

Should We Risk It? VTE Risk Screening and Anticoagulation Prescribing Audit

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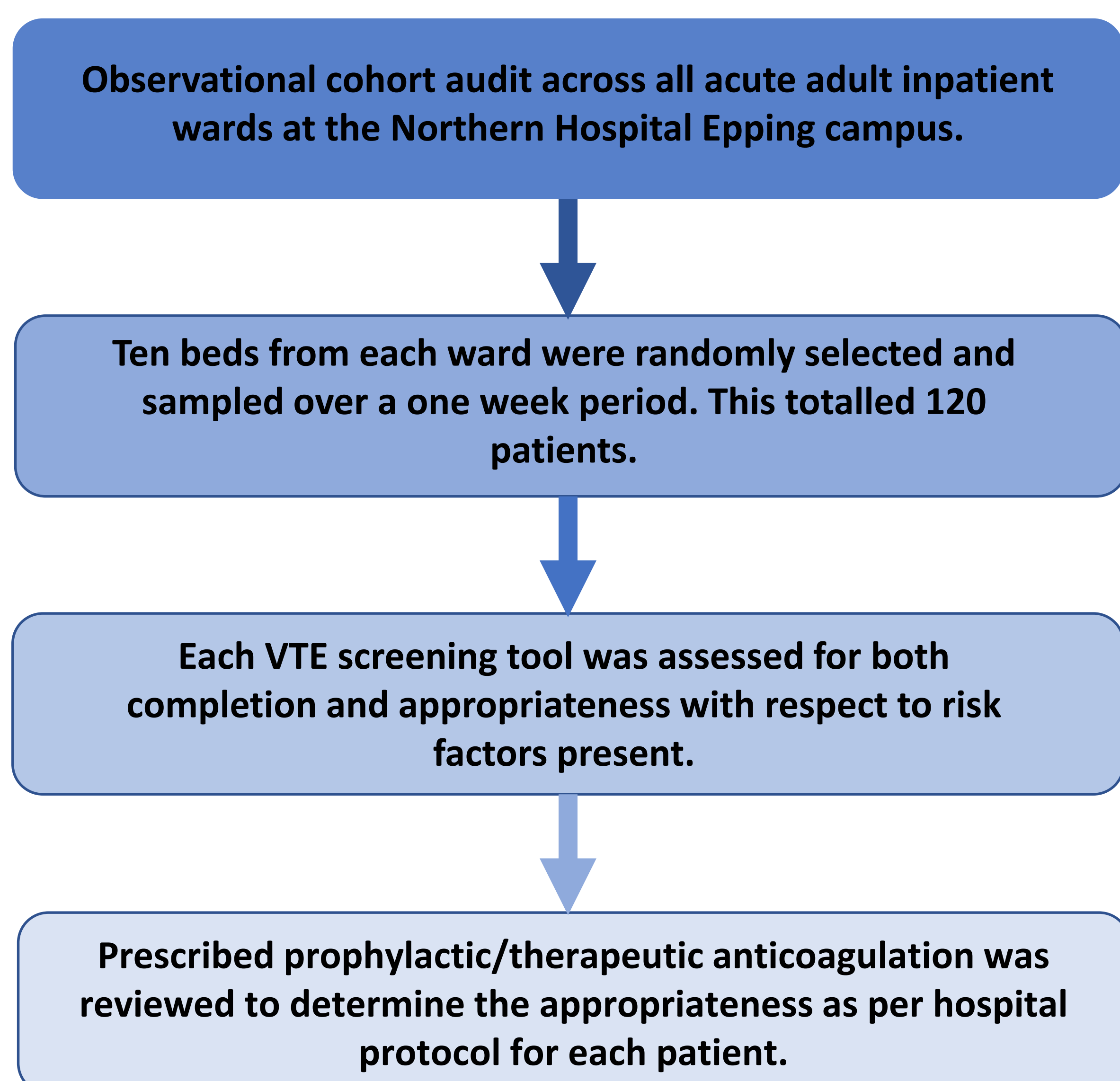
INTRODUCTION

