

IMPROVING THE USE OF ANALGESIA AT TRIAGE IN THE EMERGENCY DEPARTMENT

Quality improvement project on reducing the time to analgesia being offered in the emergency department at Dumfries & Galloway Royal Infirmary
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WHY IS THIS NEEDED?

- Up to 70% of patients who attend ED are in pain [1].
- Royal College of Emergency Medicine guidance (2021) recommends that patients in moderate-severe pain/scoring 4-10 should receive analgesia within 15 minutes of arrival [2].
- Following discussion and data sampling of patients offered analgesia at triage in the ED at DGRI, there was room for improvement

AIM

Reduce the time to offering analgesia to 30 minutes or less for patients in pain, >16 years old and presenting to the emergency department at DGRI by non-ambulance transport by the 18th of October 2024.

PATIENT INCLUSION AND EXCLUSION CRITERIA

Included

- >16 years old with 'pain' written anywhere in clinical notes.
- Any patient prescribed analgesia despite with or without record of pain

Excluded

- Ambulance, prison, GP referrals, hospital transfers and reviews
- All patients subsequently not in pain on assessment
- Chronic pain presentations

METHODOLOGY

Conditions for change

I firstly established an improvement team consisting of my supervising consultant Dr Quigley and one of the lead ANPs Sally Votier, also getting several other ANPs onboard with the project.

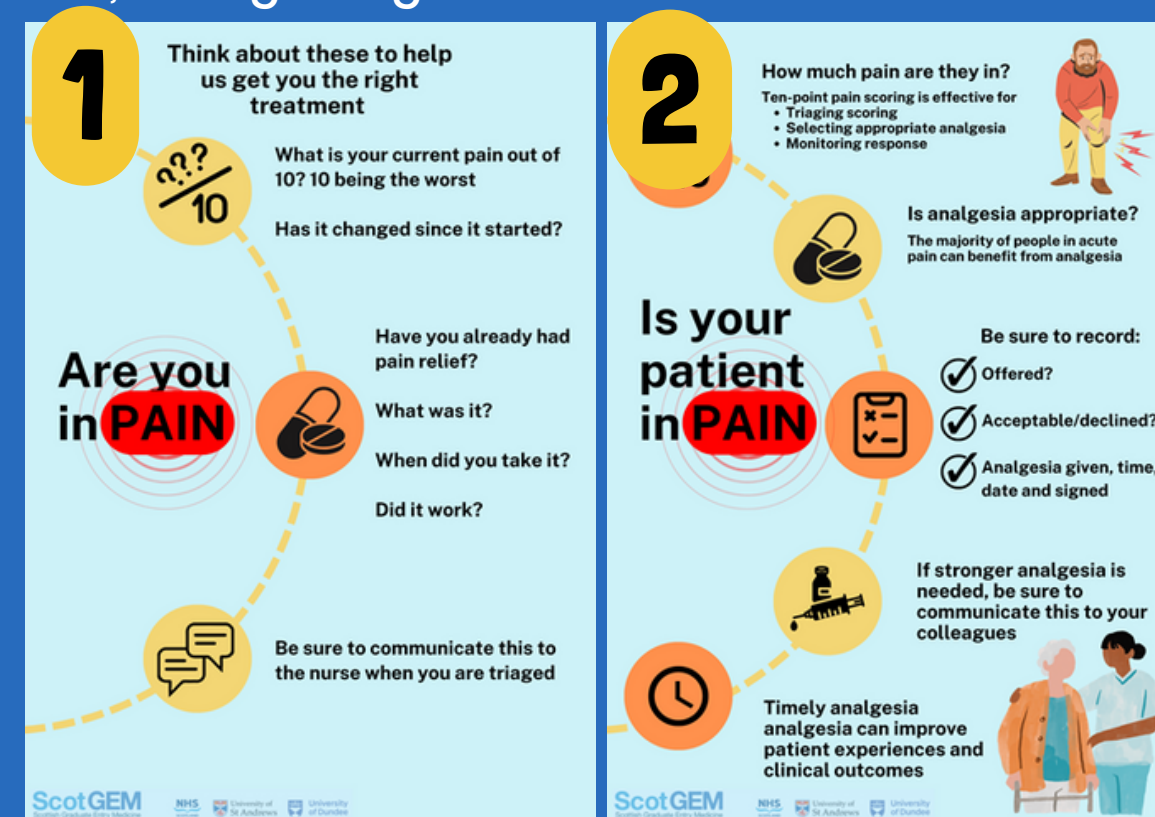
Understanding the system

Staff and patient surveys, fishbone diagram, process mapping, service user journey mapping and empathy mapping were all used to understand the system and the problems within it.

Change ideas

Driver diagram and staff discussion were used to create the following ideas.

