



Abdominal Pain Pathway

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Introduction

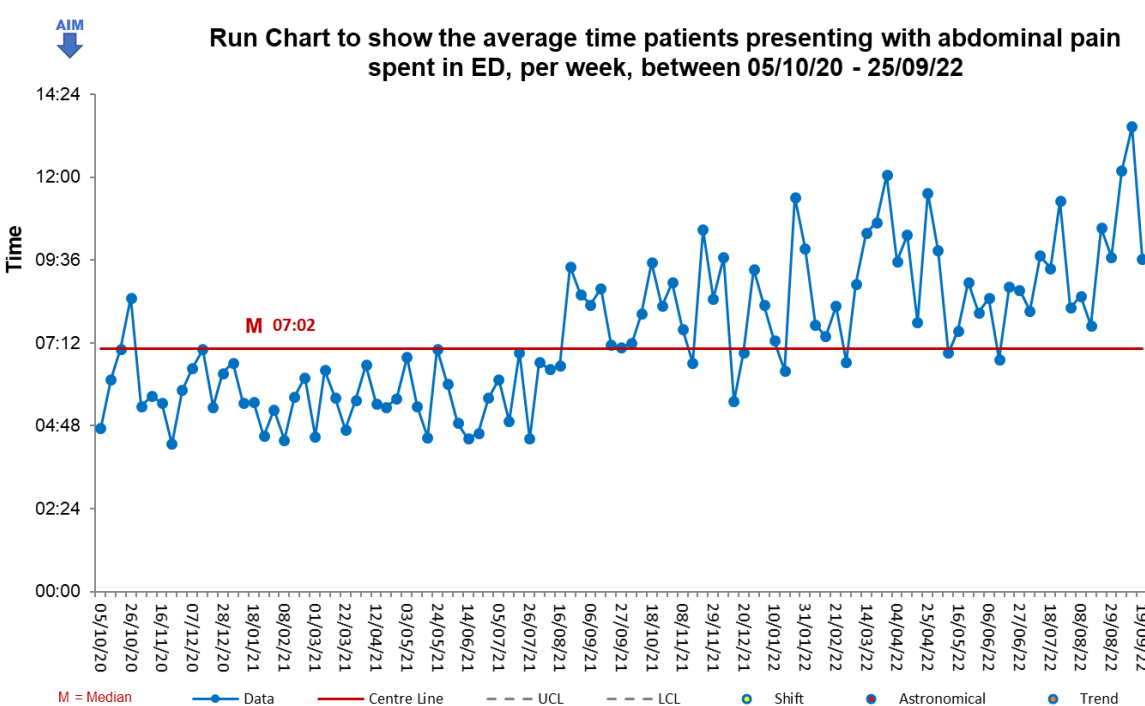
A 74-year-old patient attended the Emergency Department (ED) with abdominal pain, there were missed opportunities to access an early CT scan and failure to escalate the patient's condition. The patient had a cardiac arrest and died 14 hours later; post-mortem revealed the cause of death as extensive bowel ischaemia.

Whilst earlier diagnosis is unlikely to have saved this patient, an Abdominal Pain Pathway (APP) in the ED will provide guidance to manage the high-risk nature of older adults with abdominal pain. The APP team is a combination of clinical and nursing colleagues with the appetite to improve pathways and effect change.

Aim

To reduce time from arrival to CT scan in the ED for patients with abdominal pain due to serious intra-abdominal surgical pathology by 25% from 515 minutes to 386 minutes by August 2023, improving clinical outcomes and patient experience.

