

A RETROSPECTIVE AUDIT OF VENOUS THROMBOEMBOLISM RISK ASSESSMENT

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Objectives

To assess whether current Venous Thromboembolism (VTE) guidance in Pregnancy is being adhered to in the antenatal period within South Tyneside and Sunderland NHS Foundation Trust.

Methods

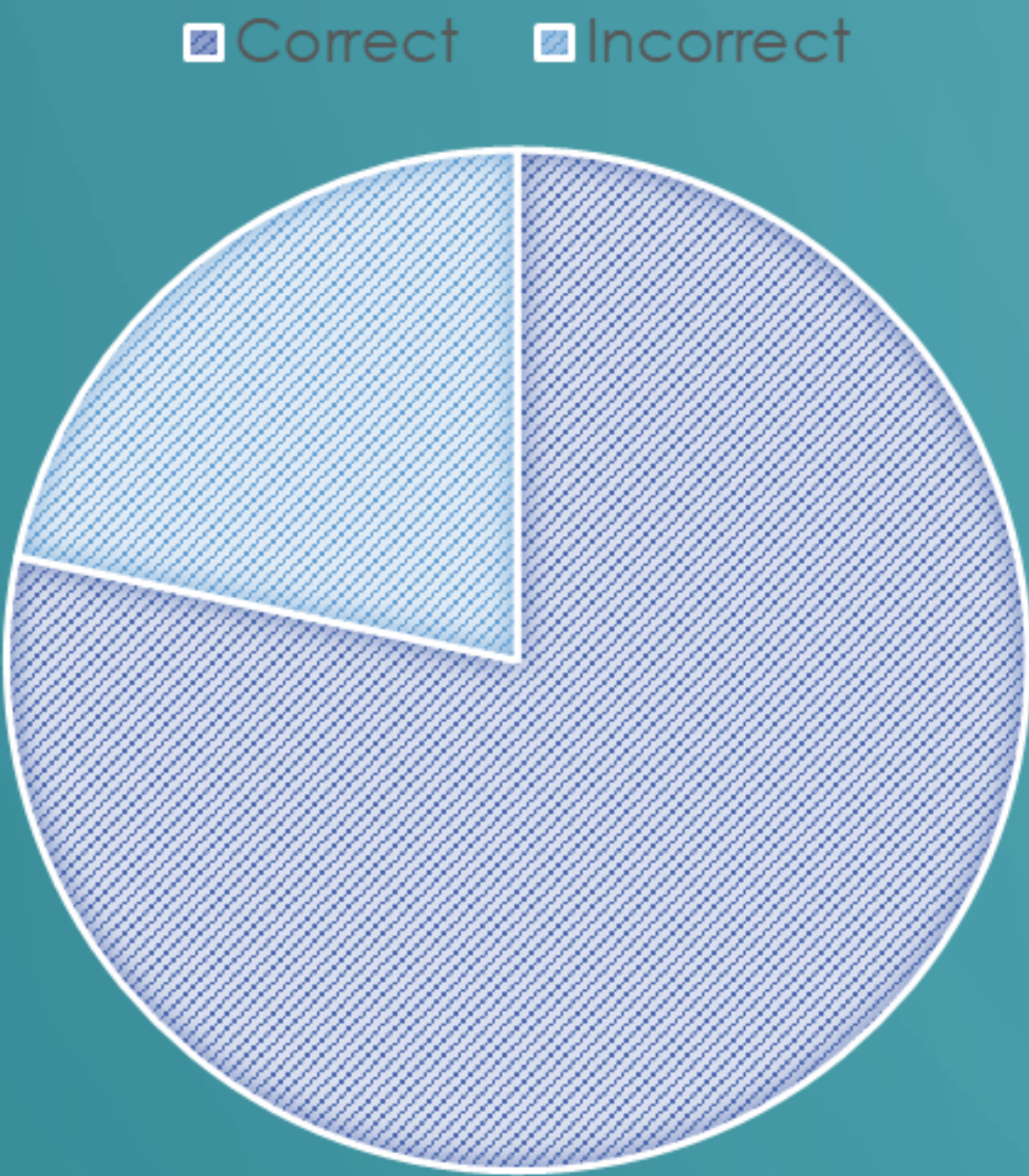
Community midwives (CMW) booking VTE risk assessment recorded and score validated against information including in midwifery and/or medical booking documentation as well as information from any attendances or admissions during pregnancy. Pharmacy records of low molecular weight heparin (LMWH) prescriptions reviewed and crosscheck against above as well as verified for correctness based on booking weight. Any patient with an incomplete record were excluded.

Design

A retrospective audit of the electronic patient records of the first 100-women to deliver in November 2020

