

Quality Improvement in Healthcare



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Aims

- Inspire
- Why undertake a Quality Improvement (QI) Project?
- Understanding QI vs Audit 
- Starting your QI project
- Moving towards action
- Successes & future ideas

Why undertake a Quality Improvement Project?

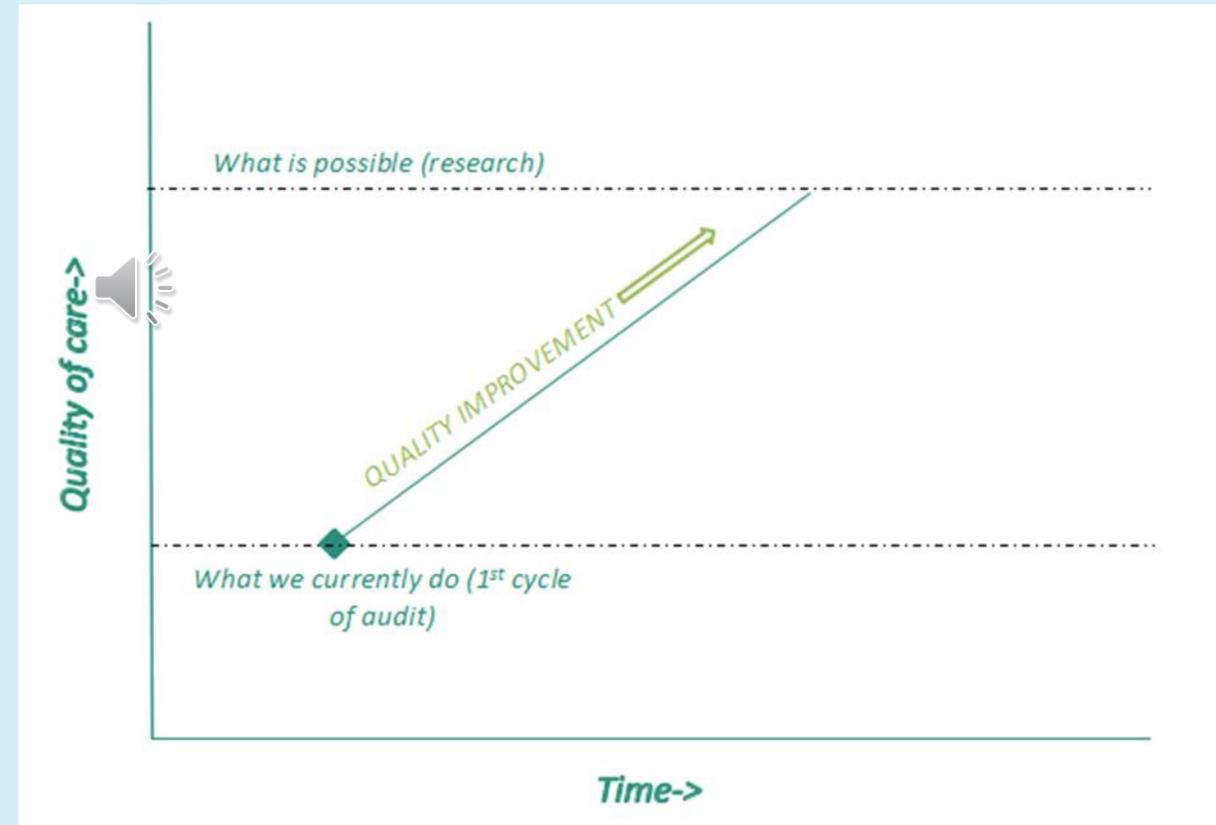
- Improved patient care and collaboration, cost savings & improved practice
- Requirement for Annual Appraisal and Revalidation 
- Presentations at local and national meetings
- Career progression (CESR, additional roles, SPA sessions)
- Higher recognition SQSF, doctorate or Masters degree

Understanding Quality Improvement (QI) vs Audit

- Audit tells us how we are currently performing
- Research asks the question – what new knowledge can we discover 
- QI is the process of moving from how we are performing towards what is possible (and beyond)

Understanding Quality Improvement (QI) vs Audit

In many ways a QI project can be seen as a journey from how we are performing now (as identified by an audit), towards what we know is possible (research) or towards achieving national targets or guidelines



Audit

Single data collection and recommendations



Intervention(s) from the recommendations



Further single data collection often months later

What is Quality Improvement

QI is a formal approach to the analysis of performance and then the use of systematic efforts to improve it.

