Tracking Outcomes – Hospital Acquired / Associated VTE

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Administrative data are imperfect for tracking outcomes, but coding changes in October 2009 improved administrative coding, and this is the most practical method of tracking the outcomes of VTE related to hospitalization.

After some discussion, we favor the use of the term Hospital Associated VTE, vs the term Hospital Acquired VTE. This semantic nuance can be argued, but Hospital Associated VTE seems to be a more general term acknowledging that VTE are often due to underlying illnesses rather than specific events that occur during hospital stay.

Hospital Associated VTE criteria: the event should not have been symptomatic or likely present at the time of admission. Hence the event should be coded with the "Present on Admission" (POA) indictor = N. Unknown (U) codes are also to be considered Hospital Associated. See also discussion below re: Patients being **re-**admitted for new diagnosis of VTE.

415.11 iatrogenic PE and infarction
415.19 other PE and infarction)
415.13 Saddle Pulmonary embolus (effective 10/1/2011)
451.11 Phlebitis and thrombophlebitis of deep vessels of lower ext Femoral Vein (Deep) (Superficial)
451.19 Phlebitis and thrombophlebitis of deep vessel of lower extremities Other
451.81 Phlebitis and thrombophlebitis of other sites= Iliac Vein
453.40 Acute venous embolism and thrombosis of unspecified deep vessels of lower extremity
453.41 Acute venous embolism and thrombosis of deep vessels of proximal lower extremity
453.42 Acute venous embolism and thrombosis of deep vessels of distal lower extremity
453.89 Acute venous embolism and thrombosis of other specified veins (most nonspecific code)

Denominator= Adult inpatient discharges for specified time frame (or patient days)

Numerator = Include all cases with specified Lower VTE or PE codes with POA = N, U
Point of discussion: Many VTE become clinically apparent in the time period after hospital discharge. These VTE may also be considered hospital associated, although some of the VTE may be more related to underlying risk factors that continue post discharge, and may or may not have been present in subclinical form prior to discharge. The VTE risk slowly returns to baseline risk post discharge. We would at least consider including in the numerator, all cases discharged from the index hospital and that are readmitted to a hospital within 30 days with a new acute LE VTE or PE (usually principal diagnosis, coded with POA = Y, W) or who are seen in an Emergency Department < 30 days after discharge from the index hospital and have a new principal diagnosis of LE DVT (98% of PEs will be admitted and not be entered in that hospital's ED data base). Cases transferred directly to a rehabilitation hospital and who are coded as having an acute DVT or PE that is not present on admission (POA=N, U) < 30 days after the index hospital stay should also be classified as having a hospital associated VTE event. If the VTE event is coded as POA=Y at the time of the contiguous rehabilitation or other acute care hospitalization, interpretation becomes difficult. These VTE events may have been not coded during the index admission, or picked up by a screening US at the time of the rehabilitation/hospital stay. We would tend to count these cases as hospital-associated VTE events but there may be some who disagree. Hospitals are likely to find only those cases that are readmitted to their own hospital with VTE < 30 days, but if more comprehensive "linked" data is available from a state data base or medicare data base, these admissions should also count as reflecting a hospital associated VTE event. The 30 days time period is a reasonable, albeit arbitrary cut-off, but two weeks sounds too short and 60 days too long.. If someone is readmitted to a hospital for a different reason

do not develop VTE, they should be censored and not counted even if they subsequently are diagnosed with VTE that is still within 30 days of the index admission Also, this definition is institution-centric rather than a public health approach, but we think hospitals don't want to take responsibility for VTE events that may have been associated with another hospital stay.

We advocate Tracking UE DVT separately in the same fashion.
Upper Extremity DVT = **453.82 453.83 453.84 453.85 453.86 453.87 and could use 451.83 (thrombophlebitis of deep veins of the UE)**
UE DVTs are significant sources of morbidity, and should be tracked as well. However, given that upper extremity events are predominately catheter related, and given that the evidence for efficacy of chemical prophylaxis is unconvincing for UE DVT, we would track these separately.

When feasible to do so, we recommend validation of coding with manual chart review on a sampling of patients, and excluding cases diagnosed by screening US.

Potentially Preventable Hospital Associated VTE: Situations in which recommended thromboprophylaxis was not in place prior to VTE diagnosis. This is in contrast to the definition for TJC Measure #6, which states that a HA VTE is not preventable if the patient was ever on ANY prophylaxis at ANY time during their stay. For this measure, VTE prophylaxis consistent with your protocol should be in place in the days preceding VTE diagnosis.