

## Lower Limb Immobilisation & VTE Prophylaxis

**Ayobami Asaju, Ramal Chandrasekaran, Mustafa Rashid**

Princess Alexandra Hospital, UK

\*Corresponding author: Ayobami Asaju, Princess Alexandra Hospital, UK, Tel: +447407742539

✉ ayobamiasaju@gmail.com

**Citation:** Ayobami Asaju (2020) Lower Limb Immobilisation & VTE Prophylaxis, Vol.S No.4: 3 DOI: 10.36648/IPIPC.S.1.001

**Received:** March 15, 2020; **Accepted:** July 17, 2020; **Published:** November 28, 2020

**Copyright:** © 2020 Ayobami Asaju. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract:

**PURPOSE :** According to the National Institute for Health and Clinical Excellence (NICE), annual incidence of venous thrombosis is approximately 2 in 1000 of the general population and that for diagnosed pulmonary embolism in UK has been reported as 7-8 per 10,000 people. Although the risk varies from one individual to another, NICE guideline stated clearly that there is need to consider pharmacological VTE prophylaxis with Low Molecular weight heparin or fondaparinux sodium for people with lower limb immobilization whose risk of VTE outweighs their risk of bleeding. We carried out this audit to gain understanding on pattern of adherence especially in the Accident and Emergency Unit of an NHS Hospital as well as finding out reasons for non-adherence so as to improve compliance.

National Institute for Health and Care  
Excellence

Final

### Venous thromboembolism in over 16s

Reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism

NICE guideline NG89 (volume 2)

Methods, evidence and recommendations

March 2018

Final

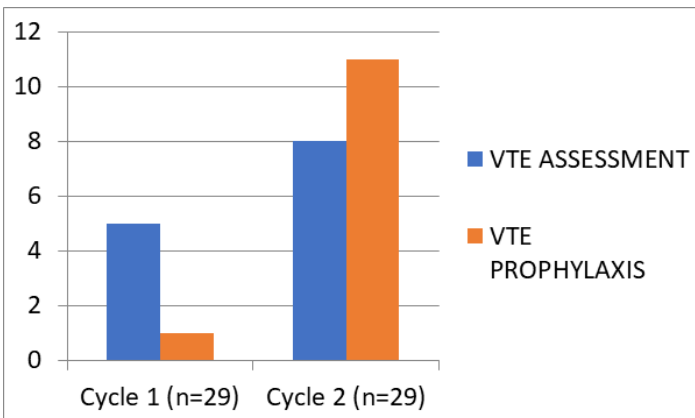
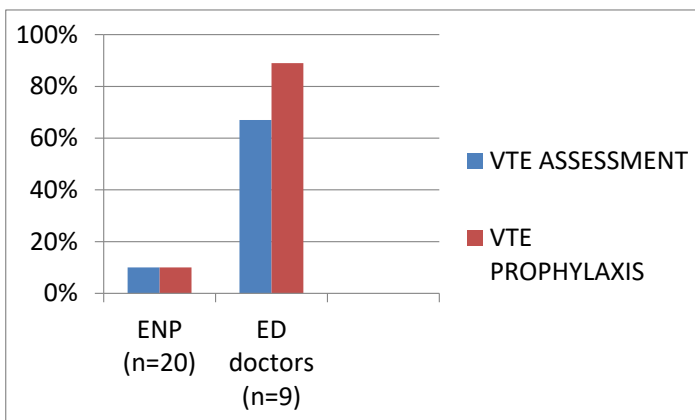
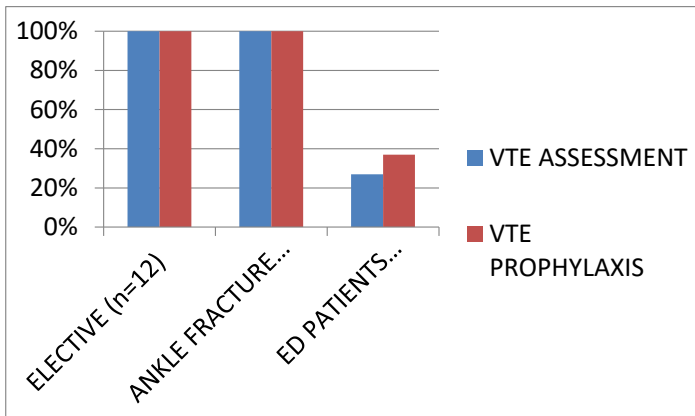
Developed by the National Guideline Centre,  
hosted by the Royal College of Physicians

### 24.6 Recommendations and link to evidence

Recommendations	1.5.4 Consider pharmacological VTE prophylaxis with LMWH <sup>a</sup> or fondaparinux sodium <sup>a</sup> for people with lower limb immobilisation whose risk of VTE outweighs their risk of bleeding. Consider stopping prophylaxis if lower limb immobilisation continues beyond 42 days. [2018]
Research recommendation	6. What is the clinical and cost effectiveness of direct oral anticoagulants (DOACs) for preventing VTE in people with lower limb immobilisation?
Relative values of different outcomes	The committee considered all-cause mortality (up to 90 days from hospital discharge), deep vein thrombosis (symptomatic and asymptomatic) (up to 90 days from hospital discharge), pulmonary embolism (up to 90 days from hospital discharge), fatal PE (up to 90 days from hospital discharge), and major bleeding (up to 90 days from hospital discharge).

**METHODS:** We retrospectively identified from our electronic patient record patients with lower limb cast, non weight bearing and were seen in Emergency department (ED) by Doctors and Emergency Nurse Practitioners (ENPs) over a 3-month period. This was also re-audited after about 4 months following teaching given to ED and compared. Patients seen by the Orthopaedic Unit who had Open reduction and internal fixation (ORIF) for ankle fractures as well as those on NWB after elective ankle surgeries over same period were also reviewed.

**RESULTS:** A total number of 66 patients were collated during the second cycle out of which 29(44%) were seen in ED, 25(38%) had ORIF done by Orthopaedic Unit while 12(18%) had elective ankle surgeries. Also important to note that 29 patients were collated in the first cycle as seen in ED. 8(28%) of those seen in ED during the second cycle had VTE assessment as compared to 5(17%) during first cycle. Also 11(38%) of those seen in ED during second cycle had VTE Chemical Prophylaxis as compared to just 1(3%) during first cycle. All (100%) patients had both VTE Assessment and Prophylaxis in the group of those who had ORIF and elective ankle surgeries.



CONCLUSION: Adherence to NICE guidelines on VTE assessment and prophylaxis still suboptimal but showed some improvement after some interventions in ED. Some of the challenges encountered in the Emergency Department included inability of the ENPs to prescribe needed medication as well as ED Doctors turnover. Additional plan to be put in place is getting printed laminated posters as aid memoirs, ENPs liaising with ED Doctors as regards prescription as well as possibly developing a backslab VTE packs from pharmacy unit.