- Nurse handover teaching and discussion
- Patient poster **1**
- Staff Poster **2**
- Triage labels trial **3**
- Doctor teaching and handover



Pain score:	/ 10	PGD analgesia
Is analgesia required:	Yes No	
Analgesia offered:	Accepted Declined	
Co-codamol 30/500mg X 2	Date: Time: Sign:	
Paracetamol 500mg X 2	Date: Time: Sign:	
Ibuprofen 200mg X2	Date: Time: Sign:	

MEASURES AND RESULTS

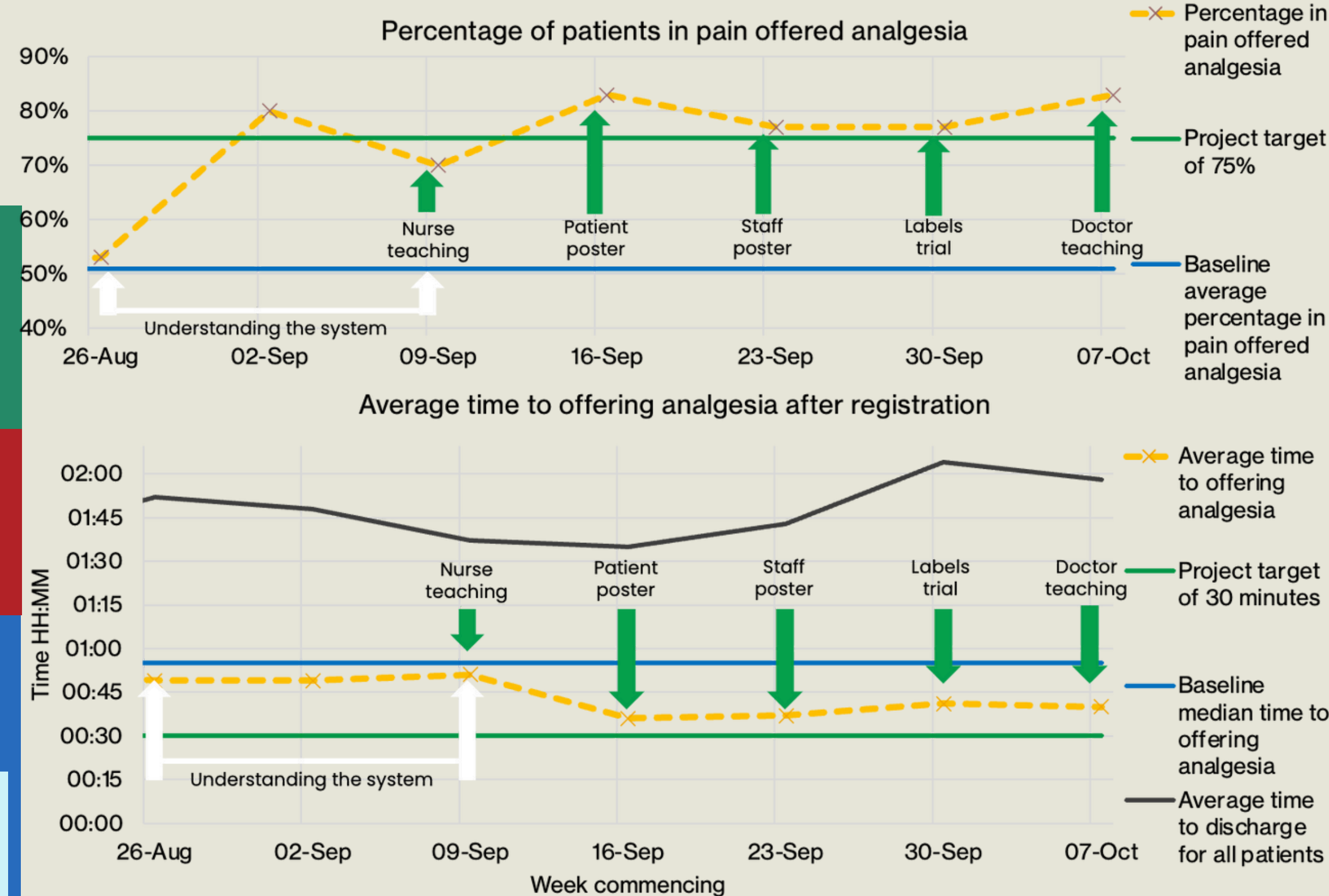
16 weeks of data was collected during the project and run chart rules [3] applied to determine if there was any significant change for each measure., the results of which are shown below.

Measures with useful changes

- Time to analgesia from registration – Non-random decrease
- Percentage of patients in acute pain offered analgesia
- Average time to analgesia administration
- Positive comments from staff

Measures with no significant change

- Percentage of patients who had a pain score taken
- Patient satisfaction with the management of pain (Likert scale 1-5 with follow up questions)
- Perceived project impact – No significant difference in staff Likert scales on satisfaction with the changes



CONCLUSION

- Target time of <30 minutes for time to analgesia not achieved
- Non-random decrease in time to analgesia below baseline median
- Non-random increase in percentage of patients in pain offered analgesia and met target

This work set the stage for future work to standardise pain scoring and analgesia use at triage. Further work on the use of analgesia for patients in moderate to severe pain was continued by an F2 doctor in the department with results pending.

REFERENCES

- [1]. Hughes, J.A., et al., Identifying patients presenting in pain to the adult emergency department: A binary classification task and description of prevalence. International Emergency Nursing, 2023. 68: p. 101272.
- [2]. Medicine, R.C.o.E. Management of Pain in Adults. 2021; Available from: https://rcem.ac.uk/wp-content/uploads/2021/10/RCem_BPC_Management_of_Pain_in_Adults_300621.pdf.
- [3]. Scotland, N.E.f. Run chart rules. 2023; Available from: <https://learn.nes.nhs.scot/3451>.

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