

# Beth Israel Deaconess Hospital-Milton

## Preventing Hospital Acquired VTE in the Medical/Surgical Setting (VTE-1)

### The Problem

Beth Israel Deaconess Hospital-Milton identified a quality gap in its performance relative to the implementation and documentation of evidence based practices shown to mitigate patient harm related to Venous Thromboembolism (VTE) in the Medical/Surgical setting. Standards of performance are defined in the Centers for Medicare & Medicaid Service (CMS) VTE-1 measure set.

Interventions associated with this measure are critical drivers in the prevention of VTE, including deep vein thrombosis and pulmonary embolism. In a 2006 report, The National Quality Forum (NQF) identified VTE as the most common cause of preventable hospital death in the United States. The NQF officially endorsed the VTE measure set in 2008, with The Joint Commission (TJC) adopting the measure set in 2009.

Beginning in January 2013, CMS required participating hospitals to submit data on VTE-1 performance. Performance is tied to external reporting, a hospital's Leapfrog Safety Score™ and organizational reputation. VTE event outcomes related to VTE-1 performance are included in CMS' Hospital Acquired Condition (HAC) program, with unfavorable performance having the potential to reduce hospital reimbursement. In addition to CMS, private payers such as Blue Cross Blue Shield incorporated VTE performance into its Hospital Performance Improvement Program (HPIP), which required hospitals to attain a minimum performance threshold to qualify for the maximum related incentive payment.

**VTE-1 Measure Description:** This measure assesses the number of patients who received VTE prophylaxis or have documentation why no of VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.

An FY14 analysis of baseline VTE-1 performance for January-September 2013 identified a suboptimal performance of 78.6% (baseline).

### Aim/Goal

Improve performance relative to VTE-1 by developing interventions and implementing VTE prevention best practices that achieve and sustain a mean VTE-1 measure performance of ≥86% in FY14 and ≥96% in FY15.

### The Team

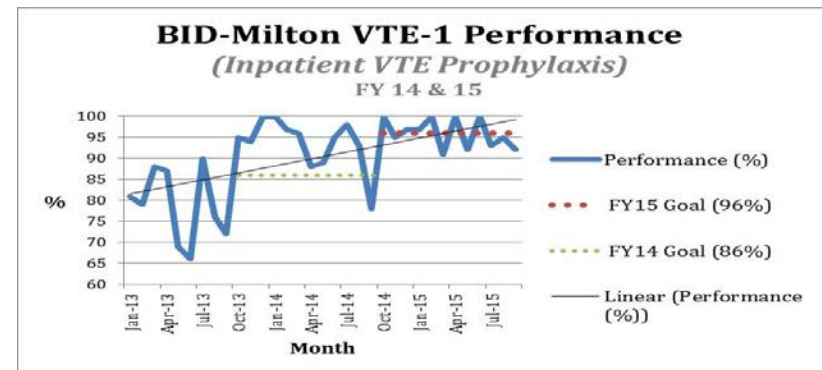
- Dr. Ashley Yeats, Vice President of Healthcare Quality/CMO
- Alex Campbell, Director, Healthcare Quality & Patient Safety
- Dr. Daniel Siao, Medical Director, Hospitalist Medicine
- Rachel Kleiman-Wexler, Director, Pharmacy Services
- Jessica Crowley, IT Systems Analyst
- Tracy Dickerson, Lead Surgical Physician Assistant
- Lynn Cronin, Vice President of Nursing/CNO
- Grace Phillips, Quality & Safety Specialist

### The Interventions

- Extensive education of Medical Staff in FY14
- Re-education of Hospitalists after major program transition in August 2014
- Identification of Hospitalist Service Medical Director and Lead Surgical PA as VTE champions in Fall 2014
- VigiLanz data mining software leveraged in April 2015 by Pharmacy Director to identify inpatients <24 hours without documentation by nursing of TED sequential compressive stockings – outliers reviewed and addressed at morning interdisciplinary rounds
- Core Measure 'Cheat Sheet' created for Medical Staff by Director of HCQ & PS in April 2015
- Medical VTE risk assessment with auto-calculation of risk score and reflex VTE prophylaxis orders created in CPOE and implemented as an order set linked to admission orders in August 2015

### Progress to Date

- **FY14 Goal of 86% exceeded: 93.3%**
- **FY15 Goal of 96% exceeded: 96.3%**



### Lessons Learned

- Performance vulnerable to staffing changes and ongoing education
- Pharmacy does not participate in Interdisciplinary Rounds on weekends, leaving process vulnerable
- Providers have not universally adopted order set, resulting in documentation 'misses'
- Lack of 'documentation in the negative,' resulting in outliers – inferred contraindications insufficient, per abstraction rules
- Discrete field documentation of application of SCDs/TEDs by Nursing is not a mandatory field, resulting in documentation 'misses' and labor intensive abstraction of paper record and narrative notes for evidence of application of mechanical VTE prophylaxis

### Next Steps

- Create mandatory field in nursing documentation for application of SCDs/TEDs & educate staff
- Reset target to 98% in FY16 to align with revised FY17 BCBS HPIP performance threshold