Venous thromboembolism (VTE) is a leading hospital-acquired complication, causing significant morbidity and mortality¹. VTE screening should be completed at the time of admission, then reviewed at least once weekly to assist in prescribing anticoagulant medications². Prior to EMR, these were documented in inpatient medication charts. Results from the National Inpatient Medication Chart Audit (2020) revealed that, on average, 11% of VTE screening tools were completed on at least one occasion³. Given the recognised importance of screening patients for VTE risk, assessing hospital performance in this area is critical prior to a planned transition to an Electronic Medical Record system (EMR) in September 2023.

AIM

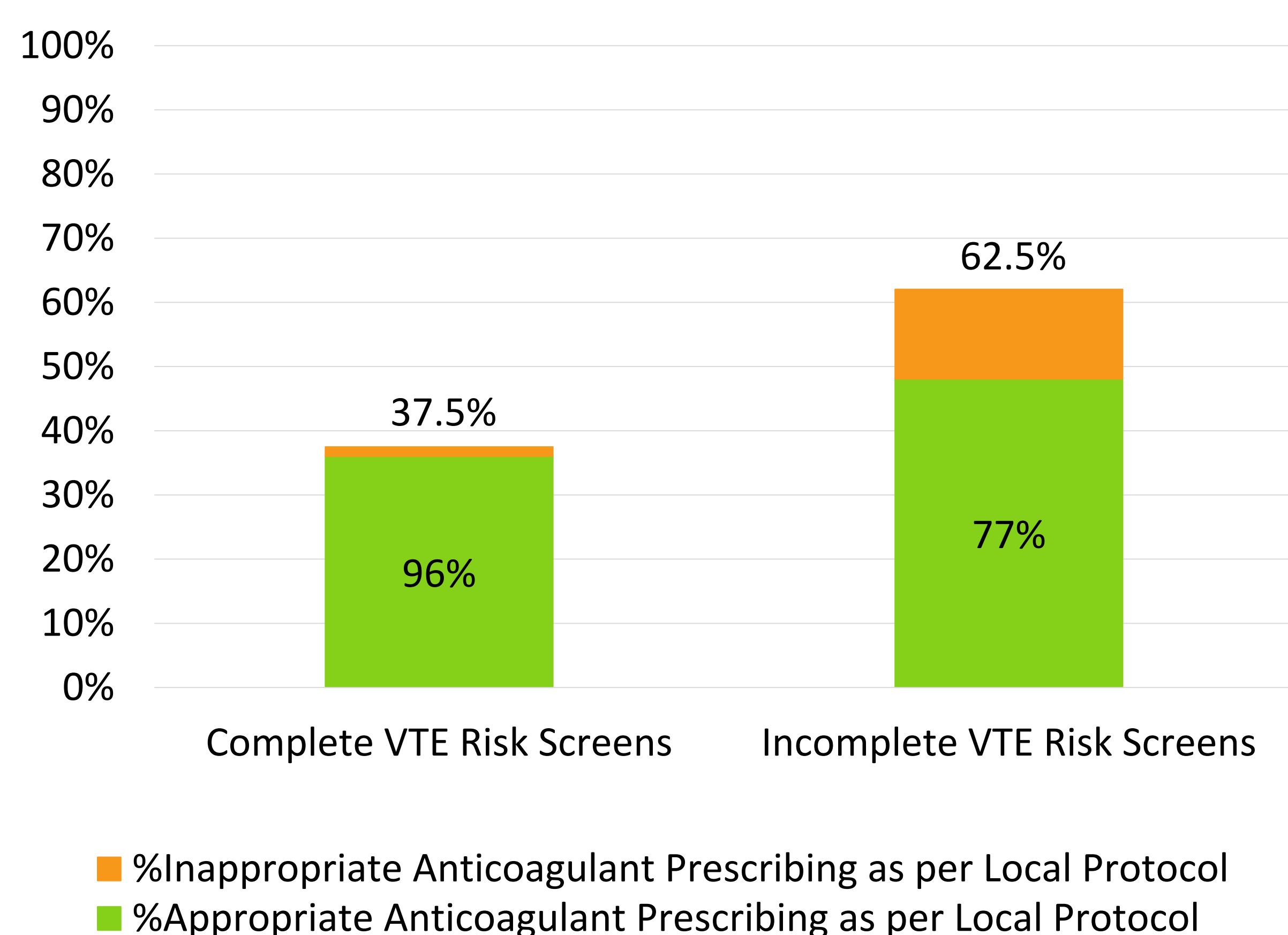
The aim of this audit was to determine a baseline rate of VTE risk screening tool completion, and the corresponding rate of appropriate VTE prophylaxis prescribing on paper-based medication charts prior to EMR. This audit will then be used to compare our performance post transition to EMR charting.

