

Change in Process for Application of Sequential Compression Devices

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WHAT WE LEARNED

Sequential compression devices (SCD), or mechanical deep vein prophylaxis, are the standard in the perioperative practice area to prevent venous thromboembolism. SCDs should be applied prior to the administration of general and regional anesthesia.

PURPOSE

The project addresses the need to change process to apply best practices for prevention of thromboembolism based on recommendations from Association of periOperative Registered Nurses (AORN). SCD application should occur before general and regional anesthesia administration.

BACKGROUND

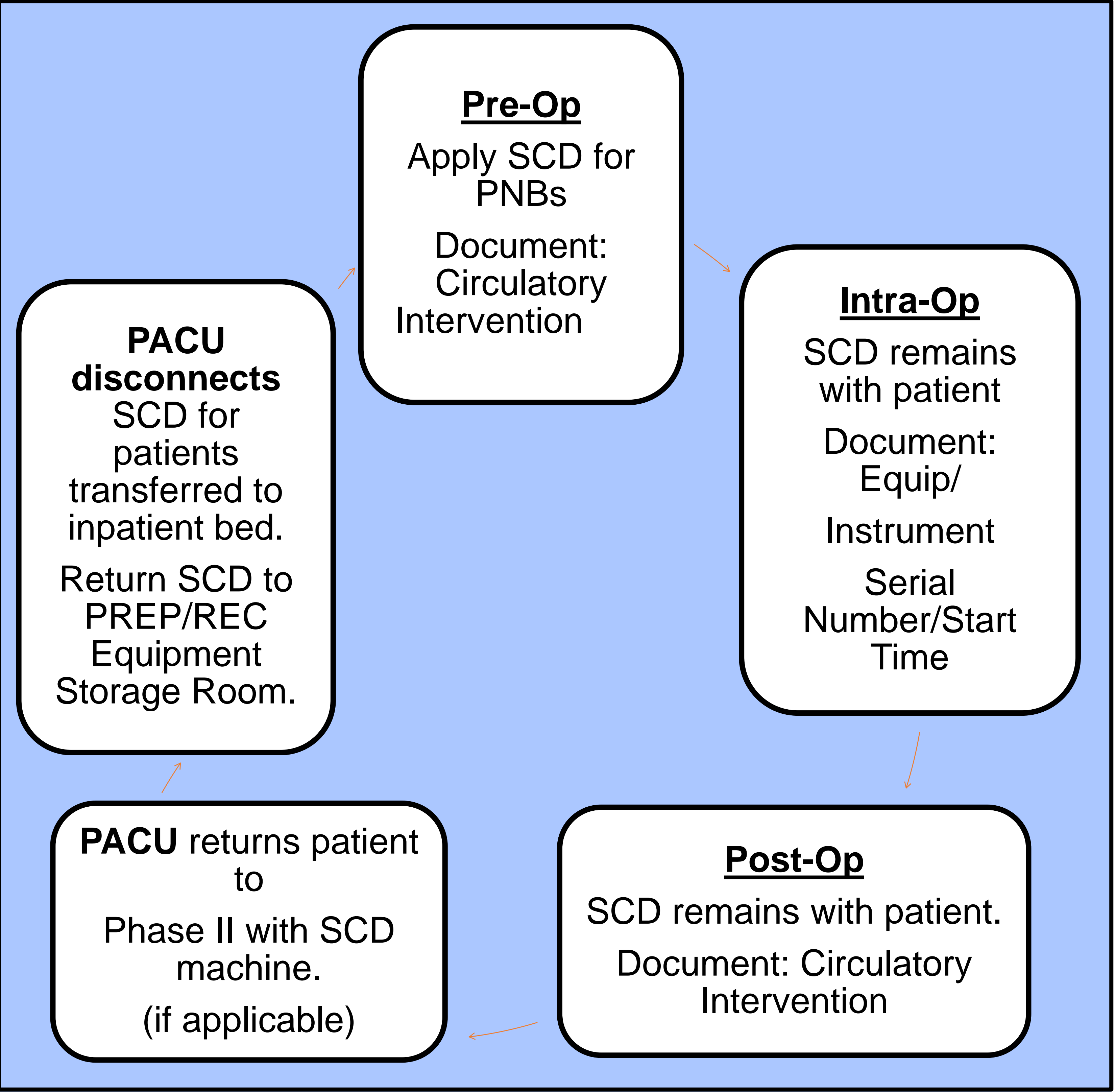
- Based on AORN Level I recommendations, SCD application should occur before the administration of general or regional anesthesia.
- Although nurses applied SCDs in the operating room (OR) prior to the administration of anesthesia, anesthesiologists occasionally performed regional blocks in the pre-procedural area.
- SCDs were not applied in the pre-procedural area prior to the administration of regional anesthesia.
- This application conflicts with AORN recommendations.

METHODS

The perioperative clinical educator reviewed organizational policy on intraoperative prevention of venous thromboembolism, confirming with AORN recommendations.

IMPLEMENTATION

- The educator developed PowerPoint presentations and tip sheets outlining the change in SCD application in the pre-procedural area versus the OR prior to administration of regional anesthesia.
- Education distributed via email and a Qualtrics® survey for attestation that the information was understood by staff.
- The change in process was socialized at staff meetings.



RESULTS

- Prior to the change in process, patients who received regional anesthesia in the pre-procedural area did not have SCDs applied until they were in the OR.
- After implementation of the process change, all patients had circulatory prevention if a regional nerve block was administered in the pre-procedural area.
- The SCD machine remained on throughout the patient's surgical process including the post anesthesia care unit (PACU).

CONCLUSIONS

- Despite policy alignment with AORN recommendations, nurses must constantly reassess their practice environments for changes that impact best practice.
- The change in application and initiation of SCDs in the pre-procedural area is consistent with AORN Level I evidence, potentially preventing incidence of venous thromboembolism in the surgical patient.

REFERENCES

Association of periOperative Nurses. (2022). *Guidelines for Perioperative Practice* (3. Mechanical VTE Prophylaxis).

