

Reducing delays in urgent care using electronic communication systems; South Eastern Health and Social Care Trust, NHS, Northern Ireland, UK

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Context:

- Based at the Ulster Hospital, a regional hospital for the South Eastern Health and Social Care Trust in Northern Ireland
- The Ulster Hospital utilizes an electronic clinical task system calls **EDAMS**
- It allows health care professionals to log tasks which are required to be completed by medical staff. This is the **first of its kind** in Northern Ireland
- Inadvertently urgent clinical tasks may be placed on this list and this can create **time delay in urgent care**
- The team involved in this project was a group of F1 junior doctors, senior consultant input, Clinical coordinators from hospital at night and support from QI leads.
- Our focus was reducing time delays in urgent care for patients**

Intervention:

- Cycle 1: ward based poster and education
- Cycle 2: Electronic warning and access to guide across hospital site

Cycle 1 Poster:

- act a visual indication for nursing staff to be able to triage clinical tasks, and have information on when and how to contact the out of hours medical team
- This poster was placed initially on one ward at nursing stations, and an electronic version was emailed to all staff working out of hours

Communication of urgent tasks out of Hours

The eDAMS task list is NOT constantly monitored by clinical team - urgent tasks need urgent assessment

What should be bleeped out of hours:

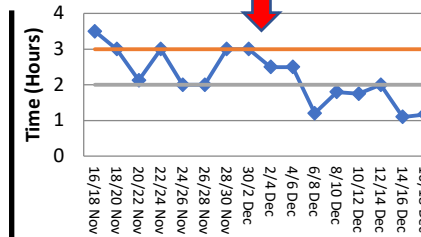
- Chest Pain/shortness of breath** - Please have an ECG ready for medical assessment
- Critical Medicines** - If patient is missing critical medicines on kardex or has missed doses
- Falls** - Are they on anticoagulant, have hit their head, lost consciousness, or had a sudden change in NEWS, have an up to date set of vitals
- Change in GCS/responsiveness** - Any sudden changes in cognition, motor function or responsiveness, check BM
- NEWS Score** - Does the patient have a NEWS trigger, please follow NEWS guidelines for contacting clinical team
- Input/Output Concerns** - No urinary output or bowel movement for prolonged period
- End of life** - Does patient need comfort meds/through pain - Actively dying - check reus status, call family
- Immediate Nursing Concern** - Immediate concerns regarding patient care needing urgent assessments/intervention

Notes:
 NBN (and) 743
 4/10 (and) 743
 During daytime hours contact with hospital for help

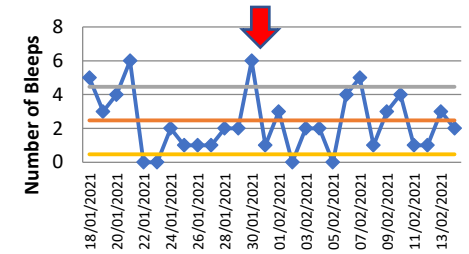
Cycle 2 Built in warning

- Success of cycle 1 guided cycle 2
- we engaged with changing the electronic system
- developed an online accessible version of the guide which was placed on resources for those learning about EDAMS
- We then also created a warning when staff added a clinical task – this warning would encourage staff to verbally communicate with their medical colleagues if a patient was urgently unwell
- This warning provided a link to the guide

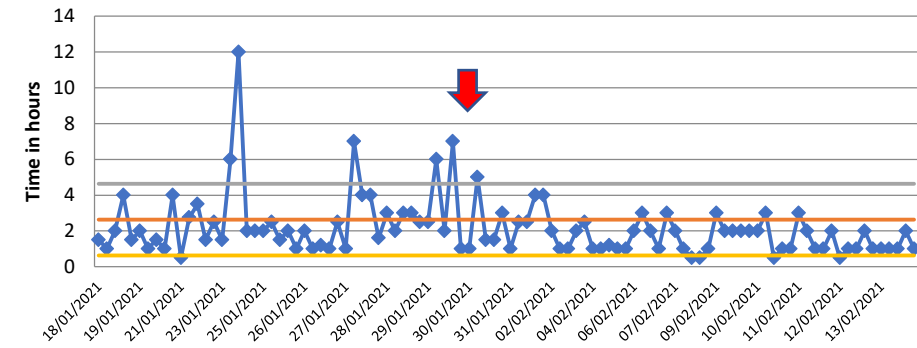
Average time to complete urgent tasks OOH CYCLE 1



Bleeps to medical team OOH CYCLE 2



Time to complete urgent tasks OOH CYCLE 2

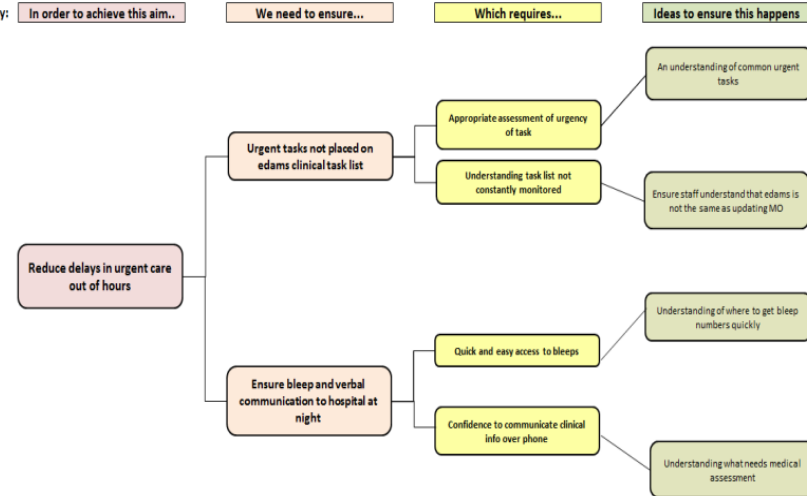


Findings

- Results from the first cycle showed that on average we achieved our aim; we found a downward shift in delays to urgent care
- The second cycle showed further reduced delays in urgent care with a corresponding improvement in verbal communication
- Overall we **created a sustainable shift in reducing delays to urgent care and improving verbal communication** that was evident over months
- This reduction in time delays are beneficial as they reduce morbidity and mortality for inpatients, and ensure improved patient satisfaction

Lessons Learned

- We were concerned that **we found some evidence that electronic communication systems may erode verbal communication**. This presents as a challenge for implementing these systems elsewhere
- We were able to successfully show that **visual aids and in built warnings can avoid introducing delays and improve patient safety**



Aims:

Cycle 1: **50% of urgent tasks out of hours are completed within 2 hours over 2/12/20- 18/12/20**

Cycle 2: **Increase in bleeps and aiming for greater than 50% of out of hours tasks completed within 2 hours 18.1.21 till 14.2.21**

Measures:

Outcome measure: **mean time to complete urgent tasks OOH**

Process measure: **number of urgent tasks on edams with corresponding bleep to hospital at night**

Balancing Measures: **1) total number of bleeps to hospital at night 2) total number of tasks appearing on edams**