



Thromboelastography (TEG) in Major Obstetric Haemorrhage: Assessment of Use during Major Haemorrhage and Healthcare Professional Awareness of TEG

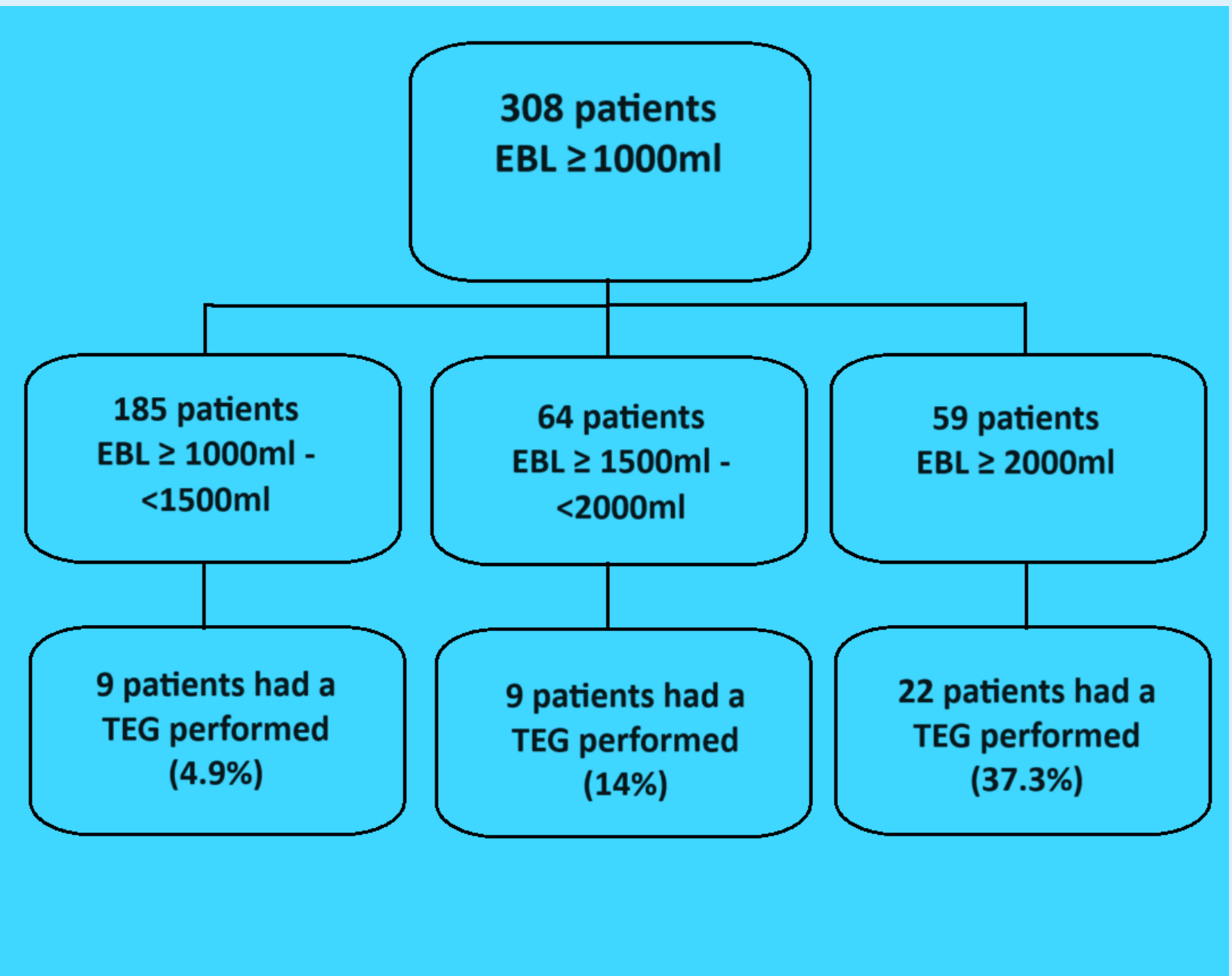
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- Major Obstetric Haemorrhage is defined as >1500ml of blood loss [1]. The postpartum period is the most common time for this to occur.
- Thromboelastography (TEG) is a point of care assay measuring the viscoelastic properties of blood clot formation. It is used to identify coagulation abnormalities and guide the administration of blood products during major haemorrhage and is recommended by the Royal College of Obstetricians and Gynaecologists in their Green-top Guideline No.52 [2].
- Local guidance recommends the use of TEG where blood loss >1000ml.