Key points:

- Knowing why or what you need to improve
- Developing an idea and processes for change that ideally will lead to improvement
- Testing a change before implementation
- Planning for spread and sustainability
- Improvement can result from learning from failure

Getting started on your QI project

- Realistic potential for improvement, and that the end result is likely to justify the investment of time and effort involved
- Ensuring that you have enough time, commitment & “organisational support” 
- Examine an area of practice where you have influence
- Issue either occurs relatively frequently or is significant when it does occur
- Discuss your proposed standards or targets to ensure that they are relevant and achievable in your local context

Data Collection

- Sample size
- Small enough to allow for rapid data acquisition but large enough to be representative. If the data acquisition time is too long, interest will be lost and the data completeness will often suffer
- Straightforward method of data collection
- Consider data that is already routinely collected
- Monitor the quality of the data
- Thank everyone involved and provide feedback often!

Moving towards action

- Analyse and discuss results with colleagues
- MDT meeting – “buy-in” and “co-ownership”
- Realistic, progressive targets 
- Small tests of change & continuously evaluate

Waste Segregation in a District General Hospital

- NHS Scotland spent >£22 million towards waste management and disposal in 2012
- No segregation of waste within the theatre complex -all waste was treated as clinical waste
- Segregation initiative →environmental and financial savings

Pilot Project

- Clinical waste disposal £432/tonne vs General £95/tonne
- All pre-theatre preparation waste (non-contaminated) placed in the clear waste bags. These are removed prior to any patient contact and weighed
- Waste taken to third party facility & segregated. Increase in recycling & significant reduction in clinical waste

Educate & Motivate

Waste Segregation Initiative

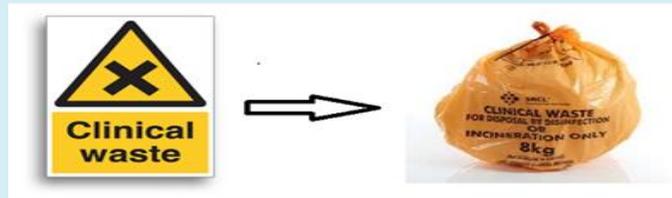
Between Cases

Place waste in clear bags.



Prior to the patient entering theatre

Replace clear bags with the orange clinical waste bags.



Prior to disposal outside theatre

Clear bags to be weighed.



Thank you for your co-operation.

Waste Segregation Initiative

Please place all waste between cases in the clear bags.

Immediately prior to the patient entering theatre, all clear bags to be replaced with orange clinical waste bags.

Only clear bags to be weighed prior to disposal outside theatre.

No contaminated waste to be deposited in clear bags.

Thank you for your cooperation.



Results

- Scheme trialled in each specialty theatre for one week
- 505.5kg of waste/week (or 26.3 tonnes/year)
- Environmental benefits plus projected saving of £8,450* per annum
- Likely underestimation as only 10/12 theatres and a few suboptimal collection days
- Follow-up figures of % increase in recycling waste

Results

- November 2018-mid 2019: reduced clinical waste by 1.9 tonnes/month and increased recycling by 1.5 tonnes/month
- Saving ~**£25,000** in the first year
- Introduction of local site champions



Discussion

- Simple measures with no increased resource utilisation
→ significant impact
- Easily upscalable activity, which could include metal, glass and PVC products
- Similar schemes in UHH & UHM
- 3 tonnes CO₂ for every 1 tonne clinical waste destroyed
~70 tonnes/year

Award winning

- 1st prize for Sustainability Excellence at the Scottish Health & Social Care Facilities Awards 2019
- Tribute to all the theatre teams who've shown commitment to making it a success



Future Initiatives – where to from here?

- Metal, glass and plastics
- Reusable sharps bins
- Multi bins
- Desflurane



Future QI ideas ...



Optimising your Day case rates

- “Treat day case surgery (rather than inpatient) as the norm for elective surgery”¹
- Default pathway for most surgical procedures
- Potential to result in:
 - Improved day case rates
 - Released inpatient beds
 - Improved patient experience

Background

- Ever-increasing demand for elective & urgent surgical procedures
- Multiple surgical procedures should be completed on a day case basis
- Appropriately screened for suitability for day case surgery

Best practice

- NHS Modernisation Agency recommended that 85% of all surgical procedures should be as day case procedures



- The British Association of Day Surgery - directory of procedures contains suggested day case rates for elective and emergency procedures classified by specialty

Data collection

- Overall true day case rate
- Review those patient episodes who are admitted to an inpatient ward and have a zero-day length of stay
- Identify any recurring themes → Act on the findings
- Review patient episodes of patients whose surgery could have been a day case but had a one-night stay

Quality Improvement Methodology

1. Assess current practice
2. Process mapping 
3. Implement change using the plan-do-study act framework

Worked example

- Review of a selection of OMFS patients – identifying common reasons for admission
- Resulted in amendments to DSU criteria, further education and agreement from all parties
- Default to day surgery

Mapping

- Map to your college's CPD matrix codes
- For trainees assisting you, link to the training curriculum competencies



Thank you...



Thank you ...