

Gaps in the practice of evidence-based prophylaxis reported among three patient groups at increased risk for deep vein thrombosis and pulmonary embolism demonstrate the need for expanded use of technologies that would promote physician education and patient safety in hospitals

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Background

- Deep vein thrombosis (DVT) and pulmonary embolism (PE) impose a major public health burden in the U.S., affecting up to 600,000 individuals and accounting for ~100,000 deaths each year, according to the *Surgeon General's Call to Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism*.¹
- Improved awareness and clinical application of evidence-based interventions, such as the top-ranked patient safety strategy of DVT/PE prophylaxis, can prevent morbidity and mortality associated with DVT/PE, according to the Surgeon General's *Call to Action*.
- DVT/PE is hospital acquired in 70% of all cases, and is the most common preventable cause of hospital death.²

Objectives

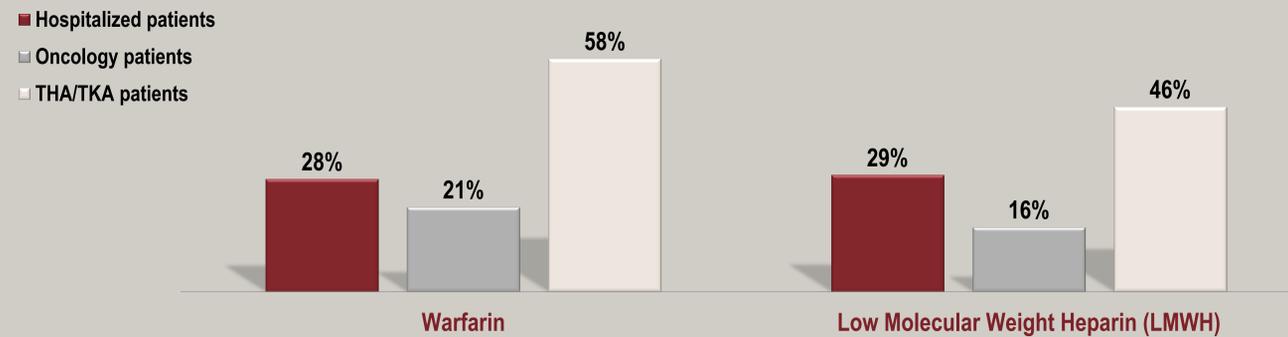
- The National Blood Clot Alliance (NBCA), a patient-led advocacy organization dedicated to promoting patient and public awareness about the signs and symptoms of DVT/PE, implemented this survey to identify gaps in evidence-based DVT/PE prophylaxis as reported by three at-risk patient populations.

Methods

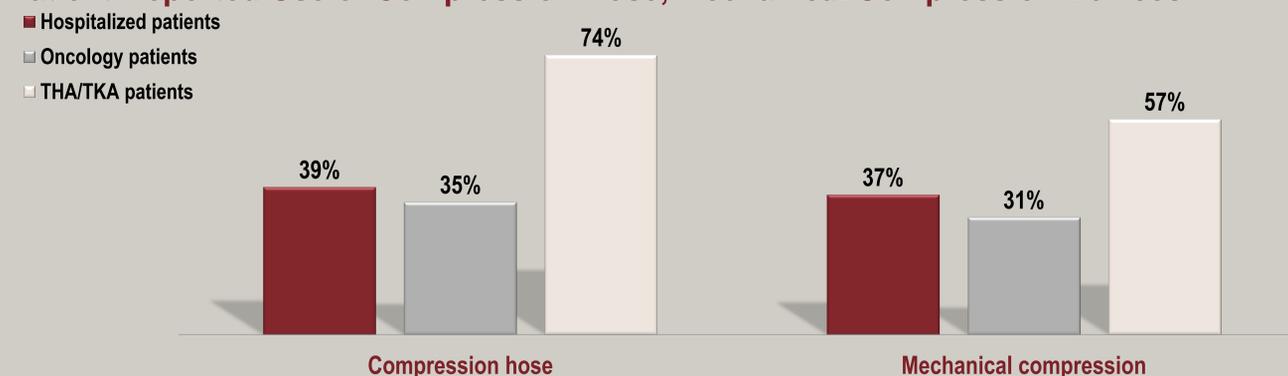
- A survey was conducted by USA/Direct, Inc., among a total of 1,250 U.S. patients, screened from an online or Internet research panel, at risk for DVT/PE, including:
 - 500 patients hospitalized for ≥3 days; mean age 53 years (range 20-80+); 64% female
 - 500 patients diagnosed with cancer or recurrence of cancer, mean age 58 years (range 20-80+); 64% female
 - 250 total hip arthroplasty (THA) or total knee arthroplasty (TKA) patients, mean age 54 years (range 20 to 80+); 55% female

Results

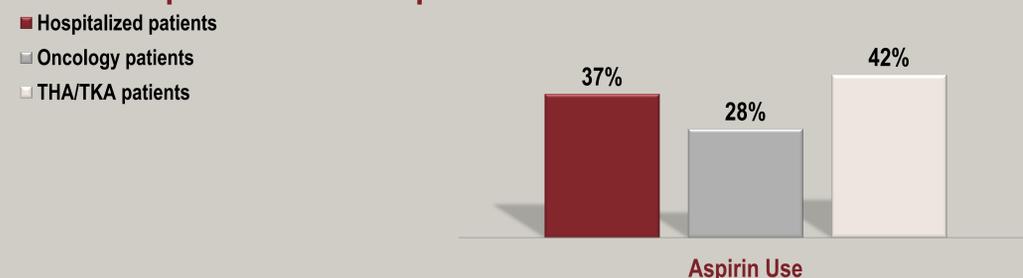
Patient-Reported Anticoagulant Use



Patient-Reported Use of Compression Hose, Mechanical Compression Devices



Patient-Reported Use of Aspirin



Conclusion

- The application of existing evidence-based guidelines for DVT/PE prophylaxis was suboptimal among all at-risk patient populations surveyed.
 - Less than 1/3 of hospitalized patients reported use of warfarin or LMWH to prevent DVT/PE
 - Oncology patients report very low use of warfarin (21%) and LMWH (16%)
 - Warfarin and LMWH use reported by THA/TKA patients, while greater than reported by other risk groups studied, remains suboptimal
- Compression hose and compression devices are underutilized, particularly among hospitalized and oncology patients.
- Aspirin use is reported more frequently than warfarin and LMWH use by hospitalized and oncology patients surveyed.

Future Directions

- Effective interventions are needed to expand the use of technologies, (e.g., medical records integrated with patient order-sets, computerized reminders, and correction alerts) directed at improved physician education and increased adherence to optimal care could improve patient safety, substantially reducing DVT/PE morbidity and mortality.³

References

- The Surgeon General's Call To Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism, 2008*
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- Making Health Care Safer: A Critical Analysis of Patient Safety Practices; Shojanian (2001)*
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The NBCA DVT/PE Survey Was Made Possible by a Grant from Janssen Pharmaceuticals, Inc.