

Increasing Compliance with VTE Prophylaxis in Post-Surgical Patients



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BACKGROUND

- Roughly 900,000 individuals develop a VTE each year
- 50% of VTEs are related to inpatient hospitalization and surgery
- 25-50% of VTE sufferers develop lifelong complications, such as post-thrombotic syndrome
- VTE events cost hospitals an estimated \$5 to \$10 billion annually
- Approximately 70% of all VTEs are preventable
- Factors that contribute to VTE prophylaxis non-compliance measures:
 - Lack of proper patient awareness leading to refusal of VTE prophylaxis
 - Ineffective communication between nursing and providers regarding refusals
 - Failure to properly document refusals

PROJECT AIM

- To develop and implement a standardized algorithm regarding VTE prophylaxis in adult post-surgical patients by December 2022.

PROJECT DESIGN/STRATEGY

Design:

- A pre-experimental design using pre- and post-implementation data evaluation.

Setting:

- Two 24-bed critical care units at ECU Health Medical Center, an academic medical center.

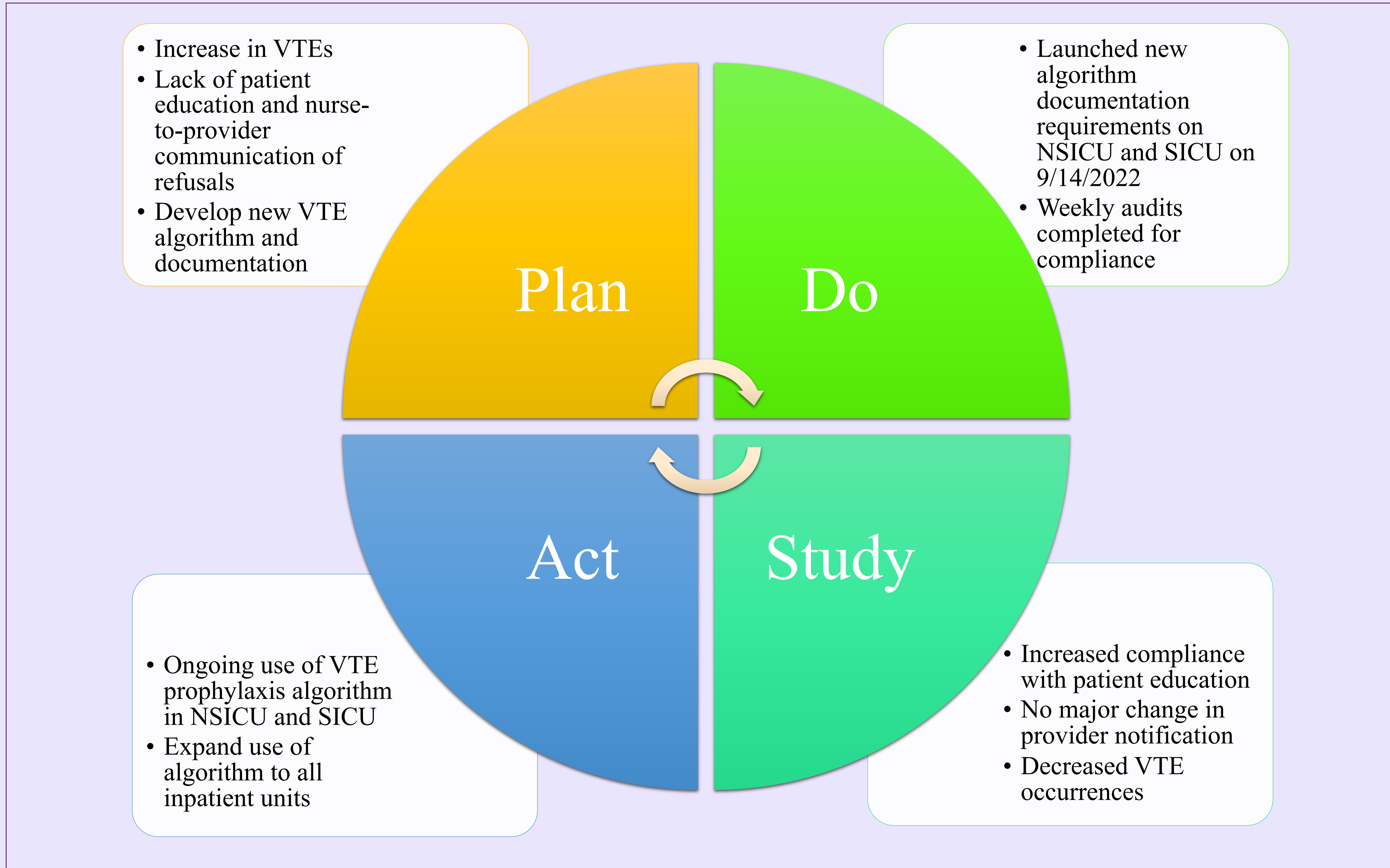
Sample:

- Adults 18 years and older admitted to the NSICU or SICU who underwent a surgical and/or prolonged interventional procedures.

