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Background

- Cancer emergency care places a tremendous burden on the NHS urgent care services and is frequently associated with poor patient experience and poor outcomes.
- Cancer patients account for up to 15% of acute hospital admissions and with cancer incidence increasing and developing treatments increasing survival, means this burden is ever increasing (Cooksley and Rice, 2017; Young *et al.*, 2016; Neville-Webbe *et al.*, 2013)
- Patients with a cancer diagnosis who present to hospital as an emergency are approximately three and a half times more likely to be admitted for an inpatient stay, than those patients without a cancer diagnosis (Rivera *et al.*, 2017; Shelburne *et al.*, 2022).
- Acute oncology services (AOS) strive to deliver continuous improvements in emergency and unplanned cancer care. AOS are renowned for their inter-professional working, improving communication between teams, providing timely expert advice, improving patient experience and cost savings through streamlining investigations, early discharge and admission avoidance (McCavery, 2020; Neville-Webbe *et al.*, 2013; The Royal College of Radiologists, The Royal College of Physicians and The Association of Cancer Physicians, 2020).

Our Trust

- Our Trust has inpatient and outpatient haematology chemotherapy services and an emergency department (ED); therefore it must also have an Acute Oncology Service (National Chemotherapy Advisory Group, 2009).
- The local AOS is led by Acute Oncology Advanced Practitioners (ACP/ AP).
- All oncology patients receive their cancer treatment elsewhere, many still receive their emergency treatment locally.
- AOS support these patients through ensuring they are on the correct pathway, acting as the main liaison between ED, the admitting medical team and the Oncologist.
- There has been a feeling of frustration within the AOS team that they can do more to support oncology patients, and their valuable skills could be further utilised in practice, therefore the team need to look at alternative ways of delivering an AOS.
- Without having onsite oncology beds, services or facilities to have an AO assessment area we needed to find a solution to how AOS could better meet the needs of our patients while working within available facilities.
- This led to the idea of a trial of AOS working in ED

Aim

The aim of the trial is to evaluate the impact specialist cancer expertise on AO patient presentation in the emergency setting had on the patients' pathway; focusing upon treatment, compliance with suspected neutropenic sepsis, admission avoidance, length of stay (LoS) and readmission within 30 days.

The Trial

14 week Trial

ACP based in ED

To provide specialist AOS input at the point of initial presentation
Mon- Fri 8am – 6pm

Patient's identified by:

