing Staff on the Intensive Care Units at RFH and Barnet Hospital.

Introduction

In July 2017, the Intensive Care Unit (ICU) nursing turnover rate was 47.2% at the Royal Free Hospital (RFH) and 36% at Barnet Hospital (BH) and contributed to 19% of all Nursing and Midwifery leavers across the Trust. A project to reduce qualified nursing turnover within both ICUs was developed using Quality Improvement (QI) Methodology with an aim of Improving Joy in Work for nursing staff working in these units.

Aim

The overall aim was to reduce nursing turnover to 25% by December 2018.

Method

A multidisciplinary team, headed by the Director of Nursing was set up to try and understand the reasons why turnover and vacancy rates were so high.

Nurses and Nursing Assistants (bands 2 to 7) were invited to a series of focus groups and asked:

What matters to you in daily work?

- What makes a good day for you?
- What gets in the way of a good day for you?
- What makes you proud to work here?
- When we are at our best, what does that look like?

Information was collated and themed and staff themselves were asked to make suggestions as to how to improve their joy in work.

A driver diagram was created capturing this information and projects working on the change ideas were started in July 2017.



Finding & Creating Joy in Work



WHITE PAPER

IHI Framework for Improving Joy in Work



With thanks to the Institute for Healthcare Improvement

What Matters to Staff?

- “More choice and flexibility with shift choices”
- “Having prompt access to ICU and ITU courses”
- “Having more access to senior staff”
- “More positive and constructive feedback”

What Have We Done?

- Set Up electronic rotas with increased number of shift choices
- Every band 5 nurse has an appropriate course booked as part of induction
- Weekly Coffee Catch-ups with matrons set up for all staff
- Employee of the month, ‘Shout Out Boards’ and monthly newsletters .

Staff Feedback

“My work life balance has really improved with the self rostering online, I can write my shifts when I’m at home...”

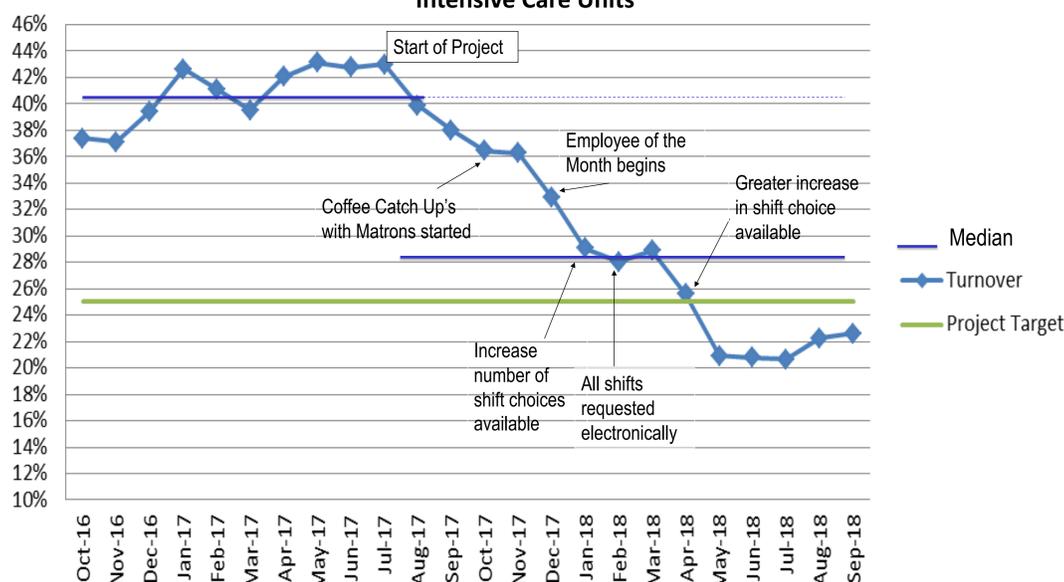
“The newsletter is a great way to find out what’s been happening socially and on the unit, loved seeing the wedding pictures!”

