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## BACKGROUND:

Acute venous thromboembolism has an annual incidence of 1-2 per 1000 persons.

Vitamin K antagonists were the traditional treatment but have disadvantages:

- Require lab monitoring
- Dose adjustments
- Drug and food interactions
- Annual risk of major bleeding 1-2%

Direct oral anticoagulants (DOACs) offer a safe, cost effective alternative.<sup>1</sup>

## AIMS:

1. To document our current practice in managing patients with confirmed DVT.
2. To ensure safe, efficient management of patients with confirmed DVT.
3. To introduce outpatient treatment with DOACS for suitable patients.

## AUDIT:



We carried out an audit between September 2013 to March 2014 -to identify how many Doppler US scans we are doing -to identify patients with confirmed DVT and look at how they were managed Patients with confirmed DVT were identified retrospectively using the radiology PACS. The charts of these patients were reviewed and the relevant data extracted.

## RESULTS:

140 doppler ultrasounds were requested for suspected DVT from ED and AAU.

14 of these were positive for DVT

Patient Characteristics	
Mean age	60 years
Sex M:F	1:1
Provoked	7%
Unprovoked	93%
<b>Admitted (%)</b>	<b>100%</b>

50% of the patients were treated with LMWH/Warfarin although 100% were suitable for a direct oral anticoagulant.

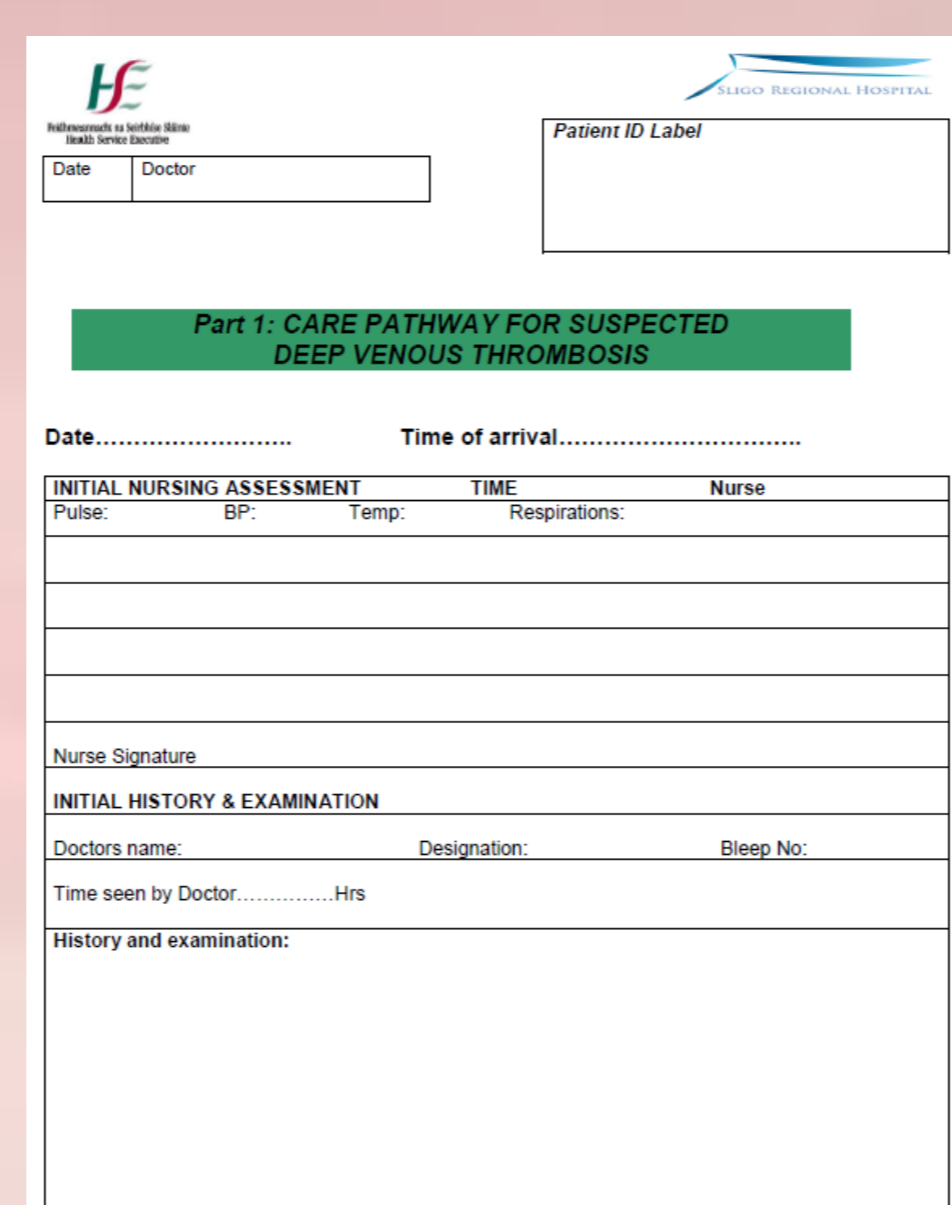
The length of stay was 0-16 days with a mean of 4 days.

For patients on warfarin the time to therapeutic range was 2-22days.

## INTERVENTION:

We introduced a care pathway for management of patients with suspected DVT (Part 1) and confirmed DVT (Part 2). This helped to risk stratify the patients and guide further investigation and management.

