

Innovation SCD Use in an Academic Perioperative Setting

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Clinical Issue

The initial evidence based research question was “When should sequential compression devices be started for best practice for (DVT/PE) protection?”

Team

Perioperative Research Council membership:

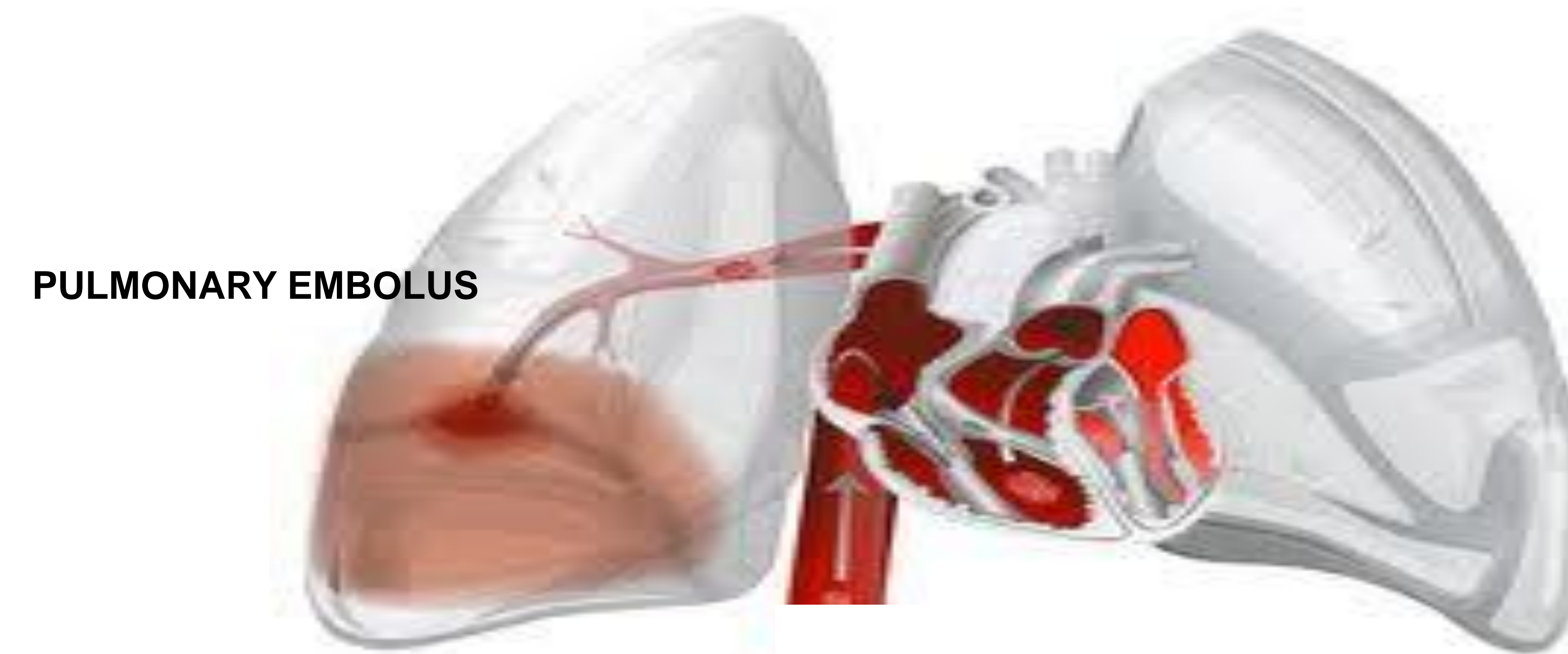
- RNs inpatient/ambulatory surgery
- Educators
- Nurse scientist
- Representing all areas of perioperative care

Preparation and Planning

- Literature review findings:
 Start SCD 12-24 hours prior to surgery
- 90% of patients admitted day of surgery
- Earliest start of SCD would be pre-op
- Contacted hospital Practice Council to review/validate
- SCD procedure

