

# Timely Management of possible Sepsis within the Emergency Department

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## Background

NICE guidance states "Give people aged 16 or over who are at high risk of severe illness or death from sepsis broad-spectrum intravenous antibiotic treatment, within 1 hour of calculating the person's NEWS2 score on initial assessment in the emergency department or on ward deterioration" <sup>1</sup> - with a high risk patient being defined of those with a NEWS score of six or above with a clinical suspicion of infection<sup>1</sup>. This guidance is reflected in local trust guidelines.

Despite previous efforts from Sepsis QIP teams including triage prompts and sepsis sheets available throughout department for anyone with suspected sepsis, antibiotics within one hour or eligible patients was only achieved 16% of the time in samples from Nov, Dec 23 and Jan 24.

## Aim

Improve number of eligible patients given antibiotics within 1 hour by 100% (to 35%)

## Outcome Measure

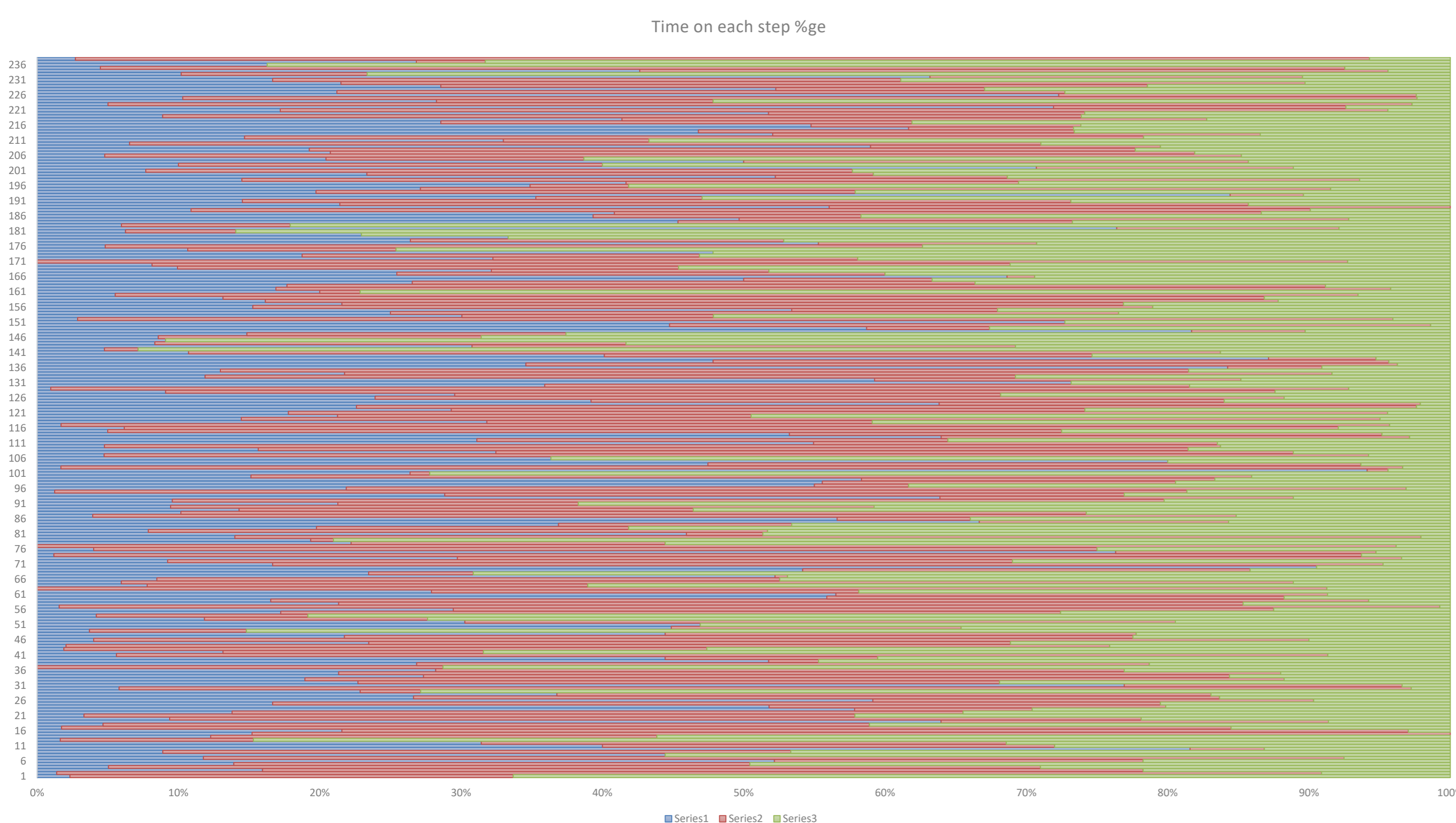
Time in Minutes from triage to antibiotics given in patients presenting with NEWS 6+ who were prescribed antibiotics during ED admission

## Process Measures

Time from Triage to be seen  
Time from being seen to antibiotic prescription  
Time from antibiotic prescription to antibiotics given.

