Return for scan:

A quality improvement project developing a new protocol for Barnsley A+E Clinical Decisions Unit

Barnsley Hospital NHS Foundation Trust

Background

In the emergency department at Barnsley District General Hospital it is not possible to get a **routine** CT KUB (for the investigation of renal colic) or an MRI spine (for the investigation of spinal cord compression) between the hours of 20:00 and 08:00.

For patients requiring either of these investigations 2 pathways exist:

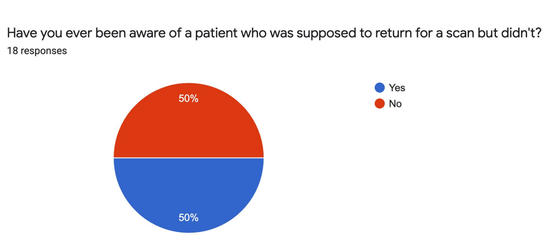
- Admission to the Clinical Decisions Unit (CDU) overnight, to have scan performed in the morning.
- Discharge home to **return to CDU for scan** at 08:00 the following day, provided the patient is clinically stable to do so.

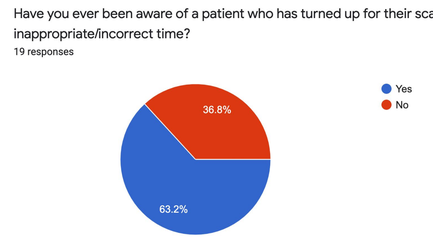
Through survey of junior doctors working on CDU several key problems were identified:

- **Patient's not returning for scan**
- **Patients returning for scan at incorrect times**
- **Doctor not aware of patient returning for scan**

In addition, **79%** of those surveyed stated that they would use a **logbook** to record those returning for scan and **95%** would **want to be told** about patients returning for scan.

58% of doctors were **not confident** that patients could be identified and **chased** using the current system and **53%** did not feel **adequate information** was given to patients about the process to return for scan.

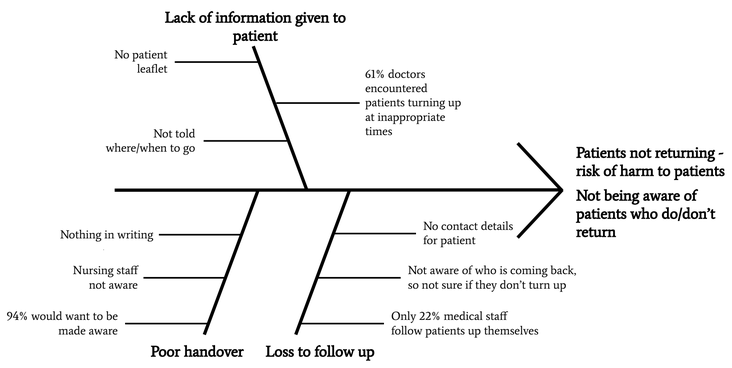




Problem statement

Currently there is no **standard process** for recording ED patients who are due to **return to CDU for scan**, or for providing **information to the patient about this process**. As such it is difficult to ensure patients requiring a scan are not **missed** and those that do turn up have their scan performed in a **timely manner**, as well as ensuring that patients are informed about **when & where to return**. This poses a potential **patient safety risk**, may provide a **poorer patient experience** and can cause **frustration** to staff who lack the information to manage workload on CDU and who may not feel confident in the current process..

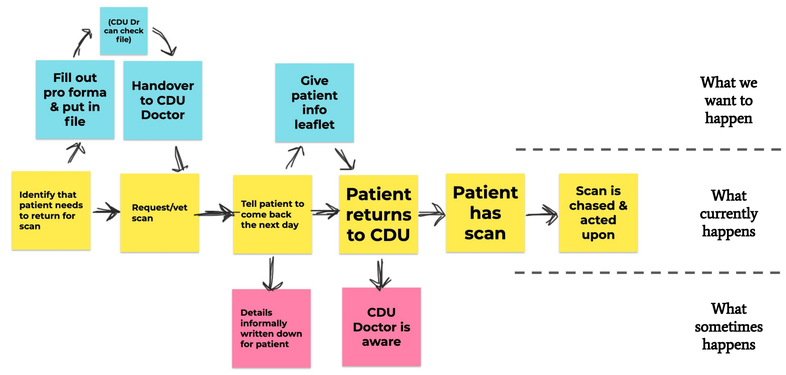
Contributing factors



Many different factors contribute to a patient not returning for scan and being lost to follow up. We constructed a <u>fishbone</u> diagram to highlight these in order to identify possible **improvements** to the process.