Results

GRAPH 1: ACCURACY OF BOOKING RISK ASSESSMENT



Booking Assessment

100% of women with

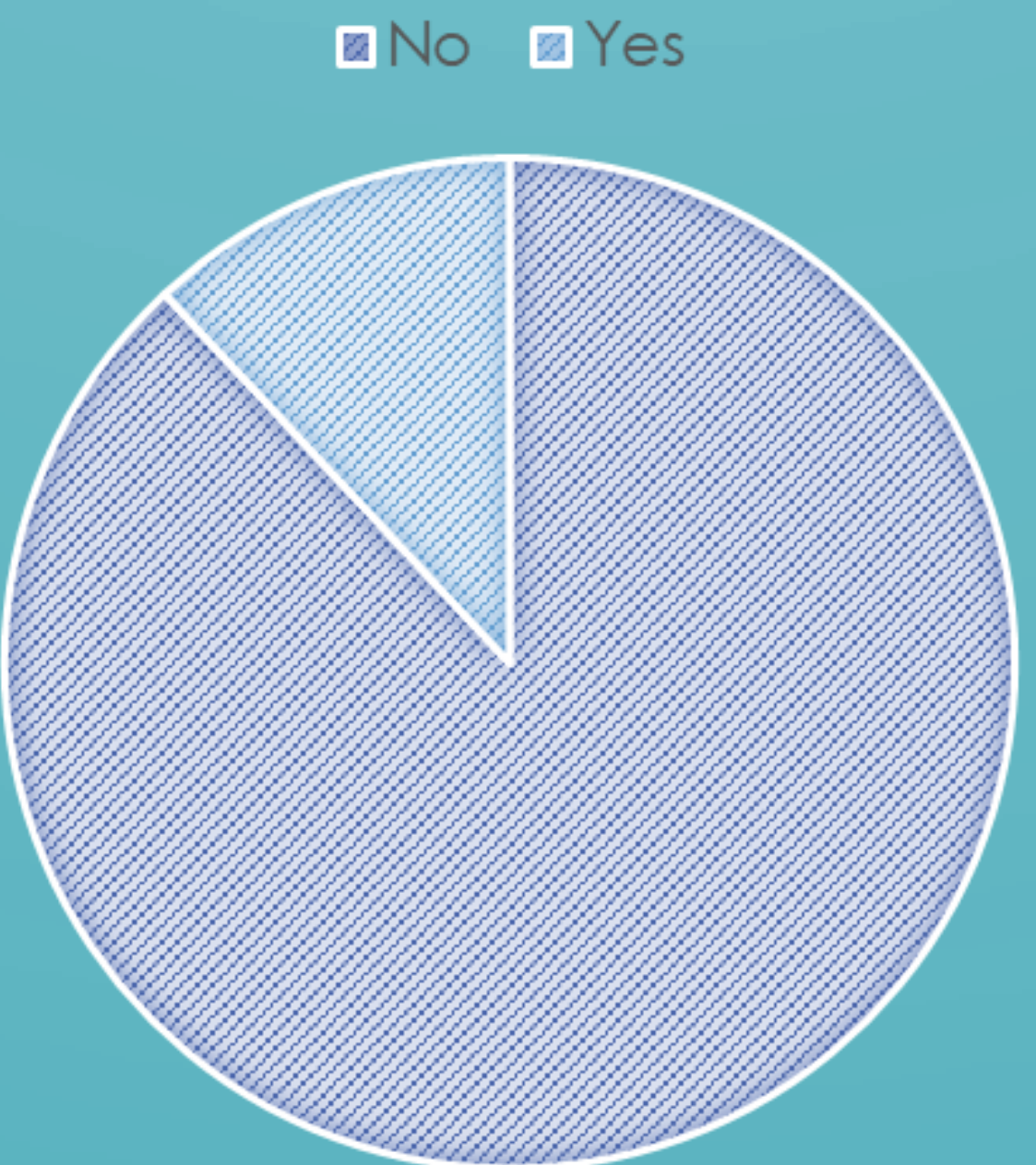
had a VTE risk assessment carried out at booking

These were inaccurate in

22% (20/92) of women with implications for

management in **10%** (9/92) of women

GRAPH 2: REASSESSMENT AT 28/40



Reassessment at 28-weeks

Only **12%** (n=11) of women had a reassessment of VTE risk recorded at 28-weeks gestation.

These were incorrect in **36%** (4/11) women with implications for management in **27%** (3/11) of women

13% (12/92) on the total cohort required re-assessment at 28-weeks gestation but only 1-women had an this completed and 8-women had no consideration of VTE, however this only potentially impacted management in 1-women

8% (7/92) of women were missed and did **NOT** receive appropriate VTE prophylaxis

2% (2/92) of women were prescribed LMWH in error based on miscalculated risk assessments

Discussion

Differences were frequently observed in these data in how age and BMI were used in the calculation and re-calculation of VTE score.

Age: RCOG accepts that data regarding age is conflicting but recommends a score of 1 if age >35.

- Difference noted in these data as to how this is being applied, >35 at booking (35yrs and 1-day or 36years?)
- The RCOG does not specify but the > and not ≥ has often prompted the use of 36-years as the cut off

BMI: clearly and consistently associated with increased VTE prevalence

- RCOG state pre-pregnancy or early-pregnancy BMI should be used for risk-assessment but dose can be calculated on booking or most recent weight.
- Trust recommends use of booking weight for LMWH-dose unless there has been significant weight gain (parameters not defined) but women were often reweighed at 28-weeks and this BMI was used for recalculated and prescribing
- Covid-19 impact and reweighting/ telephone appointment and loss of 'eyeballing' to guide assessment was noted to impact practice

Conclusion

- VTE remains a leading cause of maternal death in the UK ¹ and the accuracy of VTE risk assessments remains an essential tool in prevention.
- In these data VTE assessments were completed at booking but rarely reviewed at 28-weeks gestation or when the clinical condition changed and scores were often subject to inaccuracies.

Since completion of this work changes have been made to documentation including a separate 28-week visit proforma with linked VTE assessment. A re-audit has been planned to assess the impact of these changes.

References

Saving Lives, Improving Mother's Care [Internet]. Npeu.ox.ac.uk. 2021 [cited 4 January 2021]. Available from:<https://www.npeu.ox.ac.uk/downloads/files/mbrrace-uk/reports/MBRRACE-UK%20Maternal%20Report%202019%20-%20WEB%20VERSION.pdf>Rossignol,