## Deciding Measure to focus on

Analysing the data showed that the step with the most delay was time from being seen by a doctor to antibiotics being prescribed. We also recognised that this was a step that we could the most impact on, as we were unlikely to be able to improve time to be seen, and previous teams had attempted projects to reduce time to administer antibiotics with little success.



## Interventions

### Improve Use of "Could this be Sepsis" Triage Question

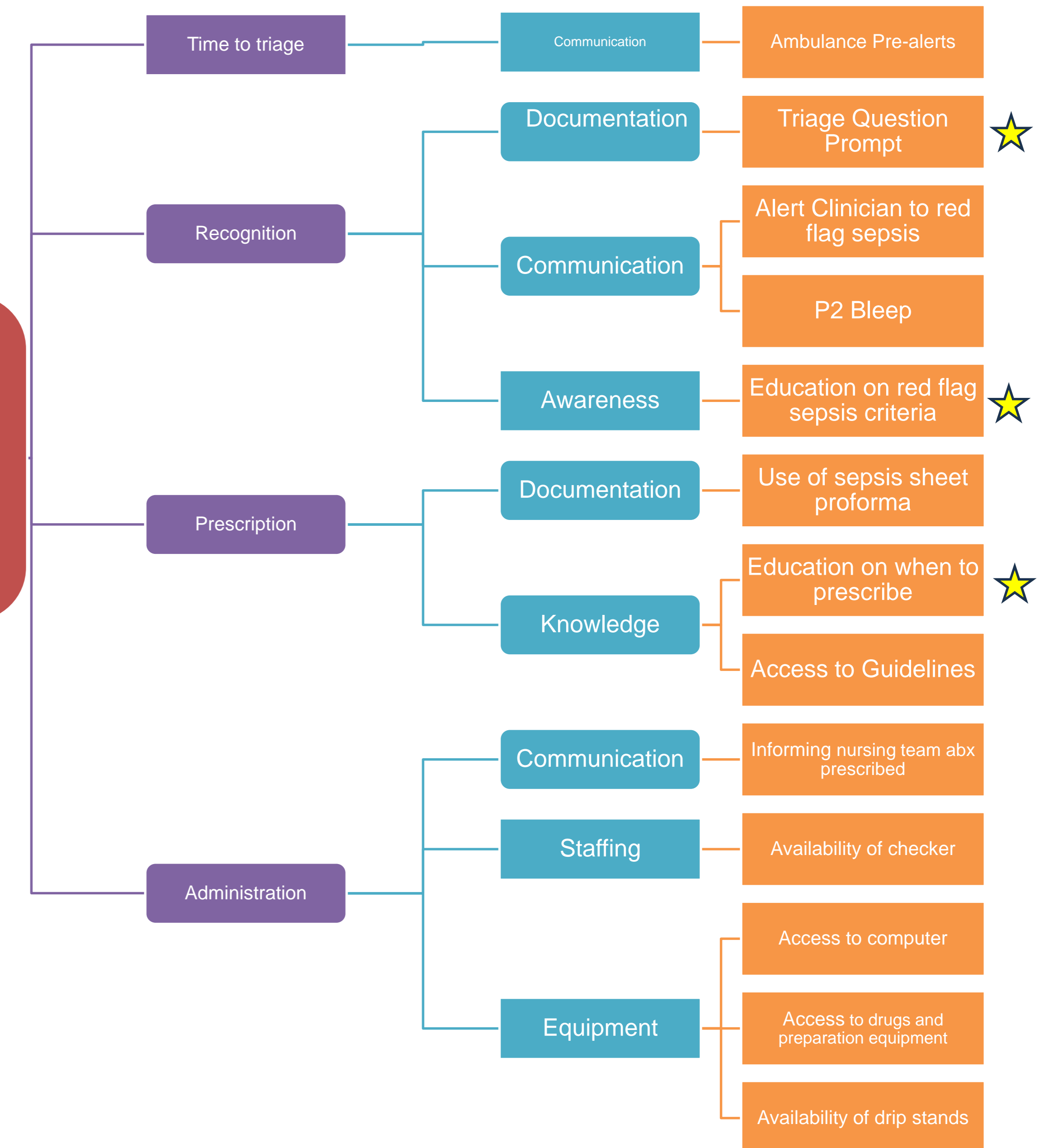
Hypothesised use of TQ could lead to early flagging of Sepsis reducing time to antibiotic prescription

- Motivational teaching at huddles
- Use of posters to encourage use of triage sepsis question
- Talking to triage nurses on shift
- Contributory Projects
- Already part of triage training
- Concurrent project making Triage question clearer on software proforma