The Audit :

Looking at the use of TEG in patients with a major obstetric haemorrhage (i.e. >1000ml).

- 1st April 2023 – 30th September 2023
- 4292 patients
- 308 patients with major obstetric haemorrhage (7%)



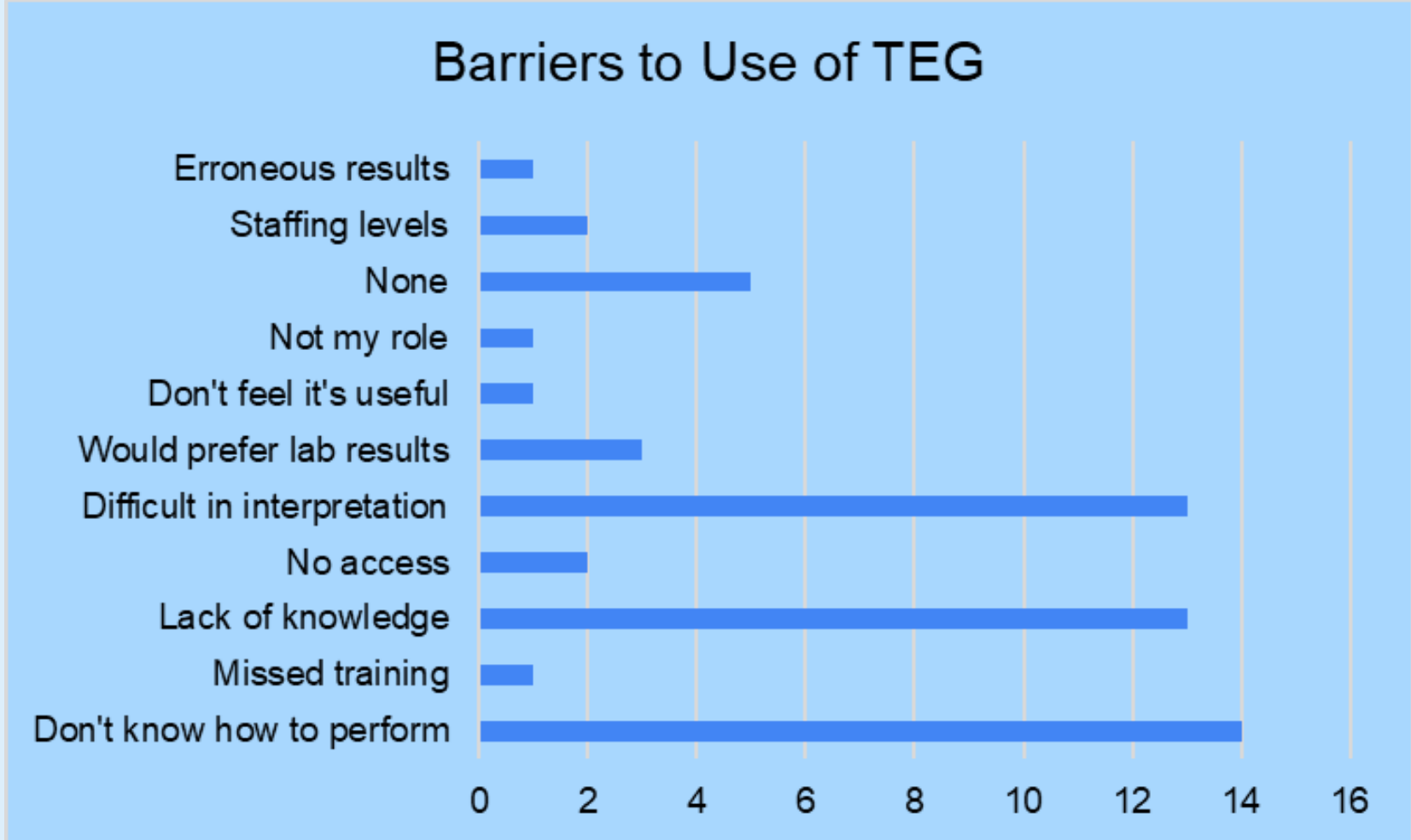
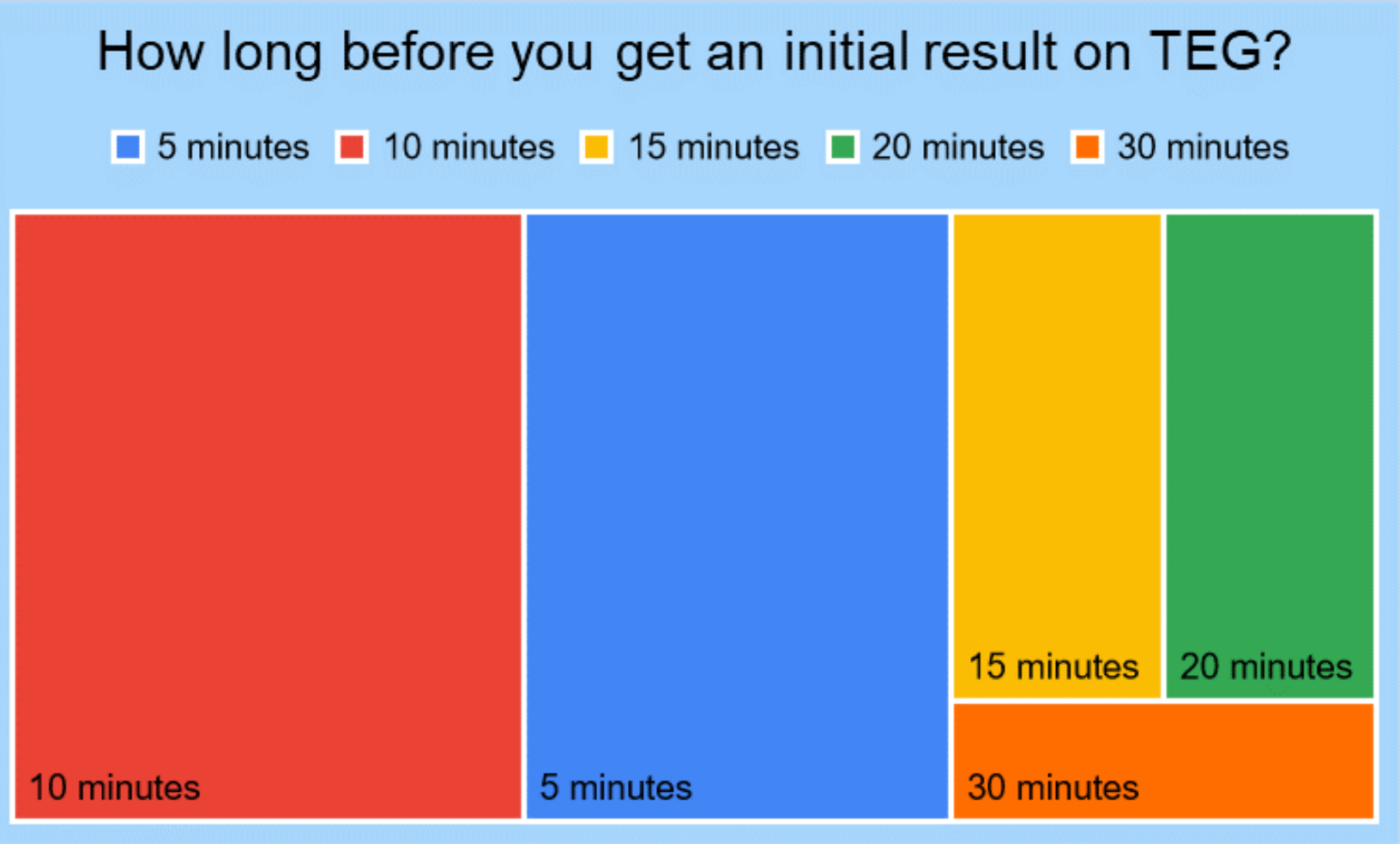