METHOD



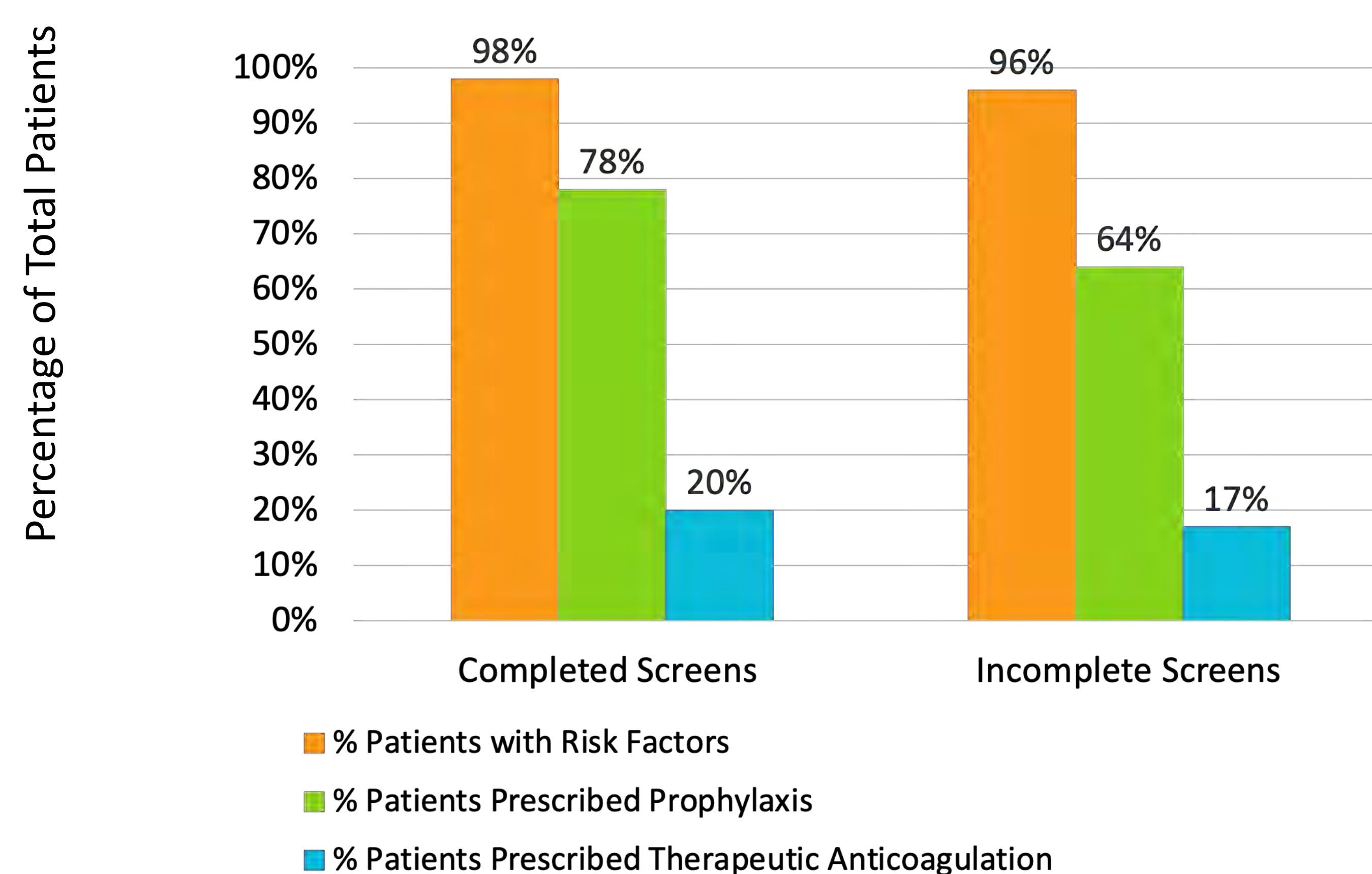
RESULTS

Figure 1: Completed Screens vs. Appropriateness of Therapy



Of the audited medication charts, 37.5% had a VTE risk screening tool completed on at least one medication chart during the patient's admission. Of these charts, 96% had either prophylactic or therapeutic anticoagulation prescribed in line with local hospital protocols (Figure 1). For patients with an incomplete VTE risk screening tool, only 77% were prescribed anticoagulation in line with hospital protocols.

Figure 2: Presence of risk factors and anticoagulant prescribing between patients with complete vs. incomplete VTE risk screen



Of those patients with an incomplete risk screen, 96% had at least one known risk factor for VTE (Figure 2). A total of 83 patients (69%) audited were prescribed some form of VTE prophylaxis during their admission, with enoxaparin being the most common agent (96%).

DISCUSSION & LIMITATIONS

The audit showed a strong positive correlation between completion of the VTE screening tool and appropriateness of anticoagulant therapy (both therapeutic and prophylactic) prescribed on paper-based medication charts. The majority of sampled patients had an incomplete VTE risk screening tool; this coincided with higher rates of anticoagulation prescribing which fell outside of local hospital protocols.

Complete and incomplete screens had a comparable proportion of patients with risk factors (Figure 2). Likewise, both groups had similar rates of prescribed prophylactic and therapeutic anticoagulation. This suggests that completion of the VTE screening was not dependent or correlated to the presence of VTE risk factors or the patient being prescribed therapeutic anticoagulation.

