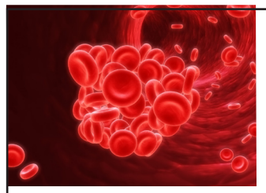

The Business Case for VTE Prophylaxis

Preventing Blood Clots in Hospitalized Patients

Strategic Imperative

VTE prophylaxis is recognized by AHRQ as #1 out of 73 recommended Patient Safety Practices based on their impact and effectiveness.[2]

In today's environment, leaders must increasingly cope with outside social and economic pressures, including:

- **Public reporting on *Hospital Compare*.**
- **Accountability and responsibility to keep patients safe (IOM report[3]).**
- **Increasing visibility of safety concerns in the media.**
- **Public expectation that you will keep them safe, and growing perception that hospitals are unsafe.**

Value Proposition

A hospital can't afford to not implement a VTE prophylaxis protocol for its patients.

- *Prophylaxis reduces the incidence of VTE by 50%–65%.*[1]
- *Estimates of incremental cost related to increased length of stay and treatment of preventable VTE are $10,000 per deep vein thrombosis (DVT) and $20,000 per pulmonary embolism (PE).*[1]
  - **For a 300-bed hospital with a 40% prophylaxis rate, this translates to $1.17 million per year in additional costs.**
- **As of 2008, there are two VTE-related "Never Events" (hospital-acquired conditions for which Medicare will not pay the additional costs of treatment) in place: DVT or PE related to total knee or hip replacement.**
- **Having a VTE prophylaxis protocol in place:**
  - **Reduces hospital and governing board liability exposure.**
  - **Aligns with Centers for Medicare & Medicaid Services (CMS), National Quality Forum (NQF), Agency for Healthcare Research and Quality (AHRQ), and The Joint Commission priorities.**
  - **Protects patients, reduces costs, and improves outcomes on public performance measures.**

Legal Considerations

Why doesn't the hospital have a VTE prophylaxis protocol in place for its patients?

- **Who is ultimately accountable for whether the hospital has a VTE prophylaxis protocol in place for its patients?**
- **What is the hospital's liability exposure if a patient acquires a VTE during hospitalization:**
  - **If there is no prophylaxis protocol in place?**
  - **If there is a prophylaxis protocol in place and it was followed?**
  - **If there is a prophylaxis protocol in place and it was not followed?**

Likelihood

A large proportion of hospitalized patients are at risk for VTE, but there is a low rate of prophylaxis.[4]

VTE is the #1 cause of preventable death among hospitalized patients. A 300-bed hospital with a 40% VTE prophylaxis rate would have 5 potentially preventable 90-day pulmonary emboli (PE) mortalities.

- **The DVT Free registry[4] found one VTE per hospital bed per annum; about half of those were hospital-acquired.**
- **70% of VTEs are deep vein thrombosis (DVT) and 30% are pulmonary emboli (PE).**
- **Approximately 75% of fatal PEs that are diagnosed at autopsy are in medical patients.**

Prophylaxis

With VTE prevention, there is a disconnect between evidence and execution. One large epidemiological study found that 71% of patients diagnosed with VTE had received no prophylaxis within the past 30 days.[5]

Every patient admitted to the hospital should be considered to be at risk for VTE, and preventive measures should be considered the standard of care.

CMS VTE Measures

VTE reduction is a priority of the Centers for Medicare & Medicaid Services (CMS) and The Joint Commission (TJC).

There are currently two publicly reported Surgical Care Improvement Project (SCIP) measures included in the CMS Reporting of Hospital Quality Data for Annual Payment Update (RHQDAPU) program:

- **SCIP-VTE-1** Surgery patients with recommended venous thromboembolism (VTE) prophylaxis ordered anytime from hospital arrival to 24 hours after Anesthesia End Time.
- **SCIP-VTE-2** Surgery patients who received appropriate venous thromboembolism (VTE) prophylaxis within 24 hours prior to Anesthesia Start Time to 24 hours after Anesthesia End Time.

TJC VTE Measures

The following NQF-endorsed TJC VTE measures have been approved as part of a core measure set for use in TJC's ORYX program and may be included as components of the CMS RHQDAPU program in 2012:

- **VTE-1** Proportion of patients who received VTE prophylaxis or have documentation why no prophylaxis was given within the first 24 hours of hospitalization hospital days (Med/Surg patients who have a 48h stay)
- **VTE-2** Proportion of patients who received VTE prophylaxis or have documentation why no prophylaxis was given within the first two hospital days (ICU patients)
- **VTE-3** Patients treated with parenteral anticoagulant and warfarin who have at least 5 days of overlap therapy with an INR > 2.0 prior to discontinuation of parenteral treatment (or who are discharged before 5 days on overlap therapy)
- **VTE-4** Proportion of patients treated with UFH who have dose managed by nomogram/protocol that includes explicit platelet count monitoring protocols (baseline, day after initiation, and at least three times per week for up to 14 days)
- **VTE-5** Proportion of patients discharged from the hospital on warfarin with documentation of discharge instructions addressing compliance, dietary restrictions, follow-up monitoring, and adverse drug reactions/interactions
- **VTE-6** Proportion of patients with hospital-acquired VTE who received no prophylaxis prior to the event

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3. Institute of Medicine. (2000). *To Err is Human: Building a Safer Health System.* National Academy Press, Washington, D.C. Available online at www.nap.edu/openbook.php?record_id=9728&page=R19
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Resources

- **American College of Chest Physicians: www.chestnet.org**
- **American Medical Directors Association—DVT Clinical Corners: www.amda.com/tools/clinical/dvt.cfm**
- **American Venous Forum: www.venous-info.com**
- **Case Management Adherence Guidelines for VTE: www.cmsa.org/portals/0/pdf/CMAG_DVT.pdf**
- **Coalition to Prevent DVT: www.preventDVT.org**
- **Consumers Advancing Patient Safety: www.patientsafety.org**
- **Society of Hospital Medicine—VTE Prevention Collaborative: www.hospitalmedicine.org**
- **Translating VTE Guidelines Into Practice: www.hsag.com/services/special/vte.aspx**
- **Vascular Disease Foundation: www.vdf.org**
- **Venous Resource Center: www.venousdisease.com**

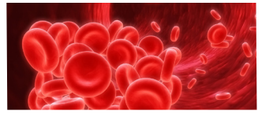
The Business Case for VTE Prophylaxis

Preventing Blood Clots in Hospitalized Patients*

Every hospitalized patient is considered at risk for developing blood clots, which are *THE MOST COMMON PREVENTABLE CAUSE OF DEATH* among hospitalized patients.

***Post-thrombotic syndrome*, a complication that occurs in 40%–80% of patients who develop blood clots, may result in permanent disability.**

* ***Definitions of Deep Vein Thrombosis (DVT), Pulmonary Embolism (PE), and Venous Thromboembolism (VTE)*:** DVT refers to the formation of one or more blood clots in one of the body's large veins, most commonly in the lower limbs (e.g., lower leg or calf). The most serious complication that can arise from DVT is a PE, which occurs when a portion of the blood clot breaks loose and travels in the bloodstream—first to the heart and then to the lungs, where it can partially or completely block a pulmonary artery or one of its branches. DVT and PE are collectively referred to as VTE.



Health Services Advisory Group, Inc.

Translating VTE Guidelines Into Practice

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