

Quality Improvement:

GI Radiology Services at Portsmouth Hospitals NHS Trust

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Background

High demand for GI Radiology services within the trust but feedback from the GI Consultant Radiologists highlighted that there were quality issues within the department across all modalities. When looking at what the specific issues were through audit and feedback from referrers the following issues were highlighted:

- Cancellation Rates
- High imaging recall rates
- Inappropriate examination booking
- High post procedure complications

Table 1. Imaging quality issues by modality

Radiology specialty	Quality Issue
Interventional Fluoroscopy	17% cancellation rate for RIG 15% cancellation rate for PTC
MR Enterography	>30% recall rate for MR Enterography
Ultrasound	21% inappropriately booked examinations onto GI US lists

Aim

Improve the GI Radiology service that was being provided within our department by reducing the number of GI patients requiring repeat attendance for non-clinical reasons in Portsmouth NHS Trust by January 2017.

Team Actions

To work towards our aim multiple areas for improvement were highlighted after analysing the existing processes.

US actions
Vetting protocols updated
Vetting process improved
US Protocols to be updated
Develop GI US specialist roles
MDT feedback
Regular staff meetings

MR Enterography actions
Establish protocols
Protocol optimisation on key platforms
Staff training sessions
Implement dedicated lists

Interventional Fluoroscopy actions

Change requesting process so that patients have a named consultant responsible.

Patients to have a suitable bed for post procedure care.

Patient leaflet prior to procedure and aftercare leaflet.

Create a suitable day case pathway with nursing staff.

Staff meetings

Reduce the number of patients requiring repeat

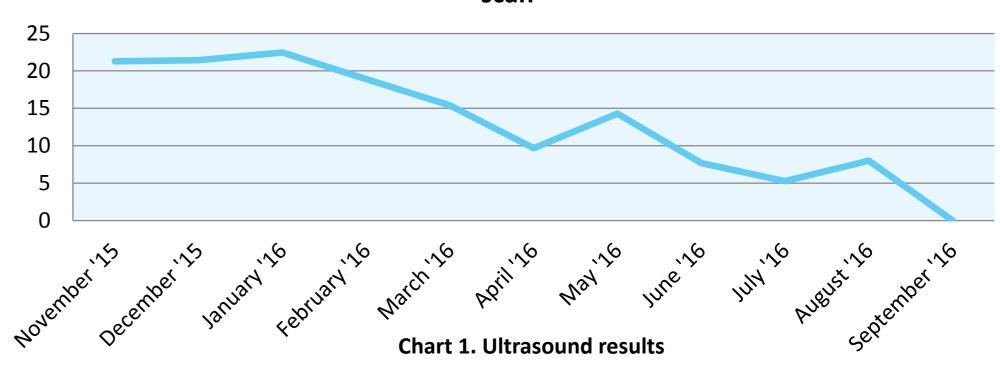
scans for non-clinical reasons for GI patients from

20% to 0% in Portsmouth NHS Trust by January

Results

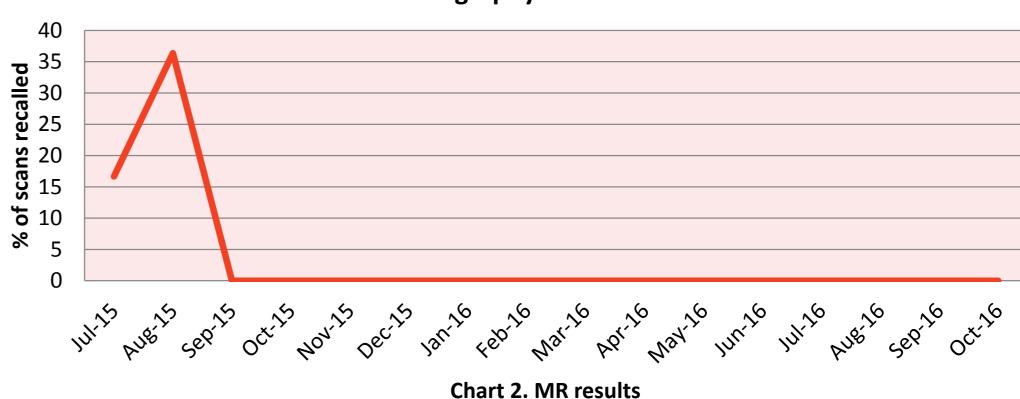
There has been an overall improvement to the GI Ultrasound lists with requests being assigned to appropriate ultrasound list, and a reduction in inappropriate rescans.

