Optimisation of Time to Antibiotics in Neutropenic Sepsis Patients in the Haematology Department, Royal Hallamshire Hospital, Sheffield

Sheffield Teaching Hospitals NHS
NHS Foundation Trust

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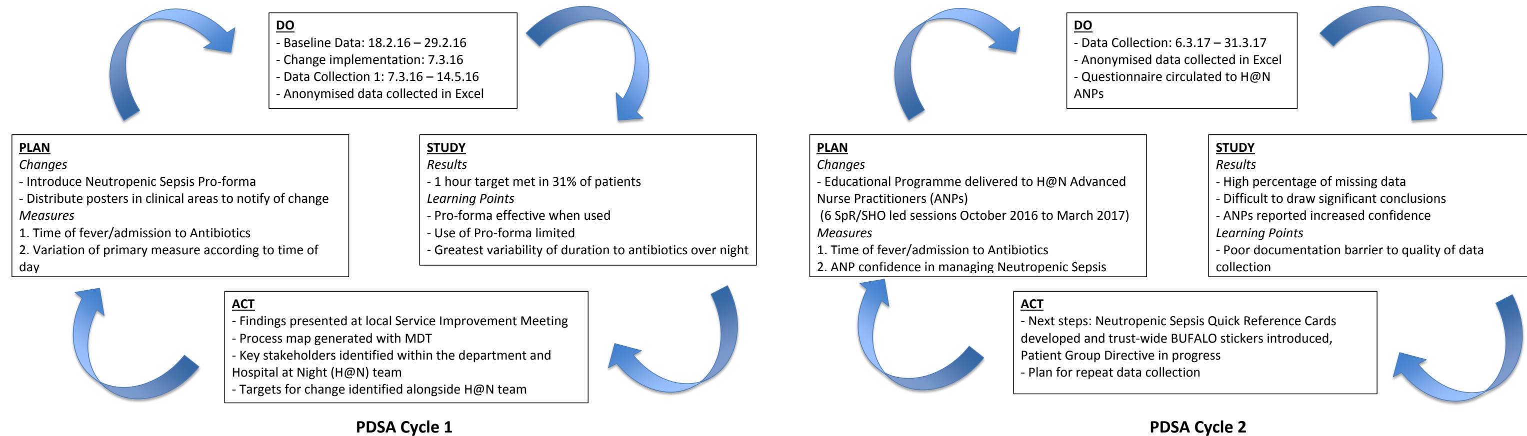
Background:

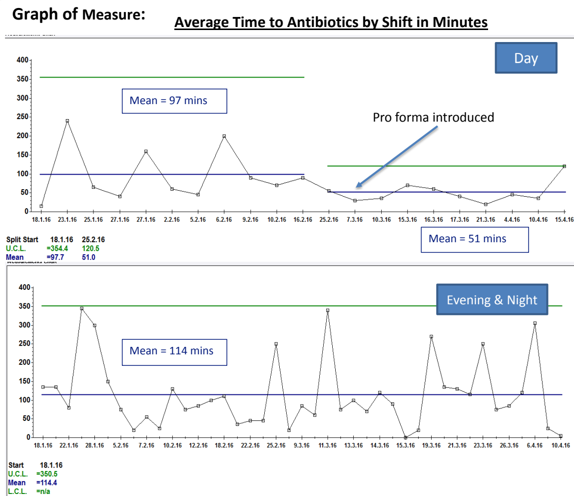
- Neutropenic sepsis is a medical emergency with a mortality of 2-21% if untreated[1].
- **All** Neutropenic Sepsis patients should receive antibiotics within 1 hour of pyrexia/presentation[2].
- Rapid treatment has reduced mortality & ITU admissions to <5%[3].
- A departmental audit conducted May-June 2014 showed only 36% of patients received antibiotics within 1 hour. Anecdotal evidence suggested that this was likely to be the same in 2016.

Project Aims:

- To assess current compliance with national Neutropenic Sepsis guidance in the STH (Sheffield Teaching Hospitals) Haematology Department over a 6 week period.
- To ensure 100% of patients with suspected or proven Neutropenic Sepsis admitted to the STH Haematology Department receive intravenous antibiotic therapy within 1 hour of presentation over a 1 year period.



Graph of Measure:



The difference made and relevance to practice & patient safety:

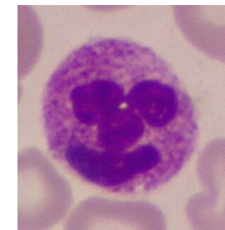
- The Hospital at Night Team structure has been changed with more individuals taking responsibility for the rapid administration of antibiotics, including ANPs. Anecdotally, individuals feel this system is working better and patient care has been improved.
- In a questionnaire circulated to the H@N ANPs they reported increased confidence and understanding of the importance, identification & management of Neutropenic Sepsis. Some trainee ANPs are now spending time on Haematology to gain more experience.

Difficulties and next steps:

- Completeness of note keeping was a major barrier to data collection in this QIP. STH has introduced a trust-wide BUFALO sticker for sepsis patients; this will prompt more comprehensive documentation and aid data collection. We have planned a repeat data collection in July 2017 to re-assess change.

Learning points:

- Implementing sustainable change is difficult and often requires a change in the working culture.
- This takes time and requires establishing close working relationships with all stakeholders to identify potential barriers to change.
- Working within a multi-disciplinary team to implement change to improve patient care and safety is extremely rewarding and satisfying.



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- The Sheffield Haematology Service Improvement Group for helping to facilitate MDT meetings.

References:

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