Results

Nursing turnover across both sites started to steadily reduce soon after the project began. In April 2018 the target of the project was reached with nursing turnover at 25% across both sites. Numerous change ideas have been tested to increase staff Joy in Work including

- Increasing choice and control with shift patterns
- Rewards and recognition in the form of ‘Employee of the Month and ‘Shout out Boards’
- Improving timely access to specific ICU courses education to ensure staff feel safe, skilled and confident when working

Combined Nursing Turnover - RFH and Barnet Site Intensive Care Units



Conclusion

This project is on-going and we are committed to ensuring we keep listening to what matters to staff and run improvement cycles to improve joy in work. We are spreading learning to other areas because we have seen how asking, listening and acting on what matters to staff can have a dramatic impact, not just on overall nursing retention, but on staff enjoyment in their work too.

Contact details: Rebecca Longmate
Director of Nursing, Royal Free Site
rebecca.longmate@nhs.net



Administrator Superuser Support Group



Christine Miles, PA & Project Support / Diagnostics / FCSS Division / Hampshire Hospitals NHS Foundation Trust



Project Aim

To provide an administrator superuser group available to provide support and advice to new starter administrators throughout HHFT as from 01/01/2019.

Background

Having been an administrator in various guises over 30 years, I know how good it is to have friendly and helpful colleagues around us when we find ourselves not knowing where to look or where to go. Therefore my project embraces the concept of bringing about improvement in the help and support to our essential team of administrators Trustwide.

PDSA

Plan. I walked the floor, both wards and departments, listening and discussing admin support currently. I then designed & perfected a survey checking it with experts in readiness to send out.

Do. I issued the survey to administrators throughout the trust: by email; hand delivery and positioning forms with key individuals to capture as many passer-by's as possible.

Study. I collated replies to study and produce meaningful data.

Act. I held a meeting with the superuser team to share findings and develop a plan on results from the survey.

Culture of Continuous Quality Improvement

Let's engage administrators in the improvement of performance.

How often do administrators convene to **problem solve & innovate?**

Improved administrator **efficiency & effectiveness** leads to an improved clinical service.

Why wouldn't you share in-house administrator skills; knowledge; and **free-valued experience?**

Austerity. In such times, winning the hearts and minds of our administrators will **influence the Trust aim** to provide an excellent clinical service.

Create an **all-inclusive administrator infrastructure**, nurturing capability and ultimately improving Trust performance.

Engagement

Training & Building Capacity

Learning Networks

Facilitate Learning

Innovate New approaches

You Said

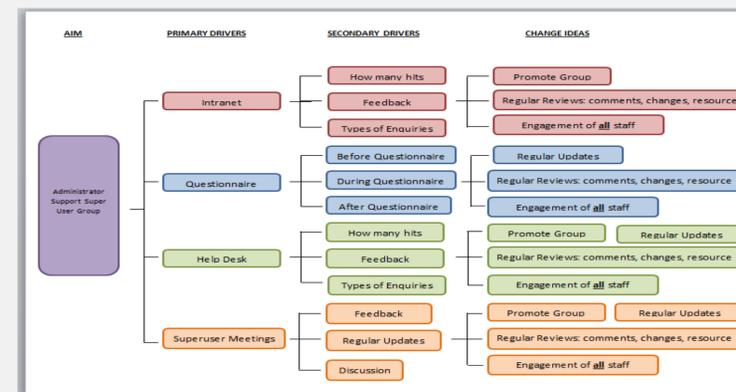
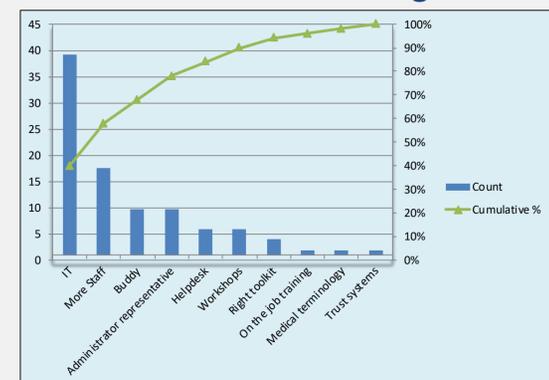
With the right support, I feel I could give so much more to my job role

