DVT PREVENTION: NURSES ASSESS FOR RISK STRATIFICATION

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Purpose: The aim of this project was to determine if the use of a nurse administered risk assessment tool would increase the use of DVT prophylaxis as compared to the current practice in an adult population of medical-surgical patients in an acute care setting.

Background and evidence review: Hospital acquired DVT’s (HAD’s), are preventable and contribute to more than 100,000 deaths a year (U.S. Department of Health and Human Services 2008). Many insurance companies and the Centers for Medicare and Medicaid Services will no longer pay for the cost of treating preventable HAD’s. The Agency for Healthcare Research and Quality’s (AHRQ) recommendation to reduce or eliminate risk and/or error is to ‘layer’ or have additional interventions in place to protect patients from acquiring DVT’s. As a result of this performance improvement project, the evidence will show that RNs are one of those layers.

Methods: An evidence-based nursing DVT risk assessment tool that was developed by nurses at JFK Medical Center in Atlantis, Florida was introduced to the Transitional Care/Neuro Unit at Santa Clara Valley Medical Center and was to be completed in tandem with the RN’s current initial admission assessment. The risk assessment tool identified level of risk. Department buy-in was critical to the success of the project and was supported by management. Unit champions were recruited. Baseline data was collected on 50 randomly selected charts and audited for the use of DVT prophylaxis that included ambulation, mechanical device use and education. Staff was educated on DVT’s and DVT prevention. Posters were prepared as part of the education including the implementation of the DVT risk assessment tool. Unit preparation, email and one-on-one education were essential forms of communication used to sustain the project. Implementation of the tool was from June 2009 through August 2009, with a total of 63 fully completed tools collected.

Results: When nursing used the DVT risk assessment tool, 29% of the patients were identified as having inadequate DVT prophylaxis ordered for their current risk level. Additional findings while the risk assessment tool was in use included: a 10% increase in the ordering of prophylaxis, a 17% increase in ambulation of the patients and an increase of 57% use of mechanical prophylaxis. Patient education; it was found that 100% of the time it was not given, both pre-use of the tool and during the use of the tool. A total of 9 patients with orders for DVT mechanical prophylaxis never had their orders initiated and 2 nurses documented that their patients did not have orders, were at risk and no documentation that he/she notified the physician. All actions necessary for MD order had immediate remediation and in-services were conducted the same day as the discovery to the nursing staff.

Conclusion: An increase in the use of DVT prophylaxis occurred when the nursing staff used the DVT risk assessment tool. Due to the findings, the use of a risk assessment tool is recommended to be included in the RN’s admission assessment. Challenges occurred during the
active phase of the project. These included missing risk assessment tools from the admission packets and at one point a complete halt to use of the tool by staff. Dissemination of the findings will occur via several forms of communication to all members of the unit. Continuation of the project will occur and will include; process improvement and further evaluation of patient education. Future studies should be done to determine if the layering of interventions prevents the development of DVT’s in the hospitalized patient as evidenced by the patient’s discharge outcomes.

**Key words:** DVT, deep vein thrombosis, evidence-based practice, prevention validated, risk assessment tool, guidelines

**References**

