

Background

- VTE accounts for almost 10% of all hospital deaths and is estimated to cost the healthcare system \$1.72 billion annually
- At Townsville University Hospital (TUH), VTE prophylaxis is prescribed via a PowerPlan, a prescribing tool in the electronic integrated medical record (ieMR), which is an electronic translation of the Queensland Health state-wide *Guideline for the Prevention of VTE in Adult Hospitalised Patients*.

Methods

- Electronic charts were reviewed retrospectively for 99 patients admitted to the acute medical wards at Townsville University Hospital during the month of April 2021.
- VTE prophylaxis charted was compared to the state-wide *Guideline for the Prevention of VTE in Adult Hospitalised Patients* to determine if prescribing was appropriate.

Aims

- Primary Aim:** Investigate the current use of the VTE PowerPlan at TUH for Venous Thromboembolism pharmacological prophylaxis prescribing.
- Secondary Aim:** Investigate if using the PowerPlan promotes more accurate prescribing of VTE prophylaxis when compared to prescribing without

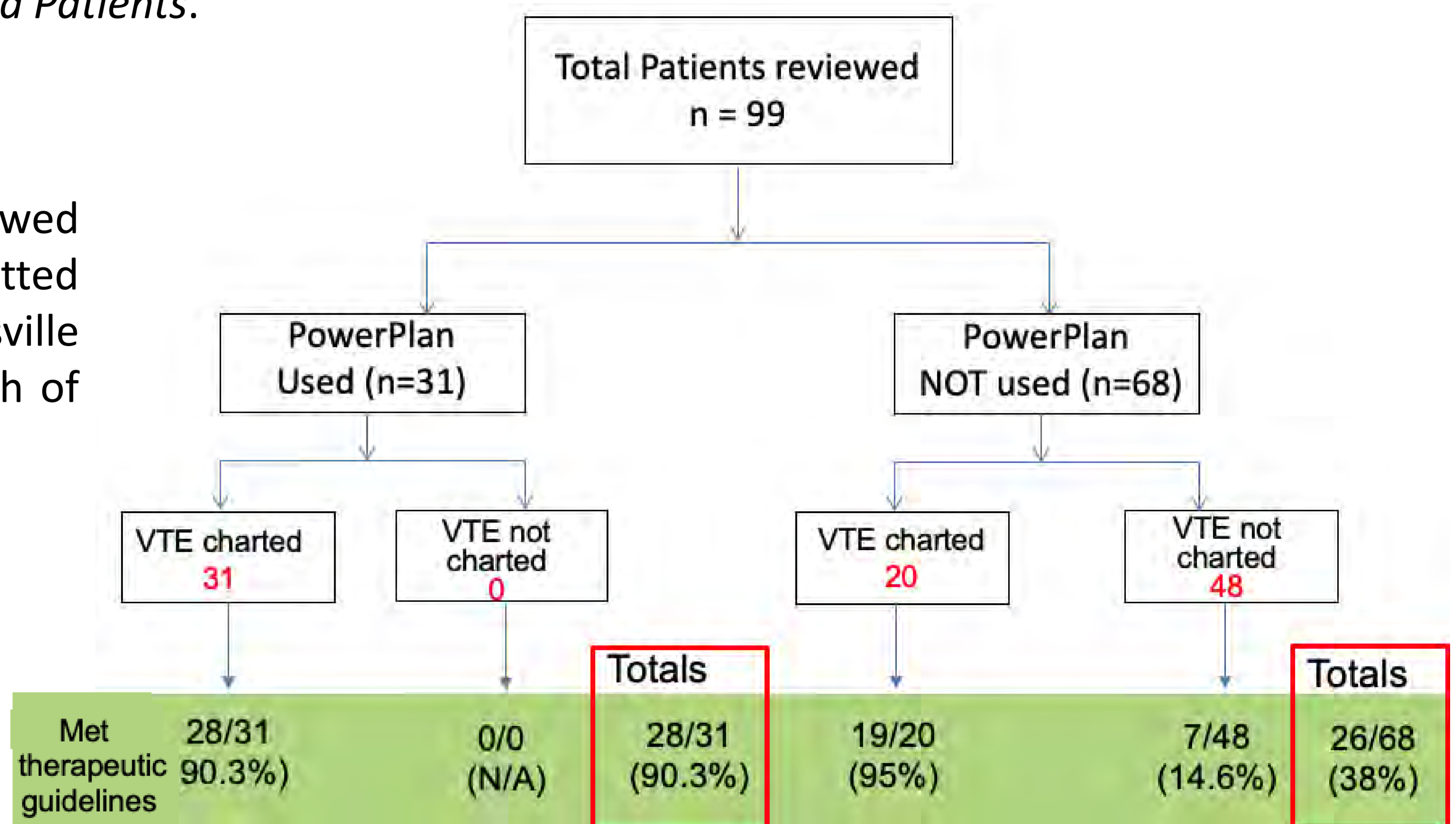



Table 1: Summary of data collected of 99 patients admitted to the acute medical wards at TUH during the month of April 2021

Results

- When charted via Powerplan, 90.3% of patients had VTE prophylaxis prescribed/withheld in line with state-wide guideline.
- Only 38% of patients without a Powerplan had VTE prophylaxis prescribed/withheld in line with state-wide guidelines. Analysis demonstrated this to be statistically significant ($p < 0.00001$).
- Subgroup analysis for high-risk groups were performed:
 - Patients with impaired kidney function (eGFR $< 30 \text{ ml/min/1.73m}^2$), VTE prophylaxis charted via a PowerPlan was 100% correct, compared to 18% when not ($p < 0.028$).
 - Patients with a BMI $> 30 \text{ kg/m}^2$, VTE prophylaxis charted via a PowerPlan was 91% correct, compared to 60% when not ($p < 0.079$).
 - Patients with weight $< 50 \text{ kg}$, VTE prophylaxis charted via a PowerPlan was 83% correct, compared to 20% when not ($p < 0.021$).

Conclusions

- This study found that using the PowerPlan prescribing tool significantly increases the likelihood that VTE prophylaxis will be charted appropriately in line with the current Queensland Health state-wide *Guideline for the Prevention of VTE in Adult Hospitalised Patients*.
- Subgroup analysis demonstrated significant benefit using the Powerplan for the high-risk groups of poor renal function or lower weight patients.

 enoxaparin
40 mg, Prefilled Syringe, Subcutaneous, morning, start: 05/11/22
08:00:00 AEST, Indication: VTE prophylaxis
Monitor platelet count as per local protocol.