

Gloucestershire Safety and Quality Improvement Academy 2025

Emergency Department Sustainability Team

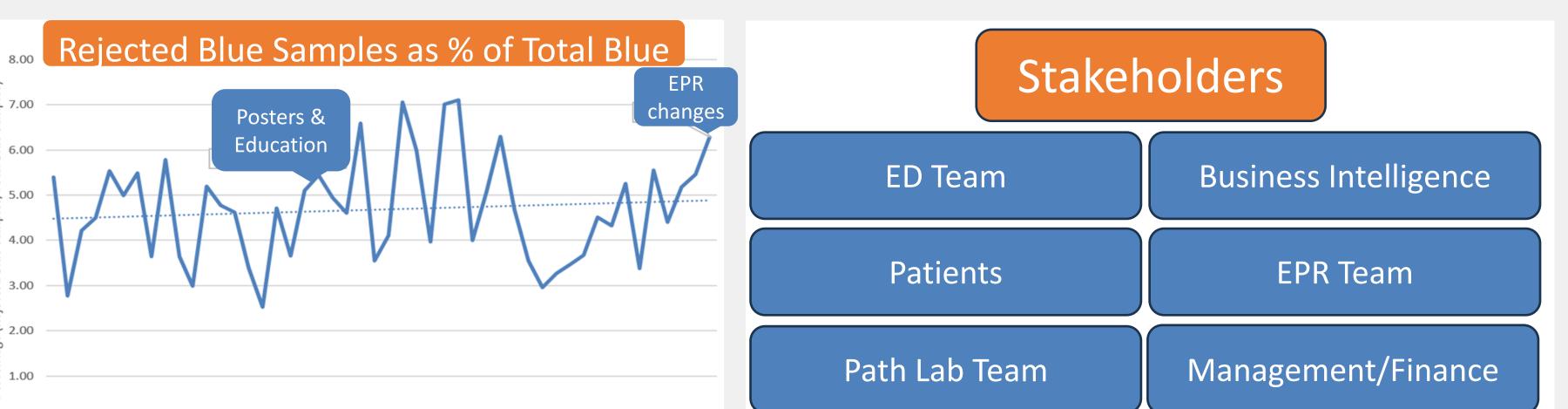
Annabel Summers – Silver QI Lead, Karen Stone – Gold Coach In Training, Grant Perry, Alice Bradley, Deborah Beange, Zsofi Steingart, Franca Osabuohien, Jane Birch, Helena Rose Fletcher, Joslan Scherewode

Gloucestershire Hospitals NHS Foundation Trust

Overall Sustainability Aim

To reduce the amount of unnecessary blood sampling in the ED Quality Improvement Aim

To reduce the number of untested blue spare samples taken in the ED as a % of total blue samples by 10% in 3 months



Balance Measures

Concerns that a single venepuncture for blue bottle may increase risk of rejected sample (due to bottle needing to be filled to certain level)

- Number of sample rejections measured as % of total bottles sent

Proportionate reduction in blue "to hold" bottles compared to total blue bottles sent