Initial Assessment

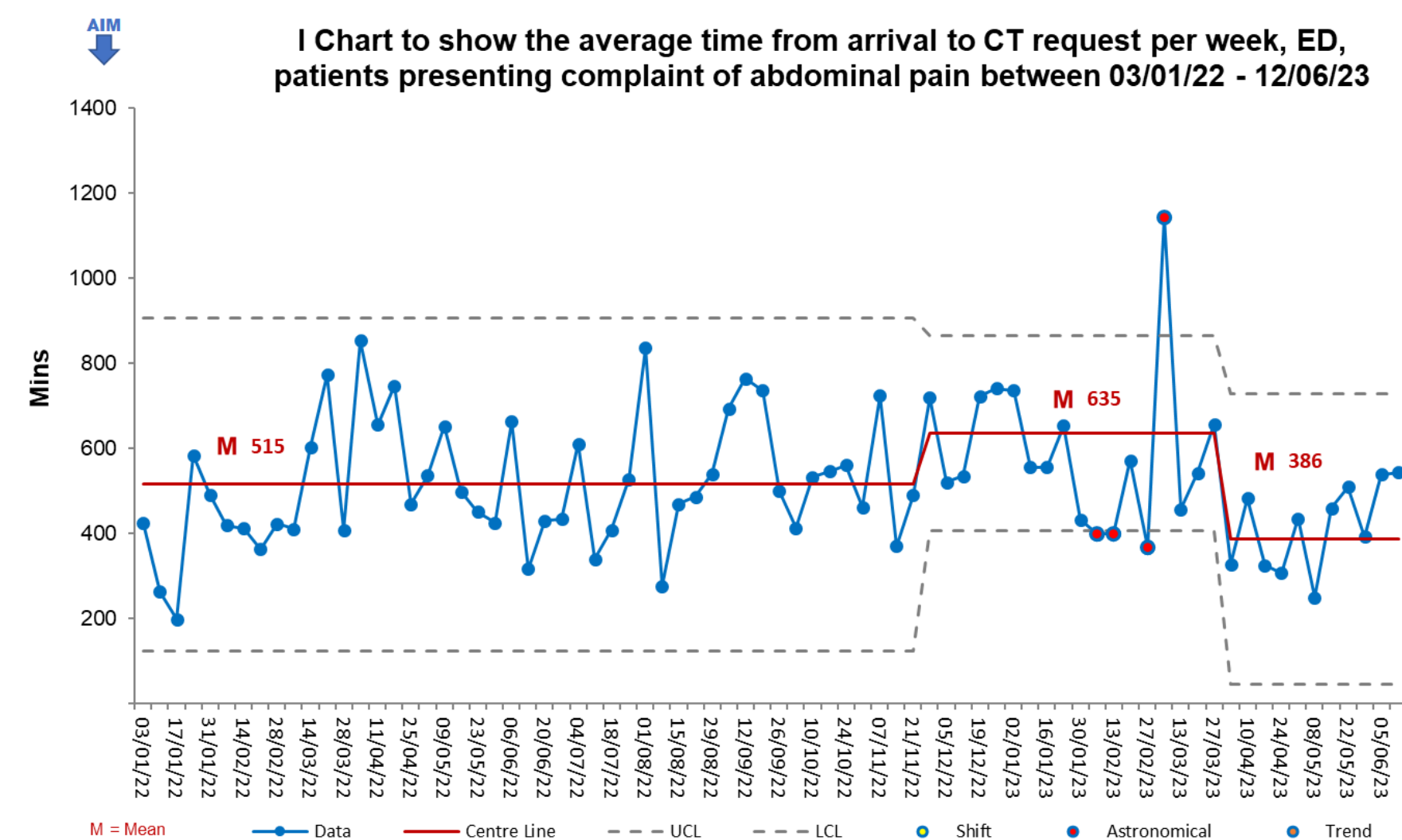


Initially we looked at reducing the time spent in ED of patients presenting with abdominal pain in from 7 hours to 4 hours. After consultation it was decided that this aim might be too big. Therefore it was decided to focus on time to CT scan from patient arrival.

Change Ideas

- To create a physical and virtual pathway detailing recommended investigations, possible differential diagnoses and steps to take with unstable patients – to be trialled at triage so that it is initiated as soon as possible in the patient journey.
- Create defined criteria so that the ED and Surgical team have complete clarity on which patients need urgent investigations including imaging modalities, to prevent delay.
- Introduction of the pathway during handover to increase awareness.
- Creation of an emotive video to emphasise the importance of the abdominal pain pathway.
- This project prompted discussions to create a separate pathway for urology patients, in hope to improve flow for patients presenting with certain conditions, such as those with blocked catheters going straight to SDEC via the on-call SHO