Referral from AOS telephone triage

Referral from cancer centre AOS

Electronic alert

ED staff or in ED handover

Other specialist services

Patients reviewed by AOS ACP

Triaged to correct pathway if not AO presentation

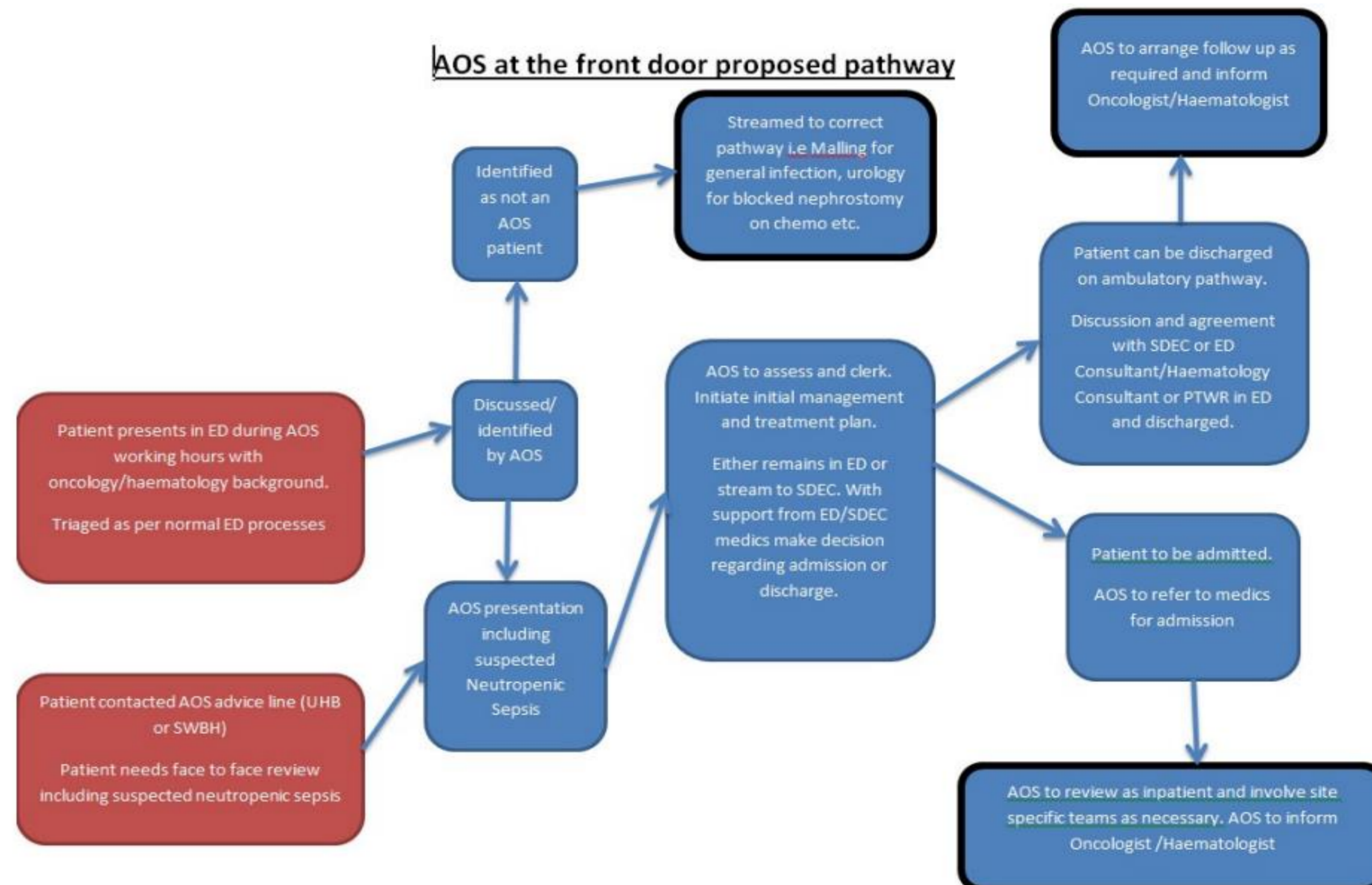
Patients with AO presentation clerked, treated and plan with AOS ACP

Discussion/review with ED/medics to confirm plan

Anonymised data was collected and stored in a password protected secure Trust I.T computerised system.

