

# Deep Vein Thrombosis: An Evidence Based Guide to Patient Education

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## Background

- Deep vein thrombosis is the most common type of venous thrombosis, although it can form anywhere in the venous system
- An embolus occurs if a part or all of a blood clot in the vein breaks off from the site where it is formed.
- A pulmonary embolism occurs when a clot lodges in the lungs - over 50,000 deaths occur per year in the United States due to this condition .
- According to other research “patients can easily overlook or forget symptoms of a venous disorder due to gradual onset or intermittent nature”.
- By educating employees and improving DVT patient education practices, the incidences of DVT’s can be reduced along with overall cost savings for patients, and reduce morbidity and mortality.
- The overall aim of patient education is to improve individual health as well as enhance the performance of the healthcare industry as a whole.

## Practice Change

Expand upon DVT teaching with patients and family at the bedside.

## Measures and Results

### Eastern Maine Medical Center

Results (n=54)

	Yes	No
Do you ask your patients if they know what a deep vein thrombosis is?	52%	48%
Do you ask your patients if they know what their risk factors are?	52%	48%
Do you ask your patients if they know any warning signs of DVTs?	52%	48%
Do you ask your patients to name a DVT prevention strategy?	22%	78%
Do you ask your patients if they know why they are at a higher risk for developing DVTs during their hospital stay?	81%	19%
Do you ask your patients if they worry about DVT prevention when not in the hospital?	18%	82%
Do you ask your patients if their loved ones have suffered from DVTs?	18%	82%

The infographic is divided into two main sections. The top section, 'Venous Thromboembolism (VTE) The Facts!', defines DVT, PE, and VTE, lists symptoms, and categorizes risk factors into Strong Risk (Extended hospital stay, Surgery, Prolonged bed rest), Moderate Risk (60+, Personal and family history, Cancer/chemotherapy, Trauma, Estrogen-based medication), and Other Factors (Obesity, Pregnancy or recent birth, Smoking, Alcohol consumption). It states that 100,000 people die each year from blood clots. The bottom section, 'Stop the Clot, Spread the Word Campaign', provides the website www.stoptheclot.org/spreadtheword, lists prevention strategies (Anti-clotting medications, Compression Stockings, Sequential Device, Walking), treatment (Anti-coagulants, Mechanical devices, Thrombolytic therapy), and testing methods (D-dimer levels in blood, Ultrasound of arms and legs, CAT scan of chest with dye).

Post-Survey

	Strongly Agree
DVT prevention begins with patient education.	100%
Patient education will increase compliance with DVT prevention strategies.	100%
DVT education should occur during admission and at discharge for all patients, especially those at higher risk.	100%
Nurses should remain up to date on the best DVT prevention strategies for patients in and out of the hospital.	100%

## Methods

- Provide anonymous surveys to telemetry nurses on Grant 4 and P6 cardiac.
- Issue educational pamphlets on the importance of DVT teaching.

## Summary/Discussion

- The implementation of the VTE educational pamphlet post-survey educated RNs on the importance of DVT teach-back to patients.
- Many survey takers expressed disbelief with the high occurrence of deaths from VTE.
  - “The pamphlet was very educational and will help me teach my patients about clots that can occur in and out of their hospital stay.”
- If we had to redo the study, the group would like to send the survey out to nurses hospital wide to see if DVT prevention strategies vary from floor to floor.

## Conclusion

- DVT teaching is not implemented as frequently as it should be, especially to patients that are at high risk.
- Nurses on G4 and P6 cardiac support DVT teaching to patients as well as agree to provide patients with an educational pamphlet to high risk patients.

### References

Forrestal, Mark & Neuhardt, Dianen L. (2014) *Fundamentals of Phlebology*; 3<sup>rd</sup> edition San Leandro, California: American College of Phlebology, 12.  
 LiberateHealth. (n.d.). Benefits of Patient Education. Retrieved from <http://liberatehealth.us/benefits-of-patient-education/>  
 Up to Date. (n.d.). DVT: Beyond the Basics. Retrieved from <https://www.uptodate.com/contents/deep-vein-thrombosis-dvt-beyond-the-basics>