Results

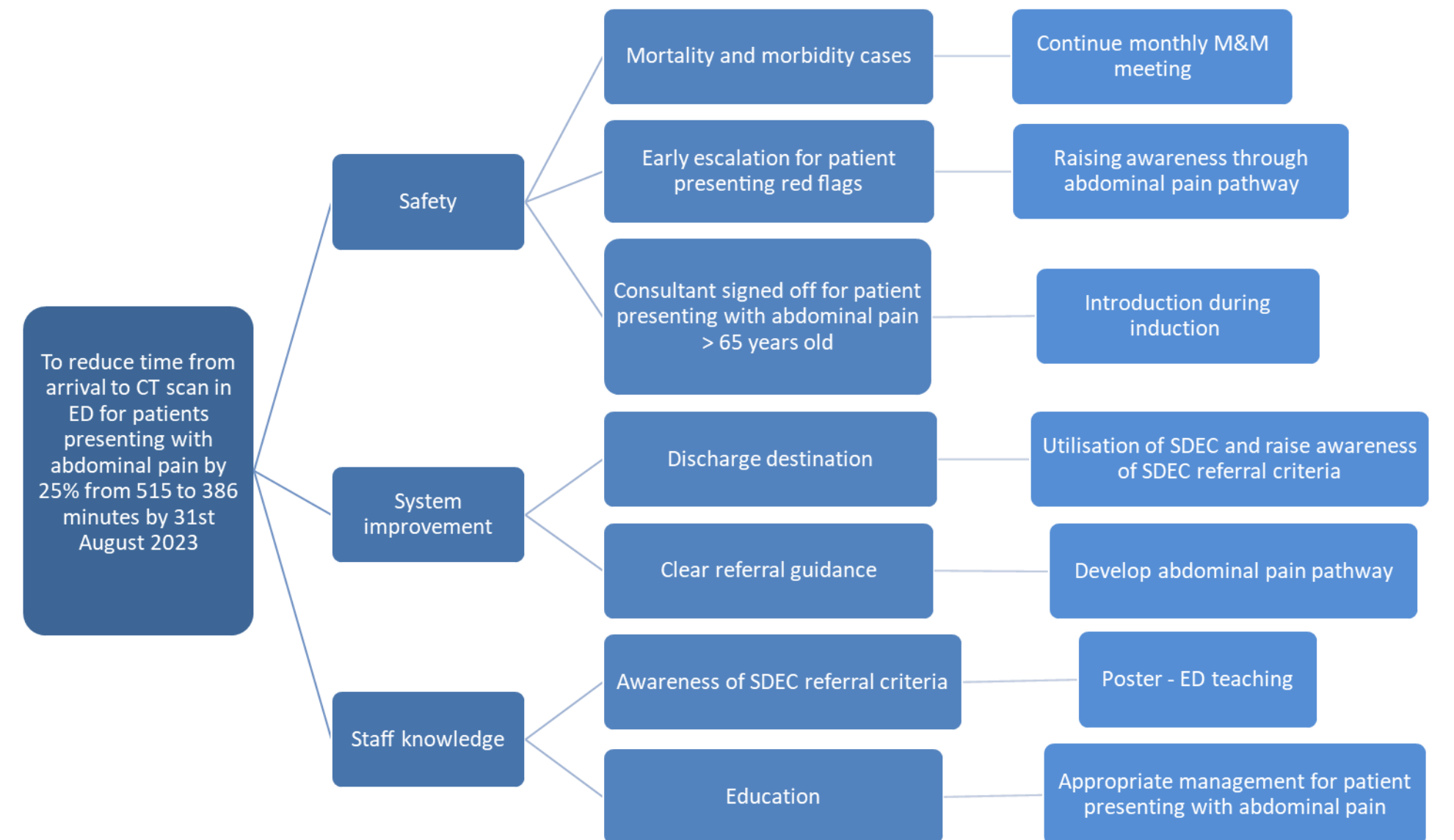


Outcome measure of time to CT for patients presenting with abdominal pain displayed an initial increase over the December period which increased the mean. We then saw a statistically significant decrease in minutes to CT from 635 to 386 minutes. This resulted in achieving our aim by a very small margin. We hope to see this sustain.

Further Results/achievements:

- ED Consultants agreed to support early CT consideration
- Abdominal Pain Pathway developed, piloted and awaiting ratification.

Driver Diagram



Patient & Service User Feedback

Pre-Intervention Interviews

Less than half of foundation doctors confident in referring abdominal pain to correct specialty

PDSA - First Pathway Trial

F1 doctors given pathway and surveyed one week later
Little actionable data
Informed future cycles

PDSA – Subsequent Trials

Expanded range of staff members involved
Positive feedback particularly regarding AUDIT-C
Technological issues mentioned regarding using the APP on mobile devices

Patient Feedback

Ongoing task

Raw Staff Feedback from Most Recent PDSA cycle

Anonymous staff feedback was collected from a small sample, of these:
100% stated the pathway was clear and easy to follow.
100% stated the pathway was suitable for the ED environment.
100% of staff questioned stated there were no barriers to using the pathway.

Lessons Learned

- Start small, all PDSA's add knowledge and value
- Failures will shape your project, it will make your ultimate aim more achievable
- Record progress and share achievements, this motivates the whole team
- Try and meet face to face where possible, then use MS Teams/WhatsApp group in between.
- Setting more targets and objectives at each catch up to maintain momentum.
- Communicate regularly with key stakeholders, they are the enablers to success
- Challenging for ED due to winter pressures, OPEL 4.
- Process behind creation of pathway, measuring progress/baseline.
- Make sure obsolete pathways are removed from circulation.

Sustainability & Spread

The revised APP is awaiting upload to the clinical pathways section of the intranet home page, for reference and utilisation by all involved trust personnel, with the aim of streamlining referral and care of patients presenting with abdominal pain, whilst maximising utilisation of the recently opened Same Day Emergency Care (SDEC) area.

As well as internal departmental communication within ED and General Surgery to raise awareness of this resource, we also plan to present at the Grand Round during the forthcoming academic year.

There is the potential for further QI work resulting from this project, including consolidation of the timely requesting of CT imaging by ED medical staff whilst awaiting attendance of surgical teams when they are engaged in other clinical activity elsewhere across the hospital site. Supported by clinical champions in ED and General Surgery, and further stimulated by the collaborative working between staff in both of these departments which has occurred as a result of this CQA project.

References

- Improvement Science at Your Fingertips. Auth: Bennett, Grunow, Park. Pub: ISC LLC (2022) ASIN: BOB9MWZWP9
- Factors associated with unfavourable outcomes in patients with acute abdominal pain visiting the emergency department. Auth: Dadeh. *BMC Emerg Med* 22, Article no: 195 (2022)
- Systematic review of diagnostic pathways for patients presenting with acute abdominal pain. Auth: de Buriel, Ing, Larsen, Dennett. *Int J for Quality in Health Care* 30, 9. Pages 678-683 (2018)