Don't forget us, we are all working to the same end - patient care

The onus seems to be on clinical support but there's an army of administrators needing support too



Pareto 80:20 findings



next steps



- Grow and develop pool of superusers.
- Launch admin helpdesk trustwide
- Develop admin support intranet page
- Develop admin bitesize workshops
- Continuous PDSA



Improving Junior Doctor Rotation using Doctor Toolbox in a Formal Verbal Handover

Session prior to starting New Clinical Rotations

T Y Toh, V Ioan-Dancea, Y Karapinar, S Beech

Contact: tiengyee.toh@nhs.net

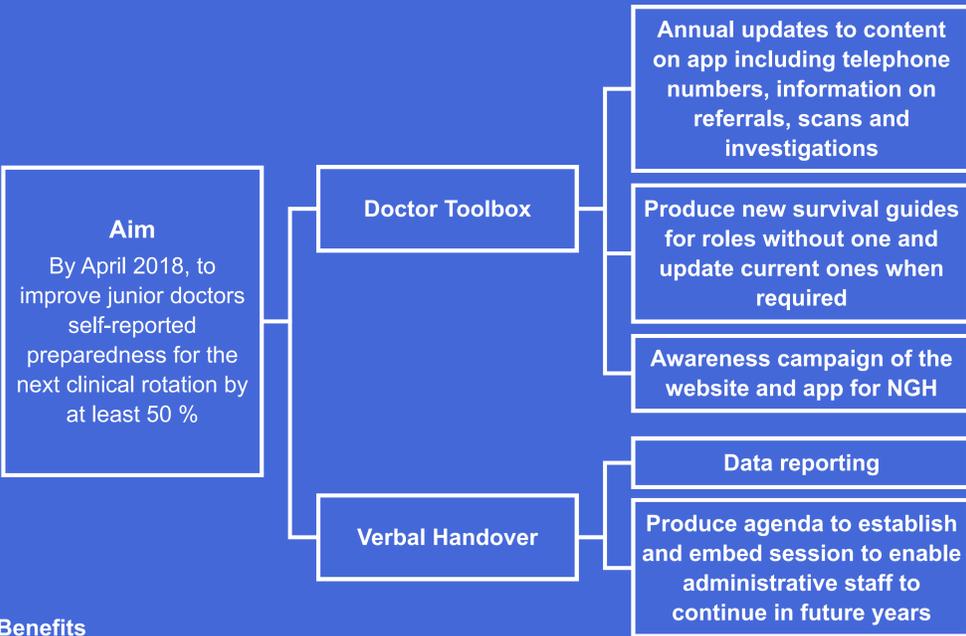
Background

Dr Toolbox is a website and mobile application ('app') that is used by the majority of acute hospitals in England. The platform provides information for junior doctors on the day-to-day running of the hospital including information on bleeps, telephone numbers, wards, investigations and referrals. The platform also contains survival guides—forms used to provide high-level information of an average day on a specific ward or in a certain role and the expectations of the junior in that role.

Northampton General Hospital (NGH) is an acute district general that currently employs 53 foundation year 1 and 2 doctors in training, in 17 different specialties. The prevalence of stress and burn out amongst junior doctors remains consistently high, and methods to reduce this are frequently sought by doctors-in-training.

In August 2017, the team became the new local editors of the application and guardians for the bi-annual verbal handover for foundation year 1 doctors in November and March each year. Despite the considerable improvement made by the NGH Dr Toolbox team for 2016/17, there was still scope to make further significant improvement to the app and its contents, and to embed and establish the verbal handover, to enable administrative staff to take responsibility for its continued success.

WHAT ARE WE TRYING TO ACCOMPLISH?



Benefits

- Increased 'preparedness' for the next rotation
- Reduced self-reported stress and anxiety in junior doctors before each rotation

WHAT CHANGE CAN WE MAKE THAT WILL RESULT IN AN IMPROVEMENT?