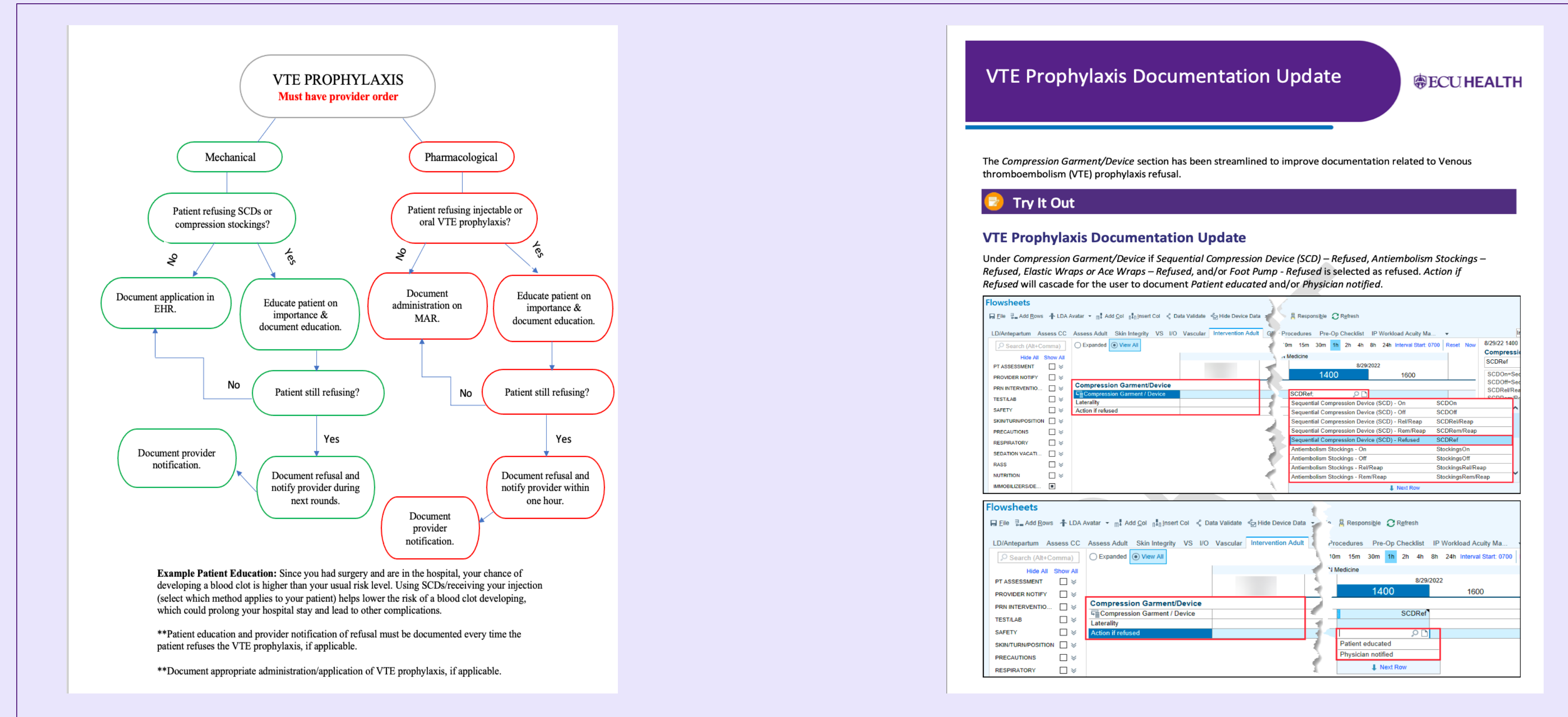
Data Collection Procedures:

- Pre-implementation data was collected over a 6-week period from July 17th-August 26th, 2022.
- Implementation data was collected from September 14th to October 26th, 2022.
- Pre-and-post data collected included the following:
 - Patient education regarding VTE prophylaxis and its importance
 - Provider notification of refusals
 - Documentation of patient education and provider notification
 - Number of VTEs in SICU and NSICU
- Data collection procedures were implemented by:
 - weekly collection of EHR queries
 - Utilization of the IHI VTE bundle
- Data analysis was completed using descriptive techniques.

