

Barriers in VTE Prevention: Impact on Therapeutic Choice and Duration

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Background

- Deep vein thrombosis (DVT) and pulmonary embolism (PE) impose a major public health burden in the United States (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* (2008).¹
- Patients who undergo hip and/or knee replacement – total hip arthroplasty (THA) or total knee arthroplasty (TKA) – are at increased risk of venous thromboembolism (VTE).¹

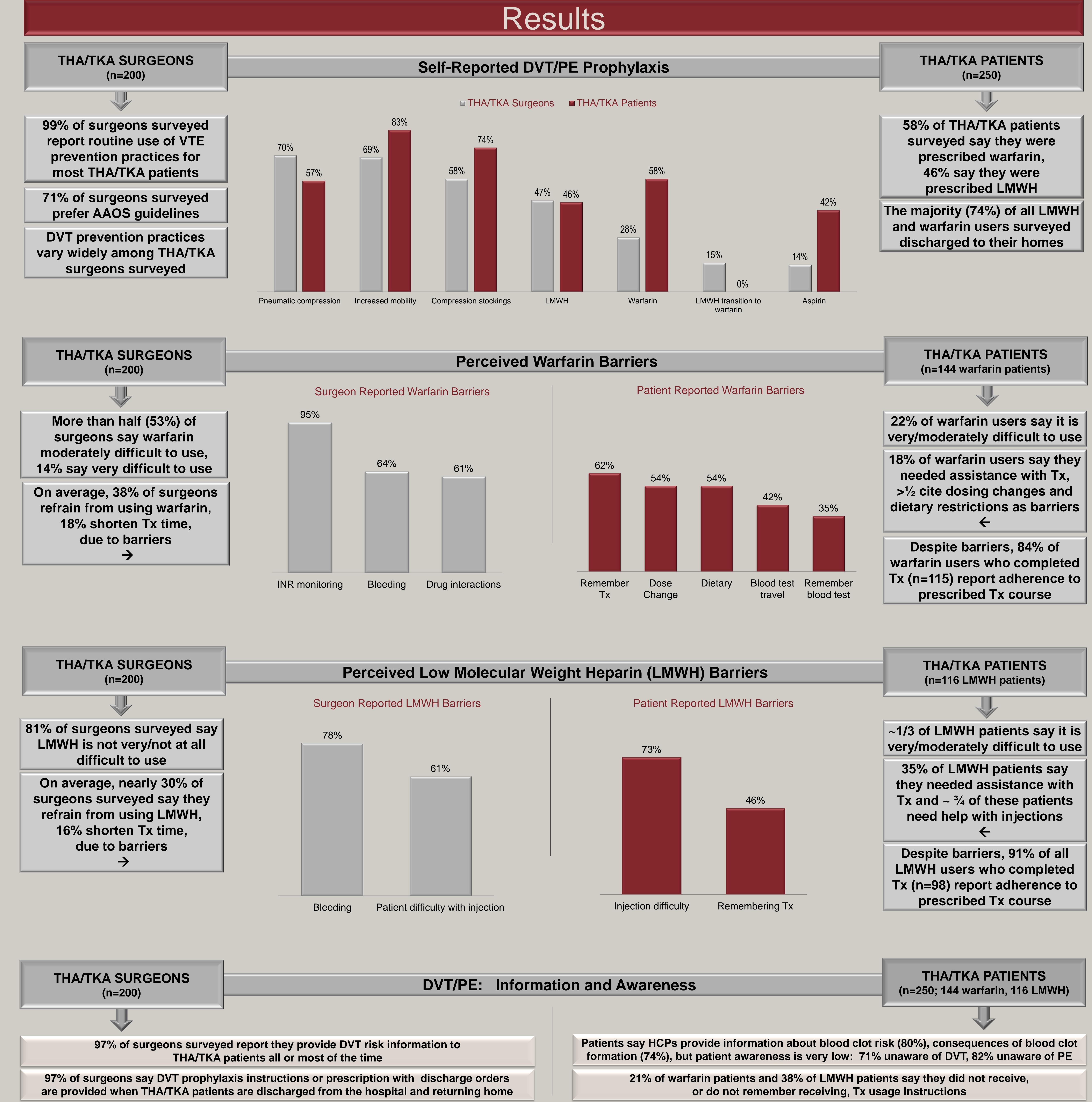
Objectives

- 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 and PE, implemented this survey to:
 - Document self-reported practices in VTE prevention among THA/TKA surgeons
 - Measure THA/TKA surgeon perceptions of anticoagulant Tx barriers
 - Measure THA/TKA patient reports of DVT/PE prophylaxis experiences and patient perceptions about anticoagulation Tx barriers
 - Benchmark DVT/PE awareness among THA/TKA patients

Methods

- An online or Internet survey was conducted by the national survey firm USA/Direct, Inc., among a national cross-section of 200 orthopedic surgeons in the U.S. who performed THA/TKA between November 2008 and November 2009. Mean procedure volume per surgeon: 76 annually.
- For comparison, a survey of DVT/PE awareness and prophylaxis experiences was conducted by USA/Direct among a sample of 250 THA/TKA patients, ≥ 20 years (20 to 80+ age range; mean age 54; 55% female), screened from an online or Internet research panel. Average post-op time at time of survey: 7 months.

Results



Conclusion

- VTE prevention practices vary widely in THA/TKA.
- Perceived barriers impact use of anticoagulation Tx in VTE prevention among THA/TKA surgeons:
 - On average, 38% of surgeons surveyed refrain from prescribing warfarin, nearly 30% refrain from prescribing LMWH
 - On average, 18% of surgeons surveyed shorten warfarin Tx time, 16% shorten LMWH Tx time
- Despite perceived therapeutic obstacles and potentially suboptimal usage instruction, most THA/TKA patients surveyed report that they adhered to anticoagulation Tx.
- THA/TKA surgeons provide DVT/PE information to at-risk THA/TKA patients, but patient awareness of DVT/PE measured by this survey is low.

Future Directions

- Comparative effectiveness research and/or a CDC/NIH Consensus Conference are needed to address treatment barriers, gain therapeutic consensus, optimize VTE prophylaxis in THA/TKA.
- Research into new anticoagulant therapies should address prophylaxis barriers.
- Information gaps relative to DVT/PE and anticoagulation use should be filled by providing HCPs with targeted patient education materials to help ensure optimal adherence/patient safety relative to DVT/PE.

References

- www.surgeongeneral.gov/topics/deepvein/calltoaction/call-to-action-on-dvt-2008.pdf
- Surgeon General's Call to Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism, 2008**
- The Surgeon General's Call to Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism, 2008
- Ortho-McNeil-Janssen Pharmaceuticals, Inc.**
- U.S. Department of Health and Human Services