

## **VTE PREVENTION:** **NATF SUMMATION**

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## **VTE PREVENTION: NEW** **FRONTIERS AND MANDATES**

- Government regulators, insurers, hospital quality control staff, peer reviewers—all promote the concept and implementation of VTE prophylaxis.
- Tools such as electronic alerts and peer-to-peer alerts can remind practitioners when their high-risk patients are not protected from VTE.

## **VTE PREVENTION: NEW FRONTIERS AND MANDATES**

- VTE prophylaxis can lead to near-eradication of DVT and PE.
- This goal requires leadership by the cardiology community, which has experience and knowledge in “Getting with the Guidelines” and in communicating with patients and other healthcare professionals.

## **VTE PREVENTION: TAKE-HOME MESSAGES**

- VTE prophylaxis remains underutilized, especially in Medical Service patients.
- LMWH in low, fixed dose is effective and safe.
- Risk factor modification will decrease the incidence of VTE as well as coronary heart disease.

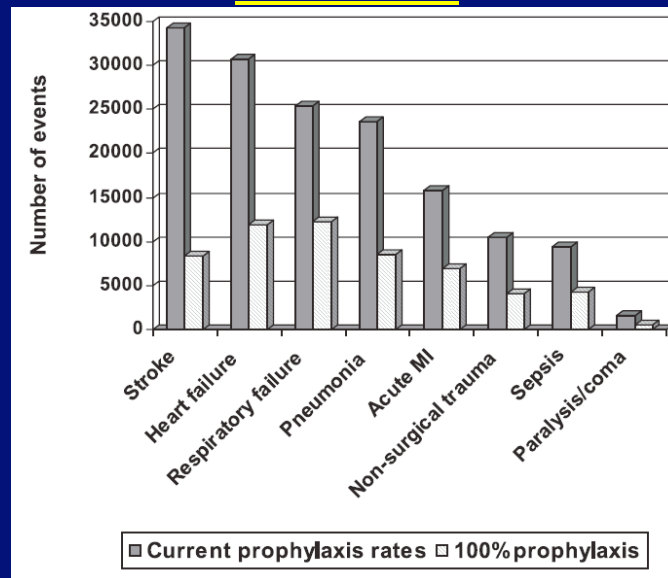
# THE PROMISE OF PROPHYLAXIS: PATH TO VTE ERADICATION

## VITAE I

VITAE I is a modeling project that uses a Federal database to focus on Medical Patients with VTE. We estimated that 2 of every 100 hospitalized Medical Service patients suffer a VTE-related event. With universal in-hospital prophylaxis, the VTE rate would be cut in half.

(Thromb Haemost 2009; 102: 505-510)

## VITAE I



(Thromb Haemost 2009; 102: 505-510)

## VITAE II

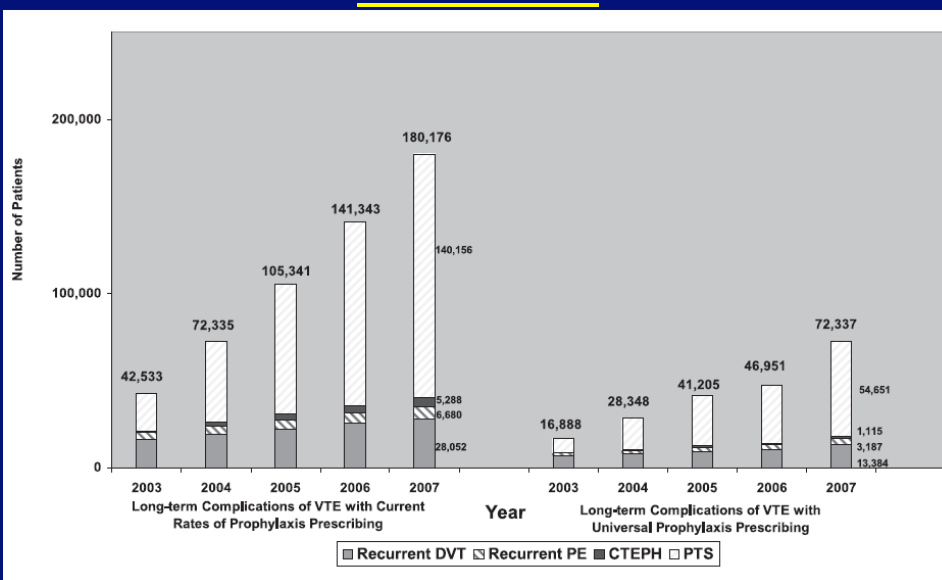
- Considers 5-year adverse impact and consequences of 1 year's acute VTE cases on Medical Services.
- Long-term complications included postthrombotic syndrome (140,000), VTE-related death (50,000), recurrent DVT (28,000), recurrent PE (7,000), and chronic thromboembolic pulmonary hypertension (5,000).

(Thromb Haemost 2009; 102: 688-693)

## VITAE II

- In VITAE II, the 5-year aftermath of initial VTE is modeled among these same Medical Patients who were initially stricken.
- If universal prophylaxis had been utilized, the long-term VTE complication rate would have been reduced by 60%.  
(Thromb Haemost 2009; 102: 688-693)

## VITAE II



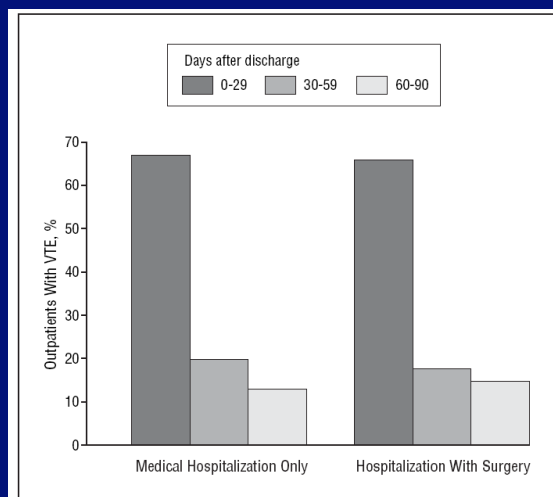
(Thromb Haemost 2009; 102: 688-693)

## OUTPATIENT AND INPATIENT VTE ARE LINKED

- 74% of VTEs present in outpatients.
- 42% of outpatient VTE patients have had recent surgery or hospitalization.
- Only 40% had received VTE prophylaxis.

(Spencer FA. Arch Intern Med 2007; 167: 1471-1475)

## VTE IN THE COMMUNITY



**Figure.** Timing of diagnosis of venous thromboembolism (VTE) relative to the preceding hospital discharge among individuals who developed VTE as an outpatient.

(Arch Intern Med 2007; 167: 1471-1475)

## **VTE IN THE COMMUNITY**

- Current practice is to administer VTE prophylaxis during hospitalization.
- Upon discharge, it is assumed that the risk of VTE abates, and consequently, prophylaxis is discontinued.
- In reality, the risk persists as many patients continue to have limited mobility as well as other ongoing risk factors for VTE.

## **CONCLUSIONS**

1. We have the tools to prevent most episodes of PE and DVT.
3. The path to near-eradication of VTE requires “buy-in” and leadership from the cardiovascular community.
4. Medical Service patients provide an excellent model demonstrating convergence of expertise in VTE and General Internal Medicine.

## **CONCLUSIONS**

4. With improved prophylaxis, the incidence of pulmonary hypertension and CTEPH will decrease.
5. Vigilance toward VTE prophylaxis, and consideration of extended prophylaxis after hospitalization, will be required at the time of hospital discharge as well as during the in-hospital stay.