Venous Thromboembolism Prophylaxis in a Rural Maternity Unit after Implementation of New State-wide Guidelines

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Background

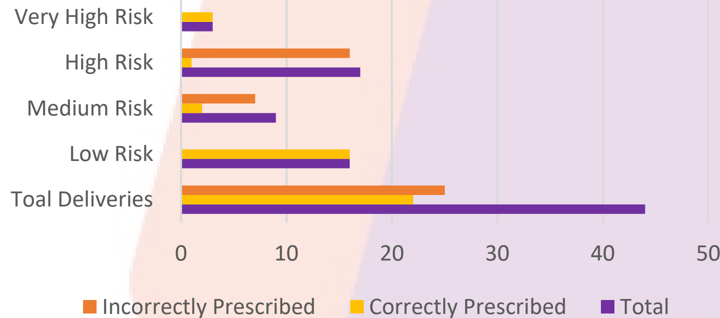
Introduction
Queensland Health implemented a new Clinical Guideline for Venous Thromboembolism Prophylaxis in August 2020. To introduce the changes to Gympie Hospital there were weekly departmental teaching sessions and the algorithm was displayed in each patient medication chart and treatment room.

Aims
The aim of this study was to examine how effectively the new Therapeutic Guideline for Venous Thromboembolism Prophylaxis was implemented in a Rural Maternity Unit. Primary outcome was if prophylactic therapy was prescribed correctly. Secondary outcome was venous thromboembolism.

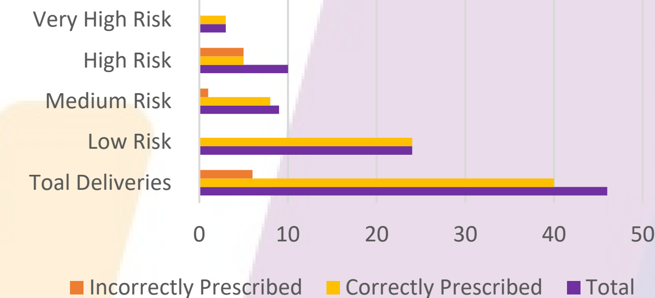
Methods
A retrospective audit was conducted over a two month period before and after the clinical guideline was introduced. VTE prophylaxis was categorised as low risk (no prophylaxis), medium risk (inpatient), high risk (7 days) and very high risk (6 weeks). Patients were followed for two months post-partum.

Results

Before Implementation of Guidelines



After Implementation of Guidelines



Results
Prior to implementation there were 44 deliveries (22 correctly prescribed), 16 low risk, 9 medium risk (2 correct), 17 high risk (1 correct) and 3 very high risk (all correct). After implementation there were 46 deliveries (40 correct), 24 low risk, 9 medium risk (8 correct), 10 high risk (5 correct) and 3 very high risk (3 correct). There was no significant difference in venous thromboembolism.

Discussion

There was a significant increase in the correct prescription of VTE prophylaxis.

Prior to the implementation of the new guidelines, the most commonly missed risk factors were Parity > 3 and Body Mass Index. The number of incorrect prescriptions here is exaggerated because the previous guidelines were being followed correctly however the treatment algorithm is different.

After implementation of the new guidelines, three of the incorrect prescriptions for the high risk group were after caesarean section during labour. The other three incorrect prescriptions were when prophylaxis was withheld after post-partum haemorrhage. In this instance the risk of bleeding should be weighed against the hypercoagulable state. Any emergency caesarean section in labour should prompt 7 days treatment with clexane.

This poster highlights risk factors associated with Venous Thromboembolism during pregnancy and the need for departmental education after implementation of new guidelines.

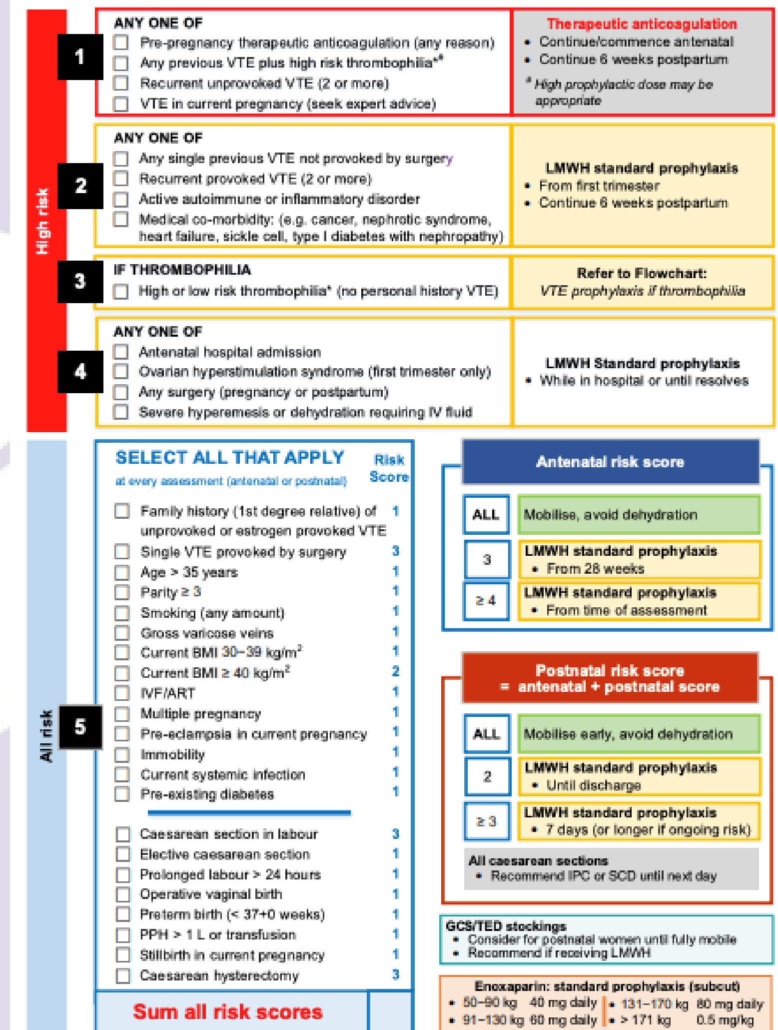


Figure 1. Thromboprophylaxis According to Risk

References
1. Queensland Health. 2020. *Venous Thromboembolism prophylaxis in pregnancy and the puerperium.* Queensland: Queensland Clinical Guidelines.