PDSA CYCLE 1 (October 2017)

Updated information on the app

Contact information for staff throughout the hospital was updated. Information for referrals, scans and investigations were also updated in line with hospital policy.



PDSA CYCLE 2 (November 2017)

Third formal handover during doctors rotation

The third formal verbal handover took place in the last week of November 2017 for FY1 doctors. This took place during the weekly teaching sessions. Attendance to the session was very high (18 of a possible 27).



PDSA CYCLE 3 (January–February 2018)

Awareness campaign

An awareness campaign of the app and its contents was launched; this included screensavers, Whatsapp group messages and posters in the doctors' mess.



PDSA CYCLE 4 (February 2018)

Upload of updated Survival Guides

An evaluation of the survival guides was completed in January 2018, to understand which guides were in need of a complete re-write and which needed minor amendments. The final documents were written in January 2018 and were all uploaded in February 2018. 4 new guides were also written.



PDSA CYCLE 5 (March 2018)

Forth formal handover during doctors rotation

The forth formal verbal handover took place in the last week of March 2018 for FY1 doctors.

HOW WILL WE KNOW A CHANGE RESULTS IN AN IMPROVEMENT?

PRIMARY OUTCOME MEASURE:

Junior Doctor preparedness for the next clinical rotation, accessibility to essential information and self reported stress

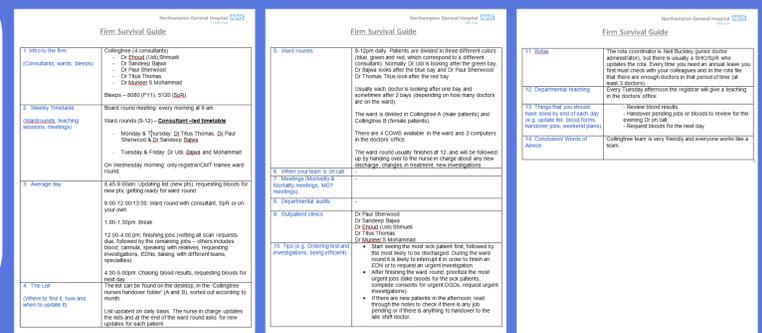
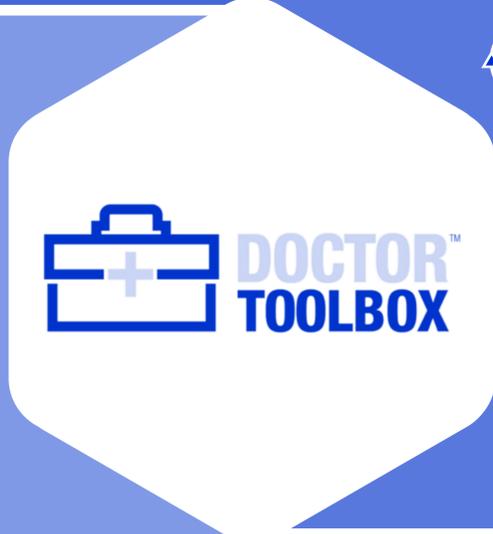
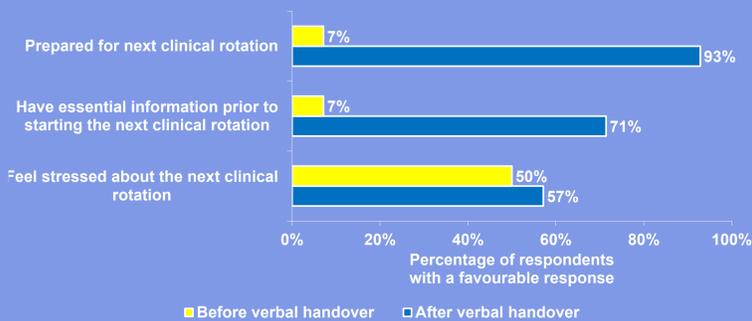