Number of blue bottles sent alone, separate to any other blood sample

- Could not be measured

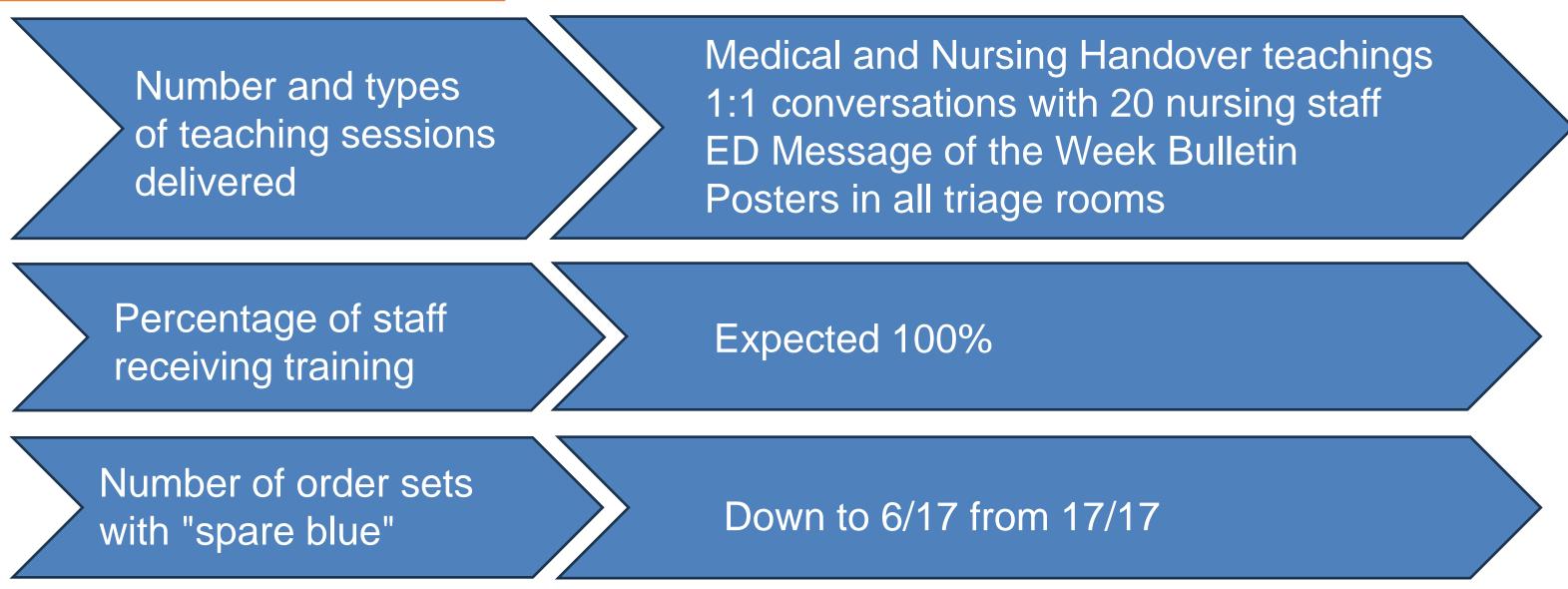
Concerns that by reducing blue "to hold", patients could require additional venepuncture