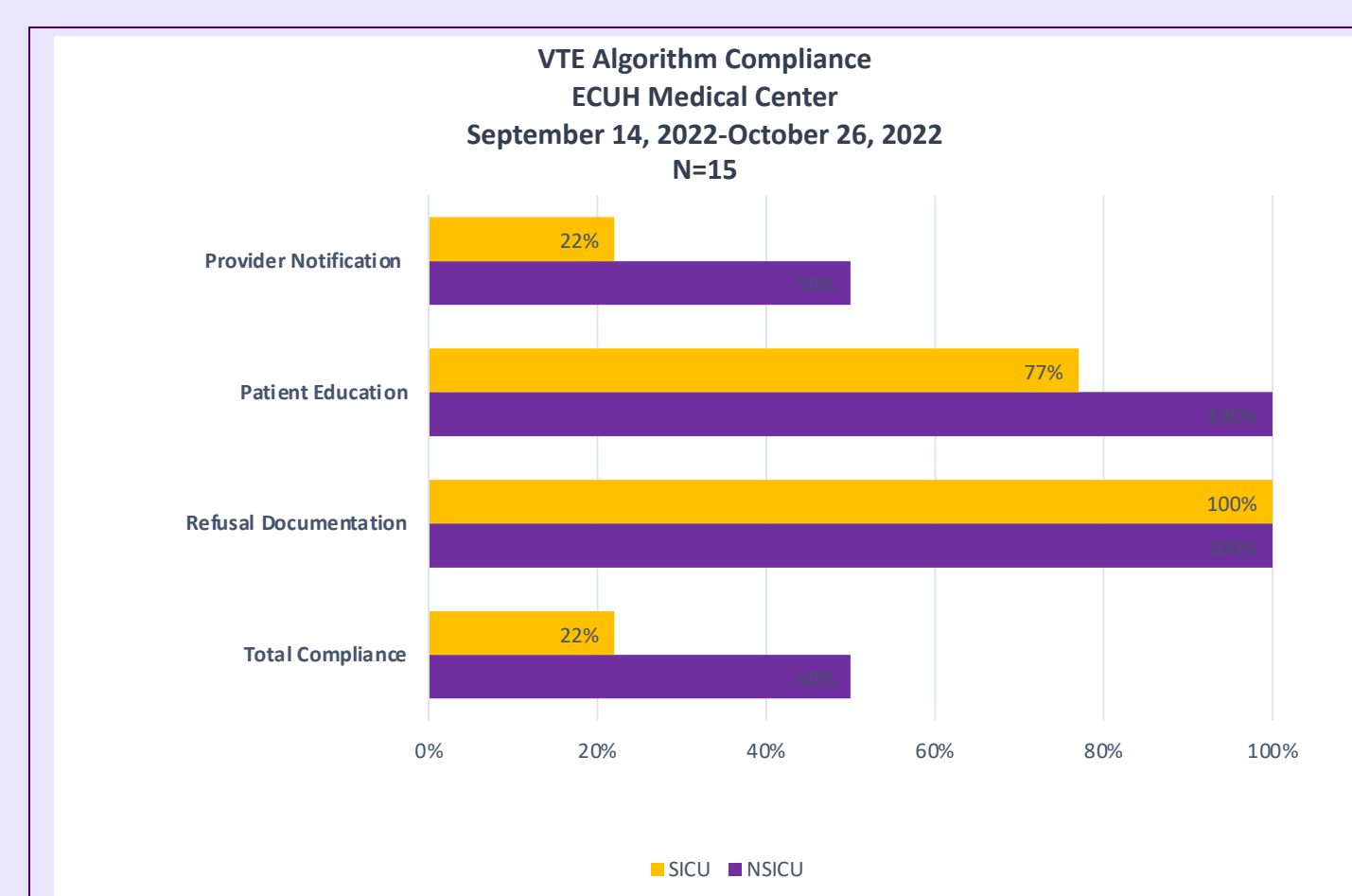
CHANGES MADE (PDSA CYCLES)