<u>Left:</u> The fishbone we constructed identified that poor handover, loss to follow up and lack of information given to patients could mean there was a risk of patients not returning, and the staff working on CDU not being aware of who to expect and as such being unable to chase the patient. Both of these factors could lead to increased **risk of harm to the patient**.

Process map



First protocol change

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RETURN FOR SCAN PROFORMA
Please file this in the front of CDU folder

Patient sticker

Patient contact number: _____

Scan returning for: _____ Requested on ICE? ☐

Date & time due back: _____

Have you given patient information leaflet? ☐

Referapatient details in notes? Y / N / NA

Doctor Signature: _____ Date & Time: _____

For CDU Doctor

Did patient return for scan? Yes/No

Actions taken if patient did **not** return: _____

Once form completed - please return to back of CDU folder

Return for scan

You have attended the Emergency Department with symptoms that need further investigation with a scan. You have been assessed as being well enough at this time to leave the department and return for this scan in the morning. It is important you return for this scan as there may be findings that require urgent treatment or follow up with a specialist. If your symptoms worsen before you are scheduled to return do not hesitate to come back to the Emergency Department sooner.

When and where to return to

Please return to the **Emergency Department reception at 8am** the morning after you attended with your symptoms.

What to expect

You will be brought to our Clinical Decisions Unit (CDU) to await your scan and results.
You will be booked in for the next available scan, once your scan is completed it must be seen and reported by a Radiologist.
The results of this scan will be discussed with a specialist to determine if any urgent treatment or follow-up is needed.
We aim for this process to happen as quickly as possible. However, as we are an emergency department, the number of patients we need to see urgently and scans that are done each day can be unpredictable; sometimes you may have to wait for a few hours.

Contacts

Main Switchboard **01226 73 00 00**
Emergency Department **01226 43 27 88**

Several drafts of a proforma were constructed prior to settling on the above. It was important for the proforma to be **clear**, and to include all pertinent information:

- Patient contact details
- Scan to be performed
- Completion of scan request
- Patient information leaflet given
- Referapatient details (for MRI spine/neurosurgery referrals)

Each referring doctor would complete the above proforma and place it into a **clearly labelled folder** on CDU so that the next morning the CDU doctor would know who to expect as a return and be able to **follow up** any DNAs. In addition a **patient information sheet** was given to each patient explaining when and where to arrive the next day e.g. CDU 08:00 to ensure that each patient was given standardised instructions.

Summary of first change

Clear **protocol** created and disseminated to staff within the emergency department via email and bulletins.

- Identify patient suitable to return to CDU for scan
- Request scan on ICE and ensure appropriate referral to specialist completed
- Give information leaflet to patient and give instructions of where and when to attend for scan
- Complete proforma (as above) and place in clearly labelled folder on CDU

Anecdotally, this process was felt to be more intuitive by the junior doctors working on CDU during the day time. It was followed between **June 2021** and **September 2021**.

Despite this general feeling of improvement there were still patients who arrived at CDU without a proforma having been completed for them and without the CDU doctor being aware.

'Give It A Go Week'

This September Barnsley Hospital ran its first **'Give It A Go Week'** as an incentive and opportunity for staff within the hospital to trial new quality improvement projects with the support of the Quality Improvement team.

We decided that this week would be the ideal opportunity to implement a second protocol change for the process of patients returning to CDU for scan.

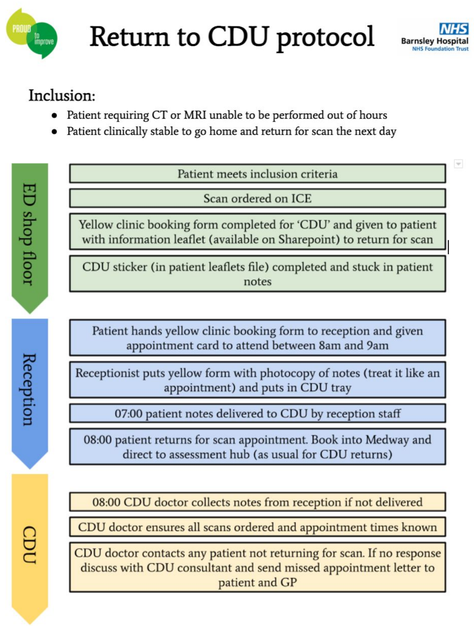
Within Barnsley ED there is a **paper yellow form** to bring patients back for ENT, ophthalmology, orthopaedic or other specialist clinics. The form is completed by an ED middle grade or consultant and then given to the patient to hand to reception on their way out at which point a follow up appointment is booked, and the patient given an appointment card.. All staff within the department use these forms regularly and are familiar with this process.

