Abstract #29283

Gaps in Hospital VTE Prophylaxis Demonstrate Need for Technology to Promote Patient Safety in Hospitals

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Abstract Text:

Background: Venous thromboembolism(VTE) is hospital acquired in 70% of all cases, and is the most common preventable cause of hospital death. Improved awareness and use of evidence-based VTE prophylaxis in hospitals can prevent morbidity/mortality. The National Blood Clot Alliance (NBCA) conducted a survey to document the importance of gaps in practice of evidence-based prophylaxis reported among three patient groups at increased risk for VTE.

Objectives: Demonstrate the need for expanded use of technologies that would promote improved VTE prophylaxis and patient safety in hospitals through physician awareness.

Methods: A survey was conducted among three at-risk patient populations to measure VTE prophylaxis experiences reported. These patients, screened from online research panels, were representative of target at-risk patient groups, including: 500 patients hospitalized >3 days, mean age 52.5 (64% female), 500 patients diagnosed with cancer, mean age 57.8 (64% female) (41% required hospitalization for treatment), and 250 patients who had undergone a partial and/or full hip/knee replacement(THA/TKA), mean age 53.6 (55% female). Criteria for patient group selection had to have been met within 12 months of survey.

Results: When surveyed, all patient groups reported suboptimal prophylaxis experiences: The use of blood thinning pills was reported by 28% of patients hospitalized for >3 days, 21% of cancer patients, and 58% of THA/TKA patients. Similarly, the use of blood thinners injected under the skin was reported by 29% of patients hospitalized for >3 days, 16% of cancer patients, and 46% of THA/TKA patients. The use of compression hose and mechanical compression devices among the at-risk patients surveyed was: patients hospitalized for >3 days 39% compression hose, 37% compression devices, cancer patients 35% compression hose, 31% compression devices, and THA/TKA patients compression hose 74%, compression devices 57%. Aspirin use was reported by 42% of THA/TKA patients, 37% of patients hospitalized for >3 days, and 28% of oncology patients.

Conclusion and implications for public health practice: The application of existing evidencebased guidelines for DVT/PE prophylaxis was suboptimal among all at-risk patient populations surveyed. Expanded use of technologies (e.g. EMR integrated with patient order-sets) to improve physician education and increase adherence could improve patient safety, reducing VTE morbidity/mortality. Title: Gaps in Hospital VTE Prophylaxis Demonstrate Need for Technology to Promote Patient Safety in Hospitals Submitter's E-mail Address: abrownstein@stoptheclot.org **Preferred Presentation Format:** Oral First author **Presenting Author** Alan Brownstein, MPH Chief Executive Officer National Blood Clot Alliance 120 White Plains Road, Suite 100 Tarrytown, NY 10591 USA **Phone Number:** 914.220.5040 Email: abrownstein@stoptheclot.org Alternate Email: idelvalle@stoptheclot.org Second author Greg Maynard, MD, MSc, SFHM National Blood Clot Alliance 120 White Plains Road Suite 100 Tarrytown, NY 10591 USA **Phone Number:** 914-220-5040 Email: gmaynard@ucsd.edu Alternate Email: idelvalle@stoptheclot.org Third author Richard Friedman, MD, FRCSC National Blood Clot Alliance 120 White Plains Road Suite 100 Tarrytown, NY 10591 USA **Phone Number:** 914-220-5040 Email: rjfriedman@mybones.com Alternate Email: idelvalle@stoptheclot.org Fourth author Elizabeth Varga, MS, CGC National Blood Clot Alliance 120 White Plains Road Suite 100 Tarrytown, NY 10591 USA

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