Comparison was made with the previous years data using the Trusts AOS database

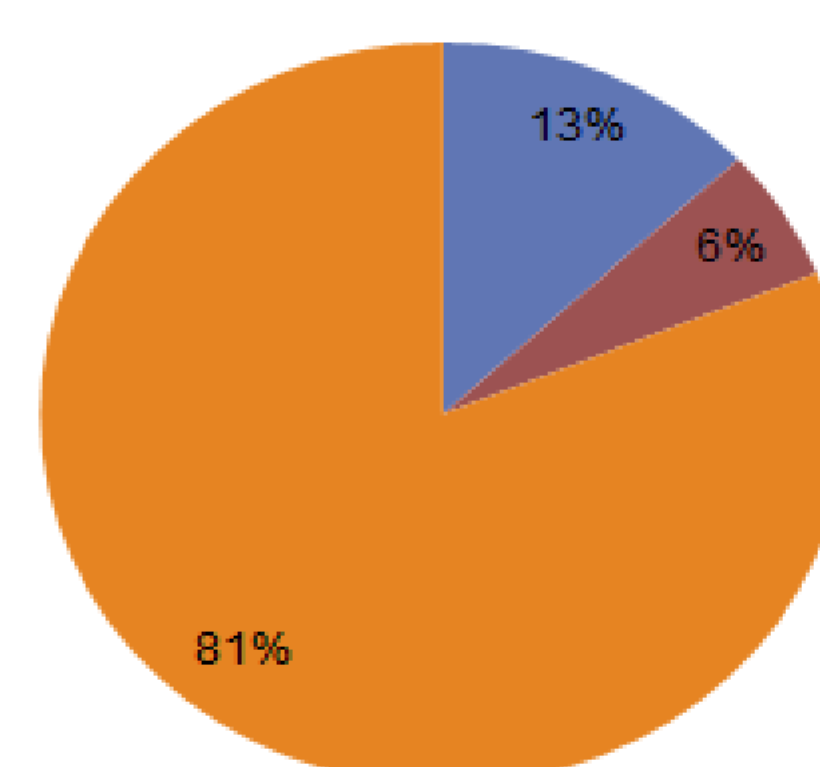
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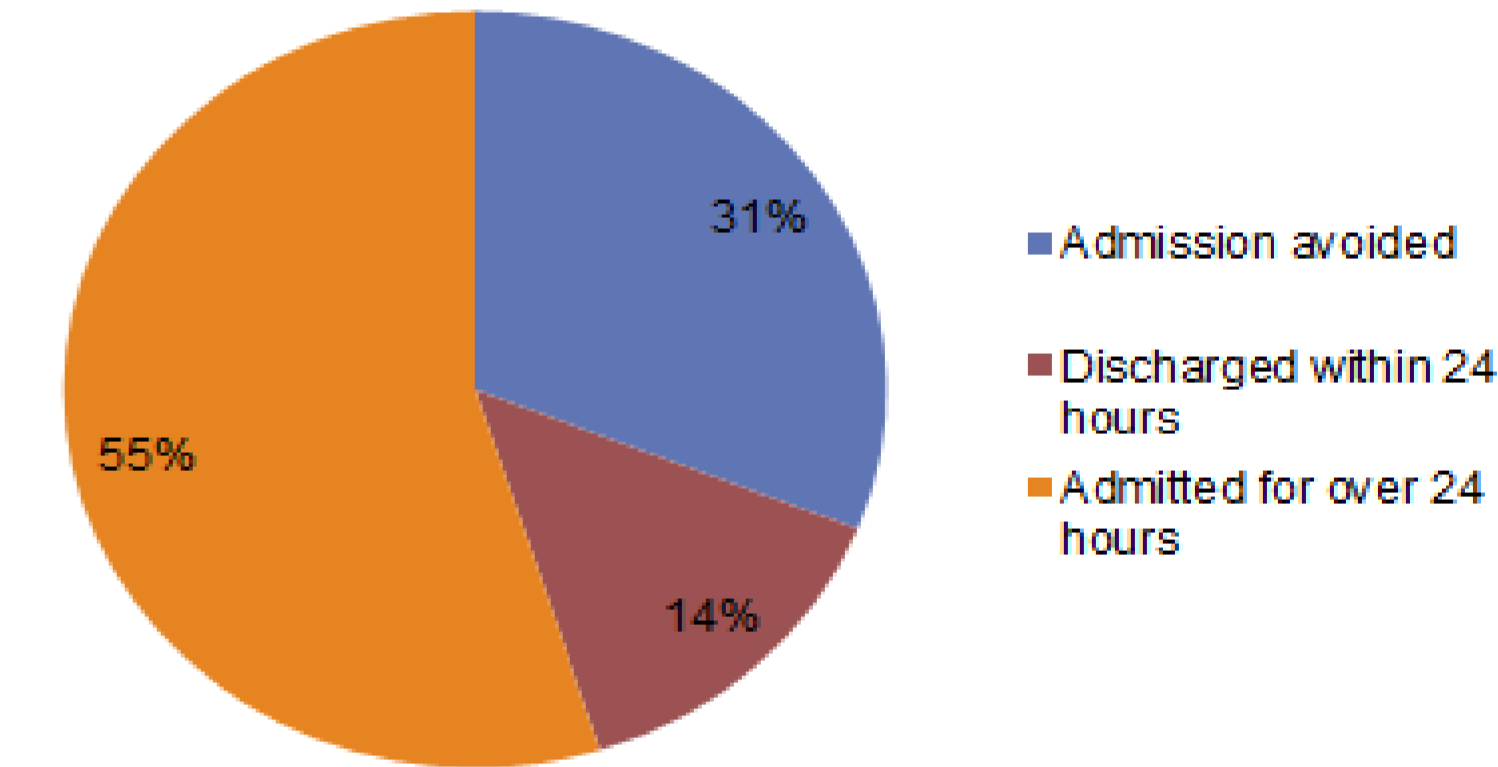
Discussion and Results

- Hospital admissions of over 24 hours were significantly reduced from 81% to 55%.
- Reduction in LoS from 7.45 to 5.81 days
- 30% reduction in number of patients being treated for suspected neutropenic sepsis
- Only patients who were potentially immunocompromised from their condition or treatment were managed on the neutropenic sepsis pathway
- Readmission within 30 days reduced by just over 10% from 28% to 17%
- Anecdotally improved patient satisfaction.