We theorised that if the yellow form contained a box to tick for **return for scan** follow up then it would be used more regularly on the shop floor as it closely mimicked current practice of bringing a patient back for follow up. We spoke with **patient flow** team and **reception** staff to discuss what actions would need to be taken when a yellow form with **return for scan** was handed in at reception.

Reception staff felt the easiest way to process these forms would be to put a copy with a photocopy of the patients notes from their ED attendance and place these in a tray labelled for CDU. At 07:00 the reception staff would take the contents of the tray to CDU so that the daytime doctor would have a record of which patients to expect back for scan that day.

Second protocol change

<u>Right</u>: New protocol for patients **returning for scan**. This document was uploaded to sharepoint with other ED guidelines, printed and displaced around the ED, put into a folder in the leaflets box on ED together with patient information sheet



Return to CDU protocol

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Inclusion:

- Patient requiring CT or MRI unable to be performed out of hours
- Patient clinically stable to go home and return for scan the next day

ED shop floor

- Patient meets inclusion criteria
- Scan ordered on ICE
- Yellow clinic booking form completed for 'CDU' and given to patient with information leaflet (available on Sharepoint) to return for scan
- CDU sticker (in patient leaflets file) completed and stuck in patient notes

Reception

- Patient hands yellow clinic booking form to reception and given appointment card to attend between 8am and 9am
- Receptionist puts yellow form with photocopy of notes (treat it like an appointment) and puts in CDU tray
- 07:00 patient notes delivered to CDU by reception staff
- 08:00 patient returns for scan appointment. Book into Medway and direct to assessment hub (as usual for CDU returns)

CDU

- 08:00 CDU doctor collects notes from reception if not delivered
- CDU doctor ensures all scans ordered and appointment times known
- CDU doctor contacts any patient not returning for scan. If no response discuss with CDU consultant and send missed appointment letter to patient and GP

Feedback post change

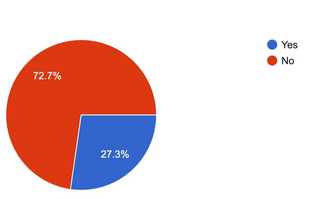
A second survey was sent to junior doctors working in Barnsley A+E 4 weeks after the implementation of the second **Return to CDU protocol**.

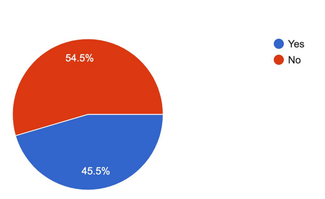
There were 11 respondents ranging in grade from foundation year 1 to core trainee 3. **82%** of these had brought a patient back for a scan the next day using the second protocol and **73%** had brought a patient back for scan using the first protocol.. Of those bringing patients back only **27%** would follow up patients scan results themselves.

The second protocol (new system) was compared to the first protocol in several aspects, and all respondents answered either neutrally or positively:

Comparing the second protocol to the first protocol	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I find the system more **intuitive**	0%	0%	30%	40%	20%
I am more confident patients will be **followed up appropriately**	0%	0%	20%	50%	30%
I **prefer** the new system	0%	0%	20%	50%	30%
I feel more able to **clearly explain the process** to patients	0%	0%	40%	30%	30%

We also surveyed respondents whether they were aware of a patient who was supposed to return for scan but didn't and whether they were aware of patients who turned up for scan at an inappropriate/incorrect time.





Summary

Our primary goal was to create a **standard process** to bring a patient back for scan that was understood by both doctors and patients, as well as **reducing patient risk** and **staff frustration** by ensuring patients returned at the correct time to have their scan performed.

Overall staff felt **positively** about the **second protocol** and felt the system was intuitive, reliable, and clear.

Despite this **27%** of survey respondents were still aware of patients who did not return for scan (improvement from 50% prior to QI project) and **46%** of respondents were still aware of patients returning at incorrect/inappropriate times (improvement from 63% prior to QI project).

Whilst the work presented here has improved the process it still appears that there is work to be done to improve the process of bringing a patient back for scan.

Authors

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With thanks to the Quality Improvement Team
April 2021 - December 2021

Future Developments

There are still many aspects that we wish to address in future work. These include:

- Survey of **patient experience** through the process including the influence of socioeconomic factors on returning for scan (i.e. cost of 2 journeys to Barnsley hospital, not 1)
- The possibility of reception generating a **daily list** of patients that are supposed to return for scan so that there is a clear record for CDU doctor to chase
- Creation of a **SOP** (standard operating procedure) for the CDU doctor to follow each day