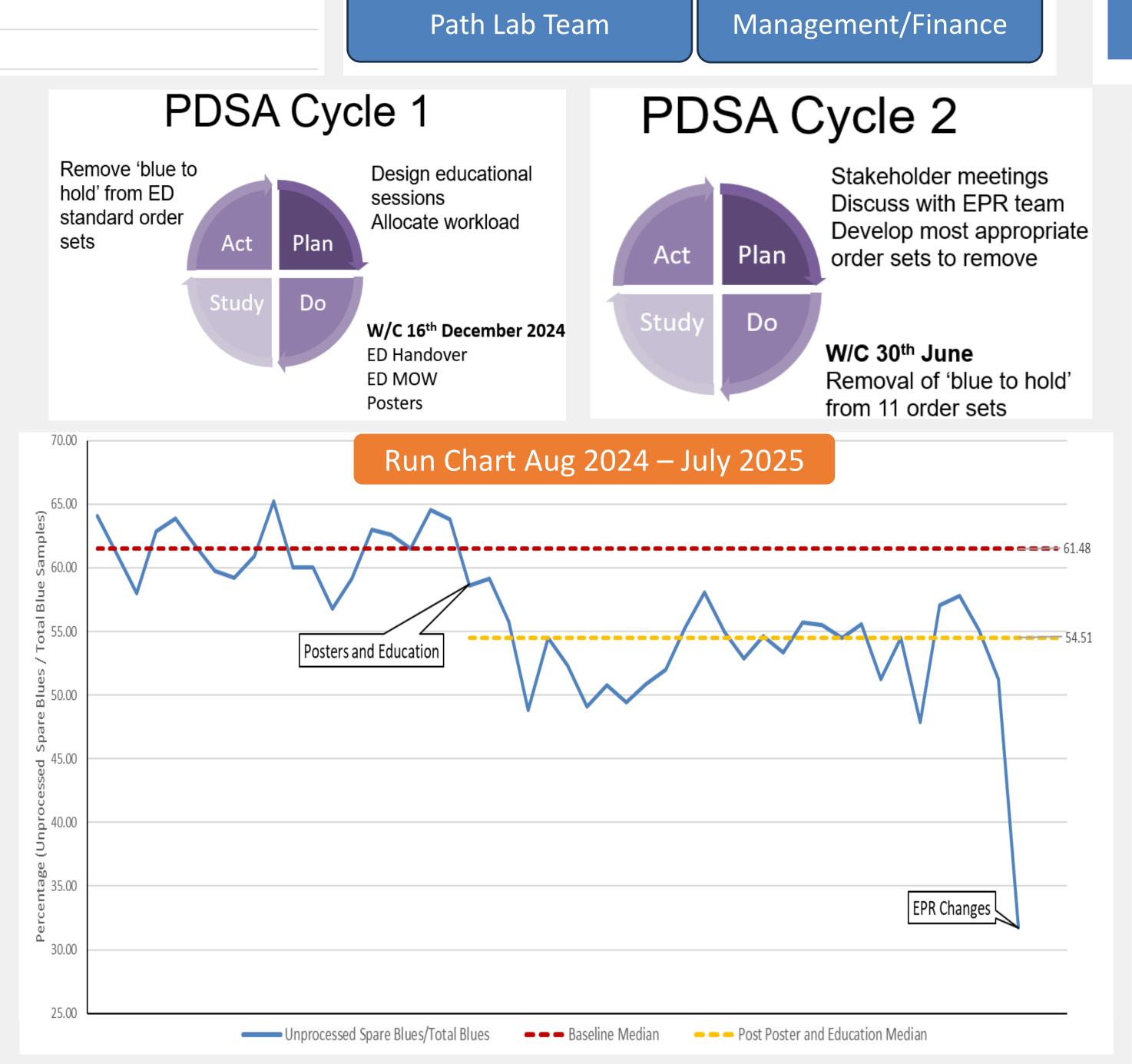
- Not possible to identify these patients

Process Measures

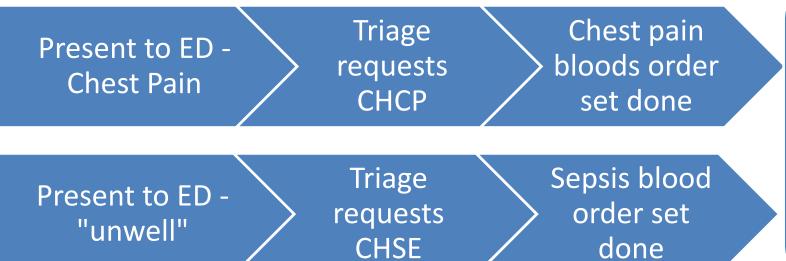
Waste/disposal of

blue bottle





Usual Process for bloods in ED



All 17 sets have 'spare blue' so a clotting/coag, INR or d-dimer can be added on later by the clinician. These are often sent, stored and thrown away

Outcome Measure

In October 2024 there was 1886 untested blue spare samples which made up 86% of the total blue spare samples taken

1886 untested blue spare samples out of 3115 total blue samples (61%)

Aim was to reduce the untested spare samples as a percentage of total blue samples by 10%, initially over 3 months

Intervention Week 16-12-24 – Posters and education efforts to reduce unnecessary blue to hold samples taken

Intervention Week 30-06-25 – EPR changes removed the option of a spare sample included in some ED order sets after discussion with senior ED team and review of guidelines

Transport of blue Phlebotomy POD transport

Transport of blue bottle bottle Processing of blue bottle Pridge storage of blue bottle

Purely based on production of blue bottles: Carbon saving = >644kgCO2e

- Equal to driving from GRH to CGH 205 times per year

Cost saving = >£97.48 per week, or £5069 per year

Next Steps

- EPR change is recent so continue collecting data
- Monitor impact
- Continue the messages and the training
- Scale up and aim for improved reduction
- Spread the message throughout Unscheduled Care and beyond