Overall, the rate of completion was above the national average of 11%³. Possible contributing factors for this result include the presence of an Anticoagulation Stewardship service and education sessions about VTE risk screening and prophylaxis prescribing targeted at junior medical staff.

An EMR system may better support consistent use of the VTE screening tool through functions such as automated alerts and optimised workflows. The EMR is also expected to increase the appropriateness of VTE prophylaxis prescribing, due to centralisation of information giving prescribers a more complete picture from which to make clinical decisions. Review of EMR-related VTE incidents will be prioritised to identify opportunities for improved compliance.

Although this audit did not investigate specific barriers to the completion of VTE screening forms, many have been previously identified and it is hoped that the transition to EMR might mitigate some of these barriers to completion that exist on paper-based charts. The results from this audit were restricted to acute adult inpatient wards and are not necessarily reflective of VTE screening practices across other specialty wards, including; psychiatric, geriatric, maternity and paediatric.

CONCLUSION

The results of the audit illustrate a strong relationship between completion of VTE risk screening tools and the appropriate prescription of VTE prophylaxis and/or therapeutic anticoagulation.

With the implementation of an EMR, improvements are expected with respect to the rates of VTE risk screen completion and appropriateness of subsequent anticoagulation prescribing. This audit will form a baseline for comparison post implementation during future audits, in order to measure the effect of the EMR on these practices.

REFERENCES

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