Figure 1: Example survival guide from the app that junior doctors are encouraged to read before the rotation

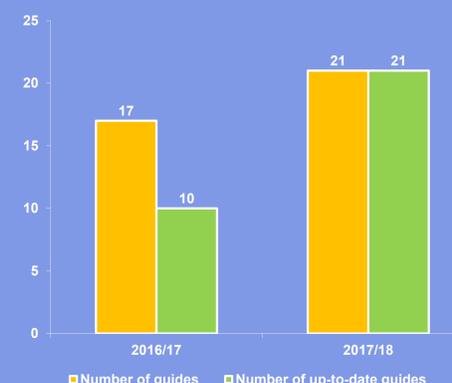
SECONDARY OUTCOME MEASURE:

Hit Count on the Dr Toolbox App



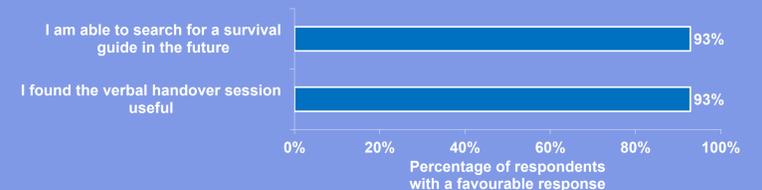
PROCESS MEASURE:

Number of up-to-date survival guides on Doctor Toolbox



PROCESS MEASURE:

Feedback on the verbal handover



Conclusion

The continued development of the Doctor Toolbox website and mobile app for Northampton General Hospital, as well as the continuation of a bi-annual verbal handover for foundation year 1 doctors has led to an improvement in junior doctor self-reported preparedness (7% to 93%). Although the anxiety and stress levels have not improved, this can be explained due to the overwhelming information found in the 'Survival Packs' and general anxiety of working in an unfamiliar environment. However, the doctors will now be better equipped to find and improve these vital information prior to starting a new rotation at NGH.

Acknowledgements

The team would like to thank the NGH Doctor Toolbox team from 2016/17 (Dr Kate Hope, Dr Morgan Sykes, Dr Prashant Shanmuganathan and Dr Portia Cartwright) for providing the relevant information to continue with this project, as well as laying a foundation to build upon for our improvement work.

The Registrar Leadership and Management Programme at Northampton General Hospital— Increasing Leadership Capability for the Consultants of Tomorrow

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Jane Bradley



Sid Beech



Liz Smillie

Background

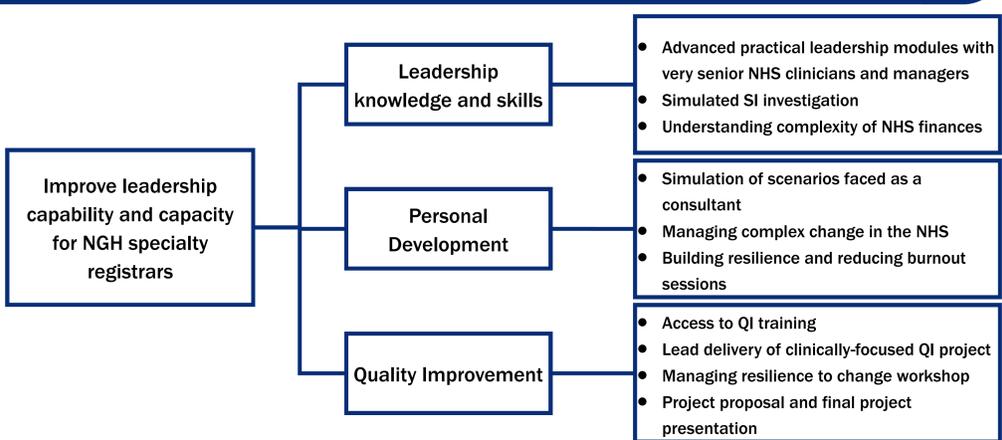
In recent years there has been an increasing emphasis on developing leadership and management skills for clinicians in the NHS. Effective clinical leadership ensures a high quality health care system that provides safe, reliable and effective care. There has been a wealth of guidance, frameworks and reports published by government organisations, charities and think tanks including:

- *Developing People—Improving Care* (2016): A national framework guiding action on the development of NHS staff co-developed by many healthcare organisations in England.
- *Leadership Development for Doctors in Postgraduate Medical Training* (2016): A report published by Health Education England that offers principles and recommendations for development of clinicians.