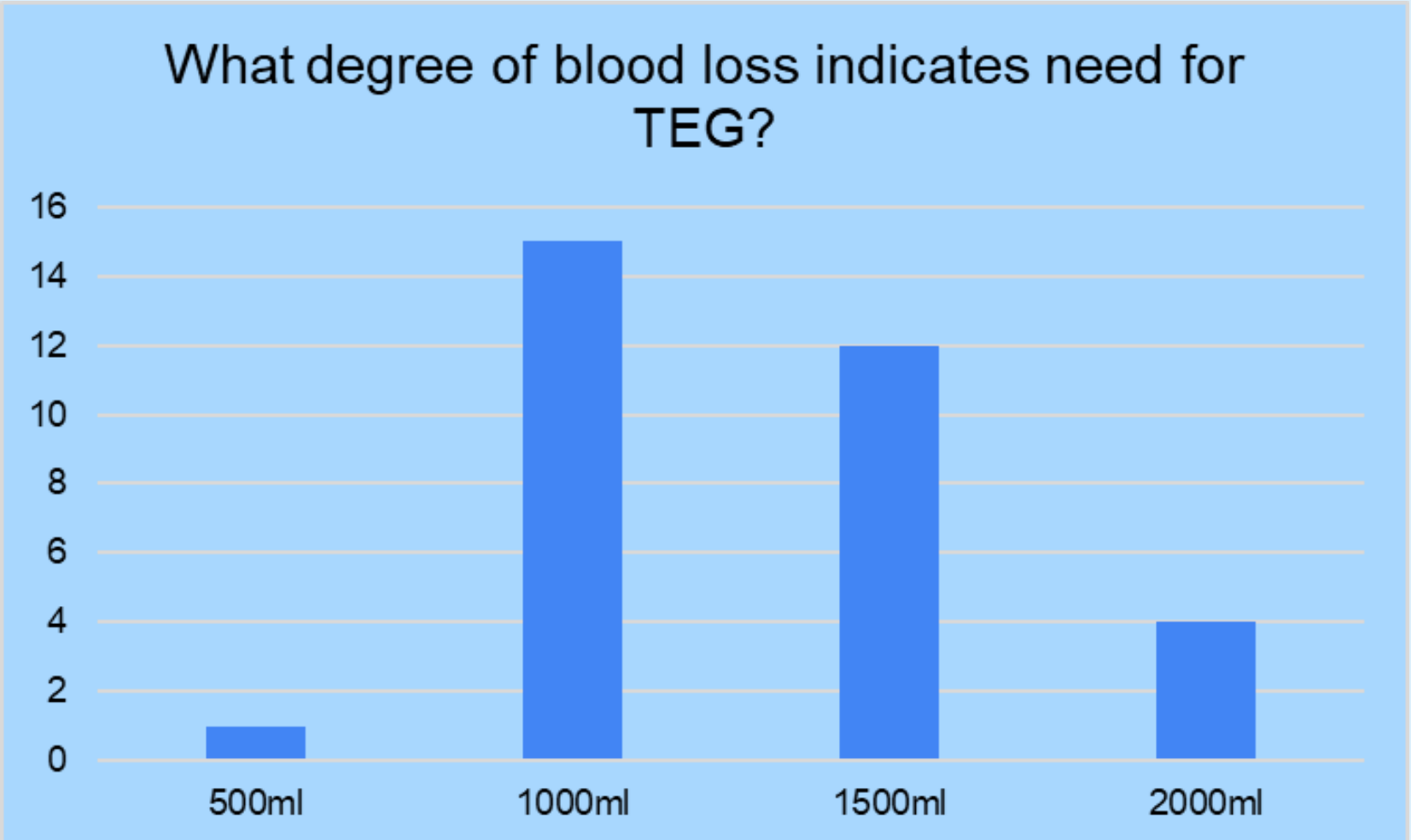
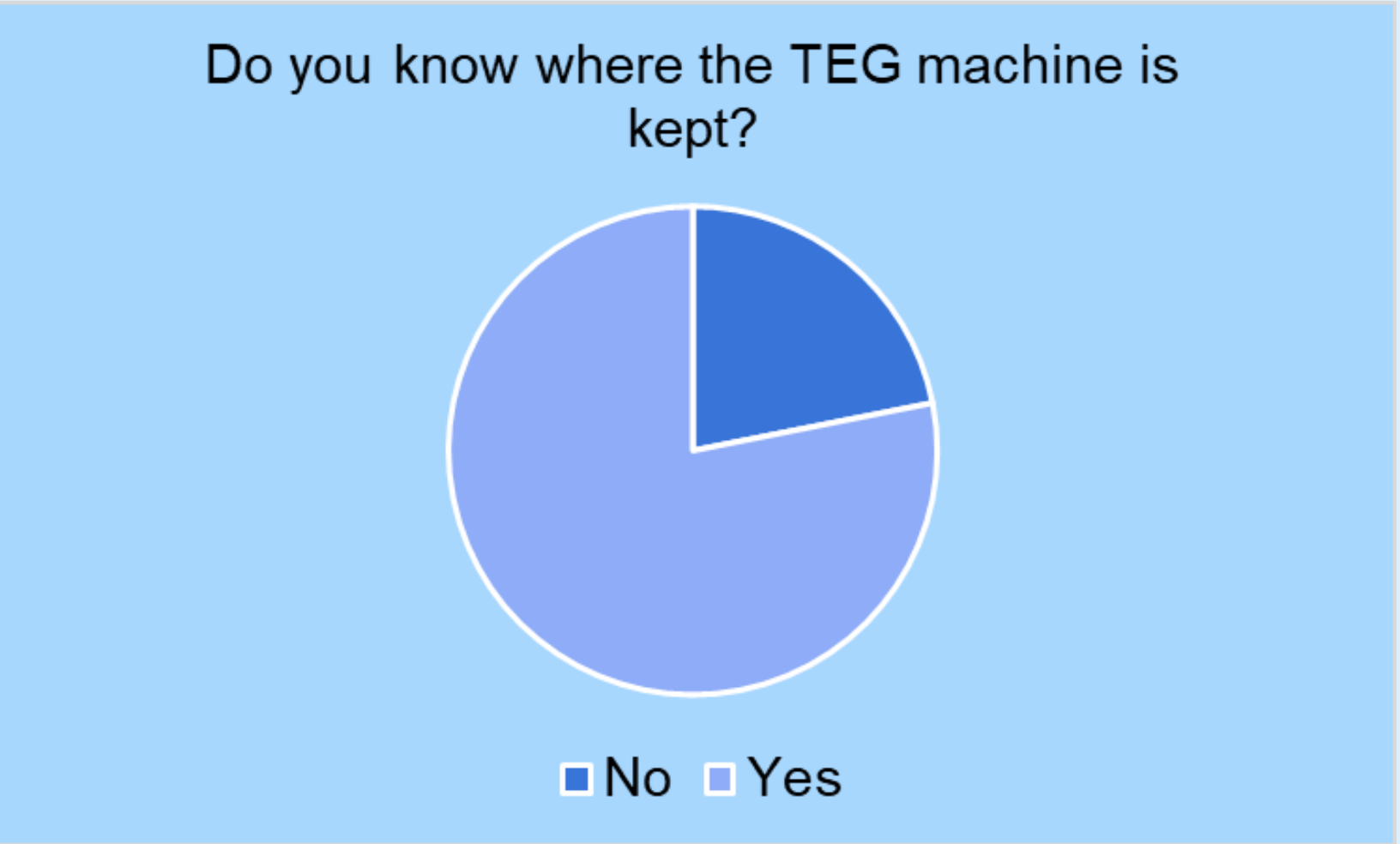
- Blood product usage pre- and post-introduction of TEG did not vary significantly.