NEW PROCESS

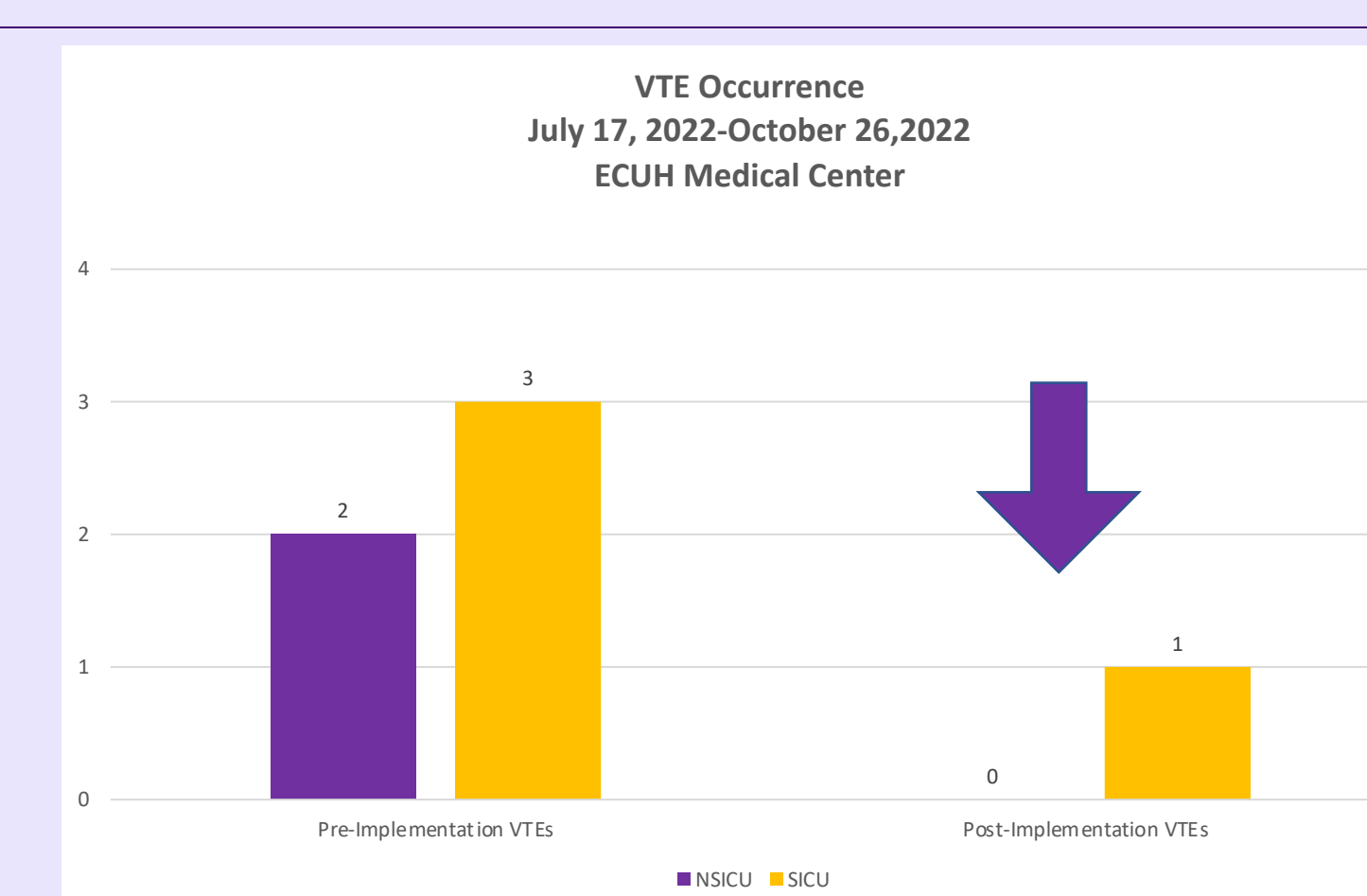


RESULTS/OUTCOMES



Demographics:

- 56 patients included
- 19 females
- 37 males
- 15 refused VTE prophylaxis



LESSONS LEARNED

Discussion:

- Compliance with patient education regarding VTE prophylaxis and its importance was increased when patients declined VTE prophylaxis interventions.
- Provider notification showed slight improvement.
- Number of VTEs were significantly lower when compared to a pre-implementation period.
- Travel nurses impacted the percentage of nurses educated during the pre-implementation phase.
 - 69.6% of NSICU nurses educated
 - 66% of SICU nurses educated

Limitations:

- The temporary status of travel nurse's employment prevented 100% staff education delivery prior to study implementation. Contractual start/end dates were a key factor.
- Only a small percentage (26.7%) of patients initially refused VTE prophylaxis.
- The duration of project implementation short (i.e. 6-weeks).

NEXT STEPS

- Advance use of the VTE algorithm including required documentation components to all inpatient units.
- Ongoing evaluation of VTE algorithm and associated documentation to monitor VTE occurrence rates.
- Encourage provider support for VTE prophylaxis procedures.

CONCLUSION

- Compliance with the VTE prophylaxis algorithm for patient education was high in NSICU (100%) and SICU (77%) when closely monitored and observed.
- Improve number of provider notifications involving VTE prophylaxis refusals by patients.
- VTE occurrences were reduced by 80% during the intervention period.
- The factors that contribute to VTE occurrences should be further explored.

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