These two reports highlight the variability in leadership development opportunities across different regions in England, with strong recommendations to greatly improve the training offer for all staff.

Northampton General Hospital (NGH) is a district general hospital in the East Midlands of England with around 100 specialty registrars working in the organisation at any one time. The quality improvement (QI) team in the hospital run several academic programmes to support the personal and professional development of the multidisciplinary workforce. These programmes have various components; some with an emphasis on leadership and management, as well as improving the quality and safety of care delivery at NGH.

What are we trying to accomplish?



What change can we make that will result in improvement?

Since 2012, the QI team in NGH has delivered an annual advanced leadership and management programme for specialty registrars working in the hospital. The aim of the programme is to provide a broader understanding of “how the NHS works” and the wider issues facing primary and secondary care introducing practical leadership and management skills and knowledge needed as a senior clinician in the NHS.

The programme initially ran over a 6 week period with 6 separate modules: *Presentation Skills, Safety Science, Leadership in Medicine, Clinical Outcomes/Governance, Progressing from Registrar to Consultant and How Finance helps the Change Management Process*. Since its inception participants have been supported to lead on a QI project.

In 2017/18, Health Education East Midlands funded a pilot of the Leadership and Management Programme, offering it to specialty registrars across the East Midlands region. This pilot was positively evaluated by participants and the next stage will see this pilot rolled out across the East Midlands in 2019/20.

Feedback from participants and faculty has been collected each year in order to refine the content and structure of the programme. In 2018/19 the programme had 12 modules delivered during 12 weeks. The modules are delivered in a two or three hour slot by senior healthcare professionals. The 2018/19 faculty include the Chief Executive, Medical Director, Director of Finance, Simulation team and Organisational Development team. Participants were also required to complete a pre-requisite course on Quality Improvement in order to join the programme, which is led by the Quality Improvement team. The full module list is shown in Table 1.