Pre-TEG Blood Products		
Units Reserved	Units Used	Units Charged
328	208	244
		11 Cryo, 40 FFP, 1 PAEXI, 7 Platelets, 185 RBC
Post-TEG Blood Products		
Units Reserved	Units Used	Units Charged
330	193	230
		20 Cryo, 57 FFP, 1 PAEXI2, 6 Platelets, 146 RBC

The Survey :

Assessing the understanding of TEG and its use in obstetric, anaesthetic and midwifery staff on our Delivery Suite.

32 Responses



Main Findings:

- Less than 15% of patients who had obstetric haemorrhage had a TEG performed as part of their assessment and management.
- TEG was typically performed after initial blood product administration.
- Of those who did, only 37.5% had a repeat TEG.
- The introduction of TEG did not improve blood product usage at 6 months.
- There was a general lack of awareness and knowledge of the use of TEG and its benefits.

Our Plan:

- Development of a TEG poster to be displayed beside the TEG machine, including an algorithm for when to use TEG, and guiding blood product usage.
- Further training sessions on the TEG machine and how to use.
- Teaching on TEG as part of Major Obstetric Haemorrhage teaching.
- Reaudit in 6 months following implementation of the above.

References

- OBS Cymru Quality and Safety Subgroup of Maternity Network Wales and Elinore Macgillivray National Project Lead Midwife OBS Cymru. *All Wales Guideline. Prevention and Management of Postpartum Haemorrhage*. 2017. <https://phw.nhs.wales/services-and-teams/improvement-cymru/our-work/maternity-cymru/obs-cymru/obstetric-bleeding-strategy-cymru/all-wales-postpartum-haemorrhage-guidelines/>
- Royal College of Obstetricians and Gynaecologists. *Prevention and Management of Postpartum Haemorrhage (Green-top Guideline No. 52)*. 2016. <https://www.rcog.org.uk/guidance/browse-all-guidance/green-topguidelines/prevenon-and-management-of-postpartum-haemorrhage-green-top-guideline-no-52/>