Assessment

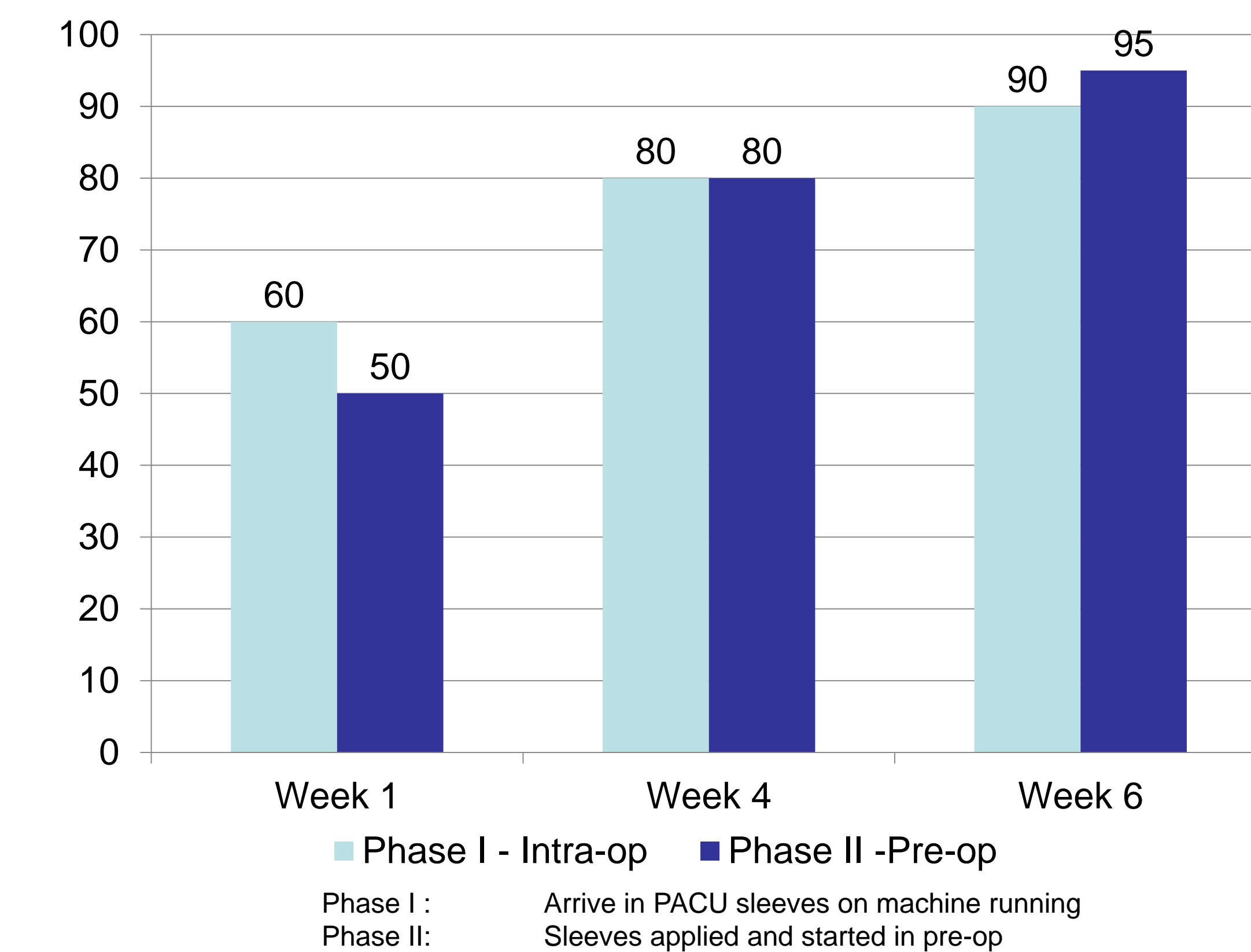
Current Practice	New Practice
SCD machine in each OR	Same
1 st case SCD started in OR	Same
Disconnect machine prior to leaving OR	Machine travels with patient to recovery destination
To follow (T/F) cases SCD start in OR	T/F cases start in pre-op
PACU restart SCD	SDC operational on arrival in PACU



Implementation

- Equipment review by company representative
- Requested small sleeves be added to inventory
- Hospital upgraded equipment
- Equipment distribution notified of work flow change
- Delivery location remained the same
- 4 delivery times established between 5 am - 7 pm
- Work flow change presented to pre-op, intra-op, & post-op staff
- Competency document developed administered to staff
- Education pamphlets developed for RNs & patients
- Outcome percentages figured according to staff perceptions

Outcomes



Challenges

- Adding a task to an already time consuming admission process was not embraced by pre-op staff
- High in-patient occupancy affected machine turn-around for cleaning and delivery
- Patient returning to operating room often returned without SDC sleeves and often without machine

Implications for Perioperative Nursing

SCDs are part of the DVT/PE prevention protocol for surgical patients and nursing is responsible to apply, start and maintain operation while the patient travels through the perioperative region of care.

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Reference: Geerts WH, et al. Prevention of Thromboembolism Venous. Chest 2008; 133(suppl 6): 3815-4535