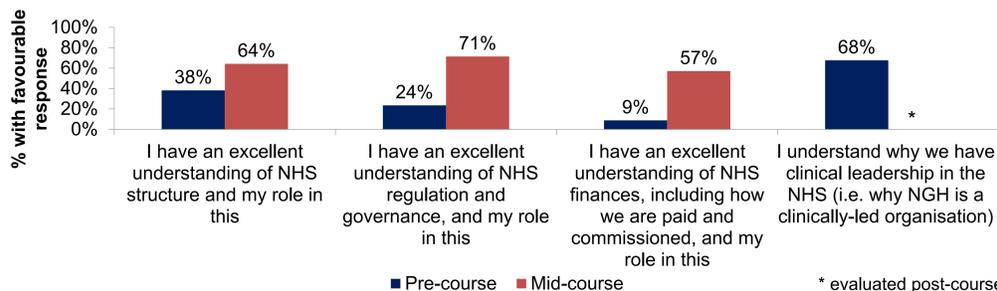
Module Name	Brief Description
Delivering Improvement in NGH Sid Beech (Head of Academic Programmes), Liz Smillie (Data Analyst)	Pre-requisite module on quality improvement methodology (Model for Improvement/PDSA), QI project process and how to measure for improvement
Patient Safety, Governance and Regulation Mr Matthew Metcalfe (Medical Director)	Introduction to the various forms of regulation in the NHS in England. The clinical and corporate governance structure in the hospital and the justification for this. Simulated investigation into several real serious incidents, to explain the process and actions that arise from them.
Dragon's Den Sid Beech (Head of Academic Programmes), Liz Smillie (Data Analyst), Dr Rebecca Cole (QI fellow), Sarah Cross (Associate Director Patient Safety/QI)	Participants present their project ideas to the wider group for advice and feedback.
Demystifying NHS Finance Phil Bradley (Director of Finance)	A brief introduction to the complex financial processes, governance and organisations in the NHS with pointers for managing a service within budget.
Improvement under pressure—confessions of a medical CEO Dr Sonia Swart (Chief Executive)	A personal perspective of how NGH has achieved 'Good' quality care, the future plans for the hospital and the importance of medical leadership.
Simulation—what it feels like to be a consultant! Vicky Garrod (Operational Simulation and Response Lead), Dr Fiona Poyner (Emergency Dept Consultant), Dr Andrew Jeffrey (Respiratory Consultant)	3 separate scenarios on breaking bad news of a medical error, rapid tranquillisation, dealing with a challenging junior doctor.
Clinical Leadership—a Divisional Director's perspective Dr Minas Minassian (Divisional Director, Clinical Support Services)	An introduction to the skills and attributes needed to be a highly successful clinical leader. This session focused on emotional intelligence.
Change without migraines Fiona Pittam (Head of Organisational Development)	Managing and leading change in the NHS can be complex, especially when facing resistance. This module provides a model to consider and prepare for resistance and overcome this using a well-established toolkit.
Building personal resilience Lorraine Ridgwell (Organisational Development Practitioner)	Recognise what depletes your energy and what restores your sense of wellbeing and personal resilience.
Mind the gap! Dr Darin Seiger (GP principal, Moulton Park Surgery)	A general physician's perspective on how to improve co-ordination and collaborative working between primary and secondary care.
Why Clinical Leadership? Dr Richard Bohmer (Senior Visiting Fellow, Nuffield Trust)	Advice on how to prepare for senior clinical roles, avoiding physician burnout, your role in the future of the NHS.
Simulation—team communication, documentation and clinical notes review Vicky Garrod (Operational Simulation and Response Lead), Dr Fiona Poyner (Emergency Dept Consultant), Dr Tom Odbert (Emergency Dept Consultant)	Participants are placed in to groups and asked to complete a concise case note review of a recent clinical incident. This is followed by a presentation of an action plan for each clinical incident with feedback from senior clinicians.
Project presentation Jane Bradley (Deputy Director Patient Safety/QI), Sid Beech (Head of Academic Programmes), Liz Smillie (Data Analyst), Dr Rebecca Cole (QI fellow), Sarah Cross (Associate Director Patient Safety/QI)	Participants present the progress of their QI project to their peers and the programme faculty. These presentations are video recorded for use in portfolios and to share locally.

Table 1: The 2018/19 programme for the NGH Registrar Leadership and Management Programme

New sessions on this years programme include Change without migraines, Building personal resilience and Why Clinical Leadership?. Participants on the programme are supported to continue with the delivery of their QI project for the remainder of the academic year, with the expectation that their work will be presented on a regional, national or international platform.

How will we know that a change is an improvement?

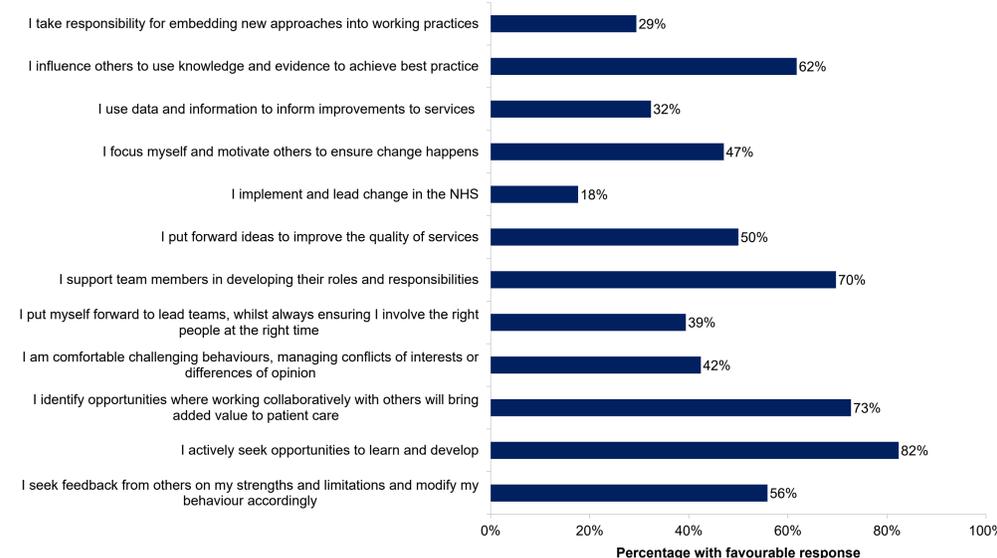
Key questions on knowledge of NHS, regulation, finances and clinical leadership