% of the patients on GI Ultrasound lists who did not require GI US scan

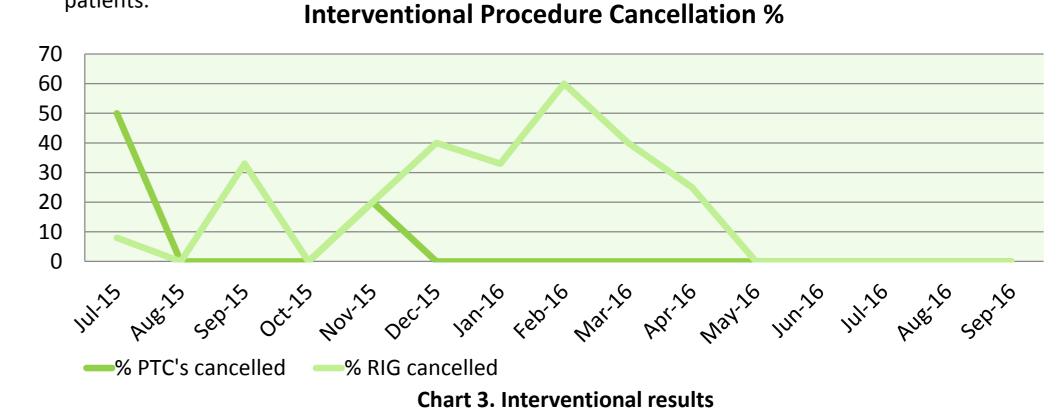


Following the team actions there has been excellent improvements to the MR Enterography service within the department with no recalls in over 12 months.

MR Enterography Scan Recall %



Progress has been made to reduce the number of inappropriate procedure cancellations however there is still on-going hospital capacity issues that affect the post procedure beds for these particular patients.



Due to the low numbers and sickness of the patients the mortality rate still fluctuates, however post procedure complications have been reduced by ensuring these patients have care in a high care ward following.

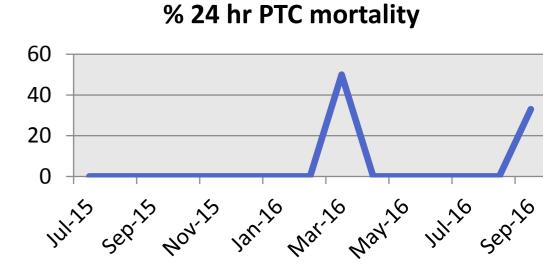


Chart 4. PTC Mortality results

Importance of identifying stakeholders and

Team working and communication— The

importance of good communication skills and

utilising the strong team members to make

understand their influence on any changes within

Actions Learning points Areas for improvement Staff meetings to highlight and address Team Driver **Individual Aims Measurability** – How to measure change and how

Reduce the number of unnecessary

inconclusive reports

Improve the validity of practitioners

report for referrers

Global Aim

Reduce the number of GI patients requiring repeat attendance for non-clinical reasons in Portsmouth NHS Trust by January

Diagram

Reduce procedure cancellations due to no access to beds for post procedure Reduce the number of unnecessary procedure ancellations from up to 17% to 0% and improve 24 hr post procedure patient survival rate to 0% by 2017. Improve post procedure care Improve image quality Reduce the number of scan recalls from 30% to 0% by January 2017. Reduce scanning errors Incorrect allocation of scanning practioner/clinician

suitable ward following procedure Create information leaflets prior to ocedure including aftercare information **Establish protocols** plement dedicated lists for complex **Vetting process updated**

Staff Teaching

Case feedback

Lead sonographer roles developed

Figure 1. Driver Diagram

effective change **Next Steps**

the service.

to assess for change.

Set up regular Quality Improvement meetings within the Radiology Department to carry on working towards our aim.

Glossary: **GI**= Gastrointestinal **CT**= Computerised Tomorgraphy **MR**= Magnetic Resonance

US= Ultrasonography **PTC**= Percutaneous Transhepatic Cholangiography

RIG= Radiologically Inserted Gastronomy **MDT**= Multidisciplinary Team