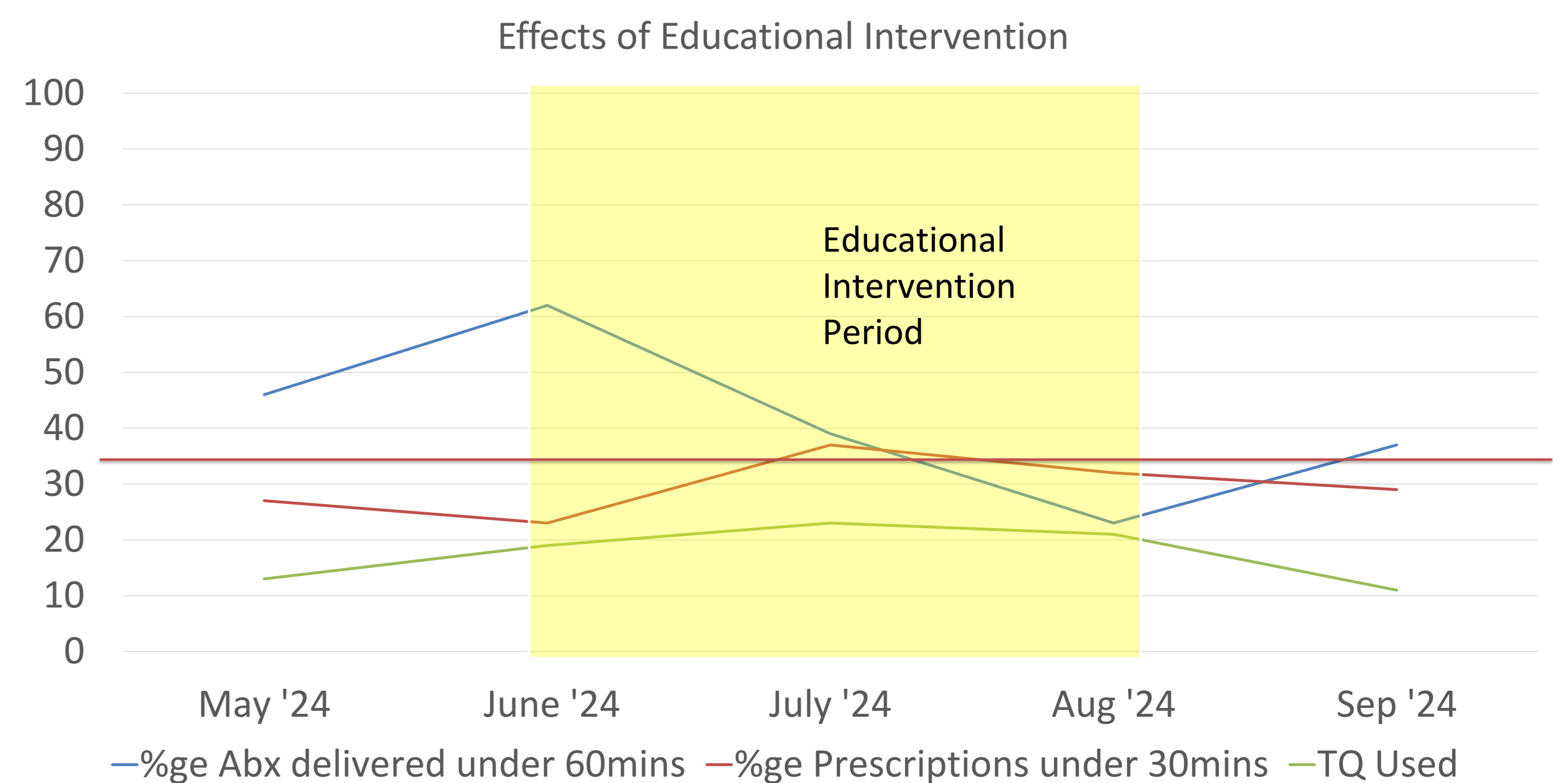
### Improve time from clinician seeing to antibiotic prescription

- Formal SHO level teaching session
- Discussion at handover around red flag sepsis recognition and early prescribing
- Contributory Projects
- P2 Bleep QIP
- Already part of P2 bleep training

Improve number of eligible patients given antibiotics within 1 hour by 100% (to 35%)



## Data



## Results

Marginal Improvement in time to prescription and use of TQ during intervention period. However overall reduction in percentage of possible sepsis patients receiving antibiotics within 1 hour

## References

- NICE (2024). *Over 16s (not pregnant or recently pregnant): evaluating risk and managing suspected sepsis | Suspected sepsis: recognition, diagnosis and early management | Guidance | NICE*. [online] [www.nice.org.uk](https://www.nice.org.uk/guidance/ng51/chapter/Over-16s-not-pregnant-or-recently-pregnant-evaluating-risk-and-managing-suspected-sepsis). Available at: <https://www.nice.org.uk/guidance/ng51/chapter/Over-16s-not-pregnant-or-recently-pregnant-evaluating-risk-and-managing-suspected-sepsis>.

## Next Steps

By the end of the intervention period 75-100% of nurses or clinicians indicated they had heard the discussion when project members attended huddles or handovers. Therefore, likely maximal saturation achieved and maximal possible benefit of current interventions achieved. As there was little improvement these finding suggest lack of knowledge is not the only issue. More work needs to be done to understand specific barriers around use of triage sepsis alerts, and prescribing antibiotics. This will include

- Questionnaires
- Focus Groups
- Individual Discussion
- Real time Simulation