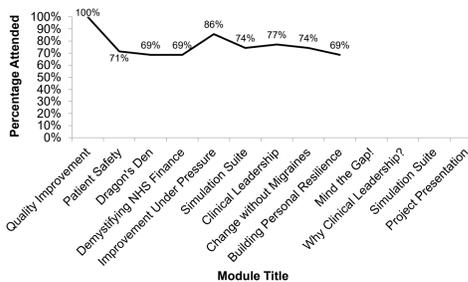
Self-evaluation of key personal attributes



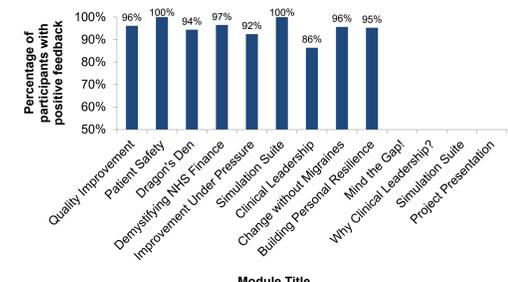
Self assessment of leadership capability and style (pre-course only)



Module attendance rate (n=35)



Module feedback



Summary

The Registrar Leadership & Management programme at NGH is in its seventh year; the 2018/19 programme is still ongoing with 35 participants on the programme. The programme has continually developed since 2012, with a larger programme that reflects the current requirements of specialty registrars in the region. The module feedback for 2018 has been very positive to-date, and we have the largest number of participants on the programme ever (35).

The programme is still ongoing, therefore we have only completed a pre- and mid- course evaluation at the time of reporting. The results show a marked improvement in knowledge of key areas of the programme including NHS structure and their role in it, NHS governance and NHS finances. We have seen a minor change in the self-evaluation of leadership attributes, however we anticipate a larger shift after completion of the course and further progress with QI projects.

Message for others

Investing in staff is imperative in the modern NHS. Effective clinical leadership leads to safer, more reliable and effective care and with most NHS providers adopting a clinically-led organisational structure, it is ever more important that trainees are actively encouraged to enrol in programmes to support their leadership and professional development.

Utilising the knowledge and skills of senior clinicians and leaders within an organisation, we have been able to deliver a successful programme for 7 years. This approach can be readily replicated in other organisations with appropriate senior support.

Acknowledgements

The authors would like to thank the faculty of this programme over the last 7 years, without whom this programme would not exist. Each faculty member has supported the programme in their own time, to the considerable benefit of the registrars, the hospital and the NHS.

Dr Amanda Bisset, Dr Richard Bohmer, Phil Bradley, Janine Brennan, Dr Rebecca Cole, Sarah Cross, Dr Mike Cusack, Dr Matthew Davies, Andrew Foster, Vicky Garrod, Mr Rob Hicks, Dr Andrew Jeffrey, Dr Yesim Karapinar, Simon Lazarus, Mr Matthew Metcalfe, Dr Minas Minassian, Deborah Needham, Dr Tom Odbert, Dr Philip Pearson, Dr Warren Pickering, Fiona Pittam, Dr Fiona Poyner, Lorraine Ridgwell, Dr Darin Seiger, Dr Sonia Swart, Dr Fiona Thompson, Celia Warlow and Dr Jonny Wilkinson.