It also focused on outpatient treatment with DOAC if the patient was suitable.

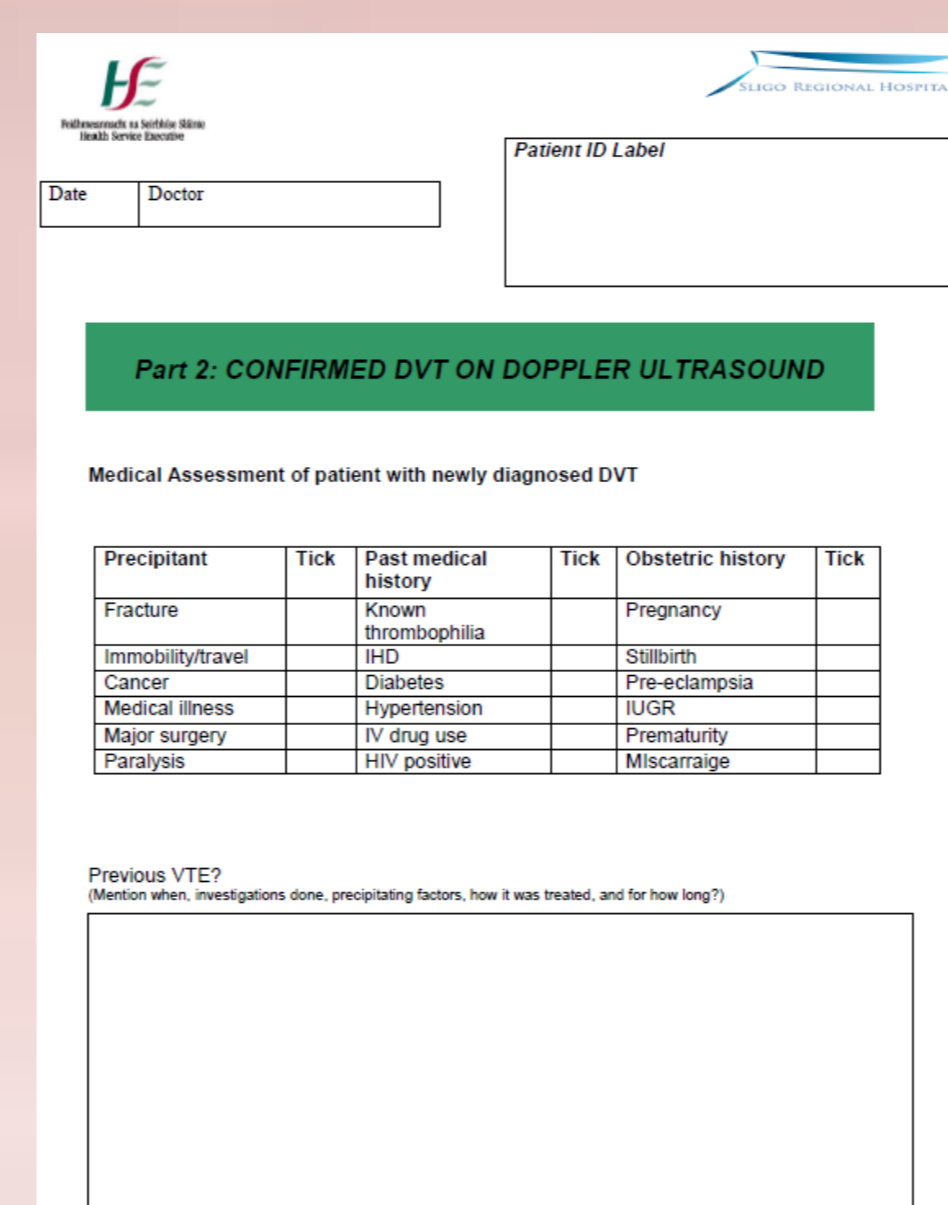


Part 1: CARE PATHWAY FOR SUSPECTED DEEP VEIN THROMBOSIS

Medical Assessment of patient with newly diagnosed DVT

Initial Nursing Assessment

Initial History & Examination



Part 2: CONFIRMED DVT ON DOPPLER ULTRASOUND

Medical Assessment of patient with newly diagnosed DVT

Medical Assessment of patient with newly diagnosed DVT

Previous VTE?

## RE-AUDIT:

We performed the re-audit using the same methodology for the 6 month period from July to December 2015.

There were 12 confirmed DVTs. 10 of these were treated with DOACs and 2 with LMWH (oncology patients for whom DOACs are not licensed).

	Pre	Post
Sex M:F	1:1	1:1.25
Mean Age	60	71
No. of confirmed DVTs	7	12
<b>Admitted (%)</b>	<b>7(100%)</b>	<b>3(25%)</b>

The length of stay for those admitted was a range of 2-11 days. The indication for admission in all cases was for other co-morbidities or social reasons.

There were no bleeding complications in any patient during the study period.

## DISCUSSION:

Introduction of an evidence based care pathway for patients with confirmed DVT has resulted in safer, better and faster treatment. The reduced admission rates have resulted in a significant cost saving for the hospital.

It has also made beds available for other patients thus improving patient flow.

The variety of DOACs now available provide the clinician with discretion when prescribing.