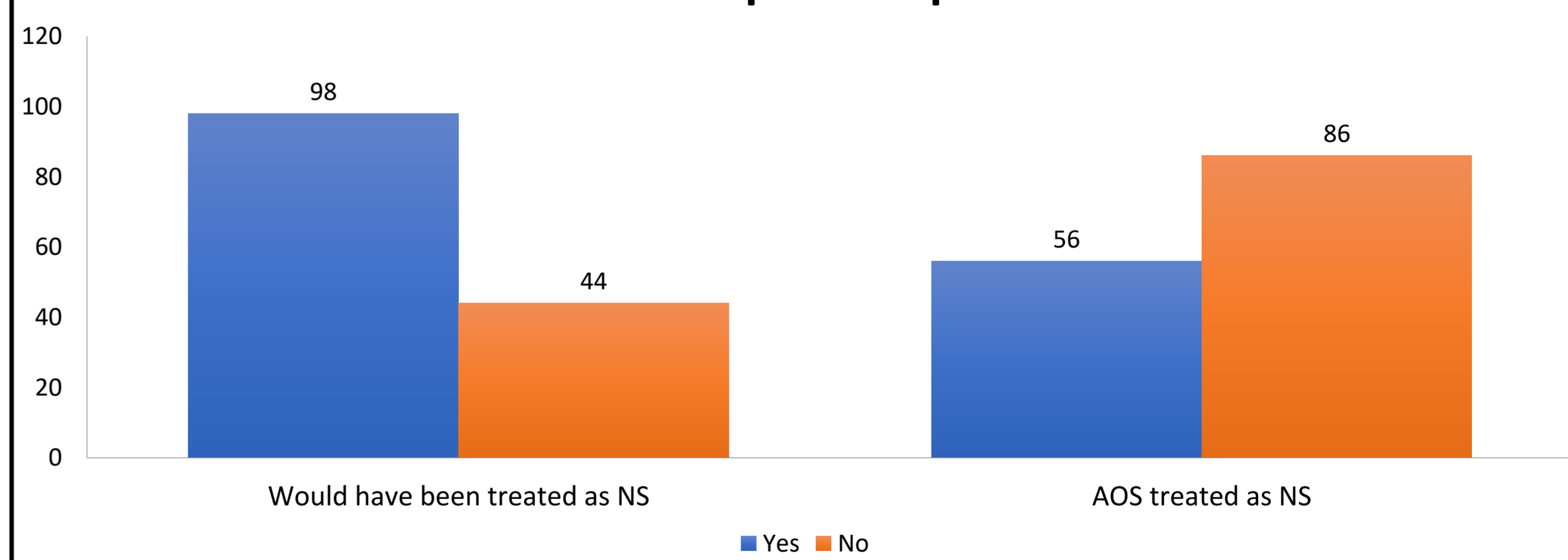
Admissions (2021-2022)



Admissions (During AOS ED trial)



Neutropenic Sepsis



What the Trial meant for AOS at our Trust

- The trial successfully demonstrated that having AOS located at the front door has a positive impact on admission avoidance, reduced hospital stays and neutropenic sepsis compliance.
- The reduced LoS saving per patient will generate a non cash releasing saving of £321k based on 931 bed days this is an average cost of £345 per bed day.
- Increasing AOS working hours from 10 to 12 hours per day 7 days a week would mean 80% of AOS emergency attendances would be within AOS' working hours, with a number of the remaining percentage still being in the department for AOS to review at the beginning of their shift.
- This led to approval of a business case to develop a robust ACP led front door service within the Trust to cover 12 hours a day 7 days a week.
- Increased utilisation of Same Day Emergency Care (SDEC) including facilitating follow-up reviews to facilitate earlier discharge