Early Flowtron Use In The ED

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BACKGROUND

ED patients at LVH-Hazleton are held in the ED at a high rate until bed availability is achieved. Therefore, ED nurses hold a level of accountability to prevent VTE. Also, there is a lack of flowtron supplies in the ED stock room.

VTE (venous thromboembolism)

- A major threat in surgical and medical patients
- One of the most common *preventable* causes of death in hospitals
- The number of deaths can be reduced if patients in all emergency departments are assessed to identify those who are most at risk
- Use of anticoagulants *in conjunction with* sequential compression therapy (flowtrons) and patient education on methods to decrease risk can positively reduce the risks.

P I C O

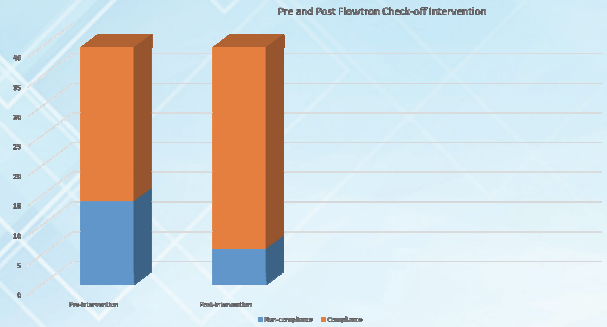
- P: How to increase flowtron use in ED bed holds
- I: Use of flowtrons on ED holds
- C: Not using flowtrons
- O: Increased compliance with flowtron use on ED bed holds

EVIDENCE

- Evidence in several studies suggests that SCD's in combination with anticoagulants reduces the risk of VTE verses when either are used alone.
- According to the 2012 ACCP guidelines, optimal use of mechanical thromboprophylaxis with IPCDs is recommended in acutely ill medical inpatients at increased risk for thrombosis, who are bleeding, or who are at high risk for major bleeding. These are consensus-based recommendations.
- It is hypothesized that IPCDs prevent DVT formation through 2 mechanisms, namely, by decreasing venous stasis and activating fibrinolysis. These effects can be achieved by mechanical compression of the foot or calf alone, or by sequential compression of either the foot and calf, or the calf and thigh.
- SCD therapy mimics muscle activity during ambulation. As the sleeves inflate and deflate, the muscle tightens and relaxes, blood is pushed upward to prevent venous stasis, and venous valves are protected against venous hypertension and continue to function normally.

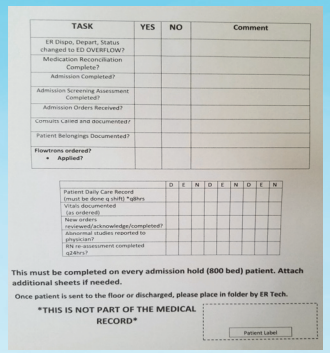
OUTCOMES

- 40 random samples prior to inclusion had a 35% compliance rate
  - 14 Patients from 40 random samples had flowtrons on as ordered
  - 26 Patients did not have flowtrons applied
- 40 random samples post-inclusion had an 85% compliance rate
  - 36 patients from 40 random samples had flowtrons on as ordered compared to only 14 pre-intervention
  - 6 patients from 40 random samples did not have flowtrons applied



IMPLEMENTATION

- Through our management team, central supply was asked to check flowtron supplies in stock room daily which was then implemented
- Checklist for bedholds : list of tasks to be completed with bed holds did not originally include "flowtrons ordered and applied." New check-off is inclusive
- Pop-up staff meetings at start of shifts to educate staff to new check-off lists



NEXT STEPS

- Consistently use bedhold check-off list with ED bedholds
- Continue to educate staff in use, risks vs. benefits

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