

DVT Assessment Module

- Seamless referral and GP communication
- Improved clinical governance and audit trail
- A WIN-WIN-WIN

Design a
DVT module

DAWN CLINICAL FRAMEWORK **7.9** Tue 04/10/2011
Version 7.9.17 (1282)

Anticoagulation DVT Assessment

**Patient view**
Add, edit or dose a patient

**List view / Daily routines**
Attendance and non-attendance

**Diary**
Consult the diary

**Message center**
Manage messages and pass messages by phone

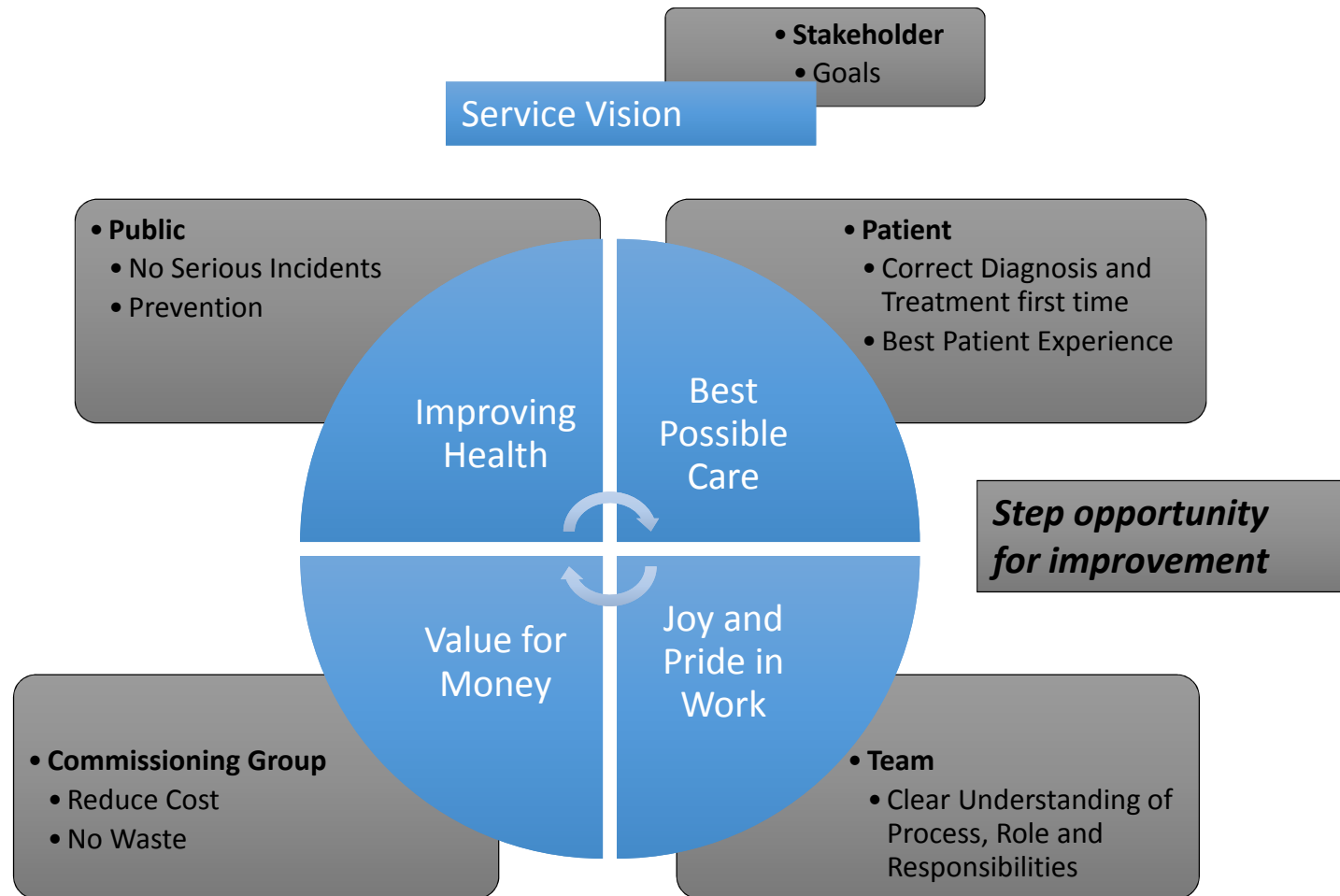
**Reports**
Custom reports

**Settings**
Modify your personal settings

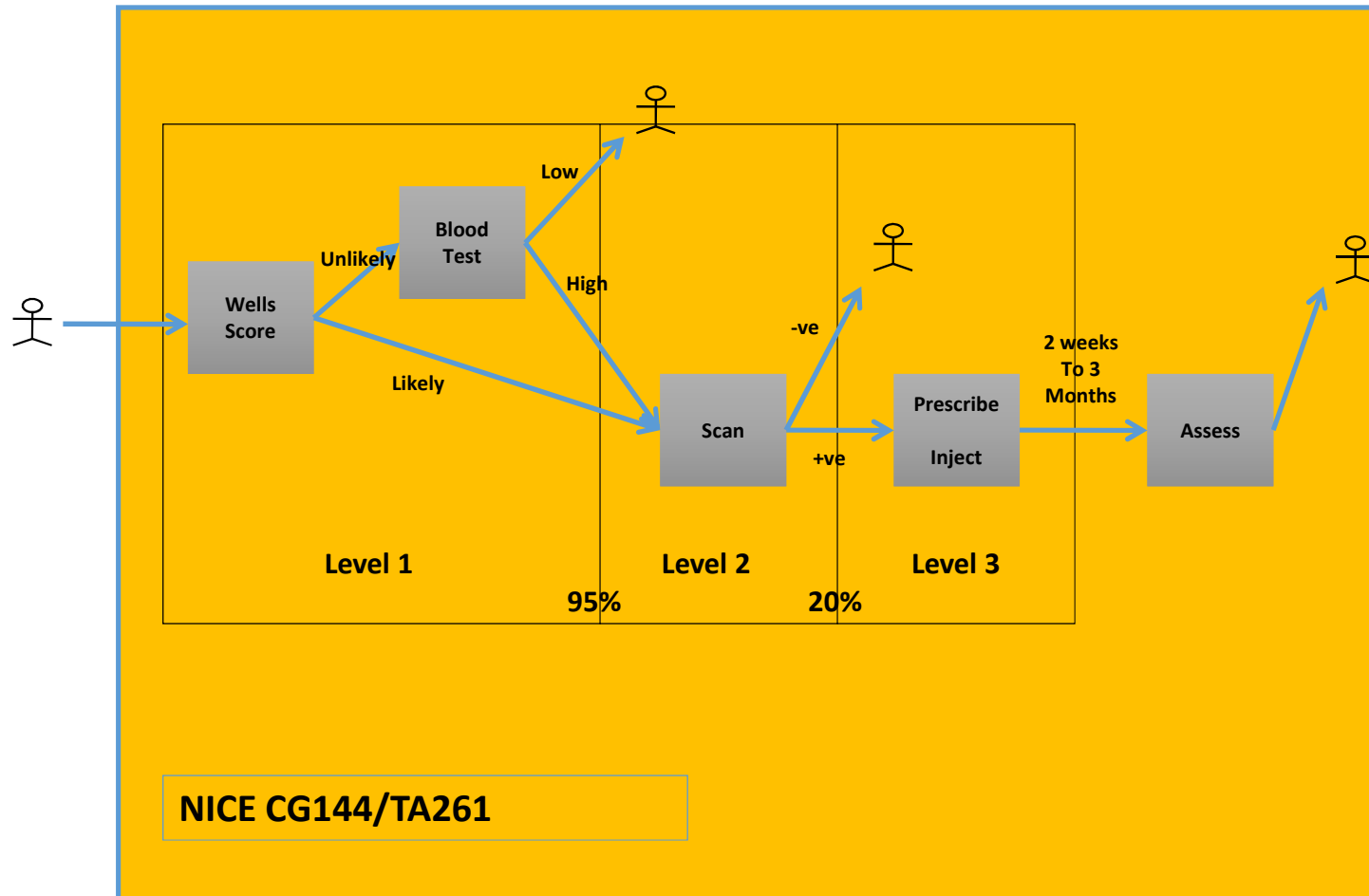


Approach and principles moving forward

DVT/PE/Anticoagulation Service – One Service – One Team

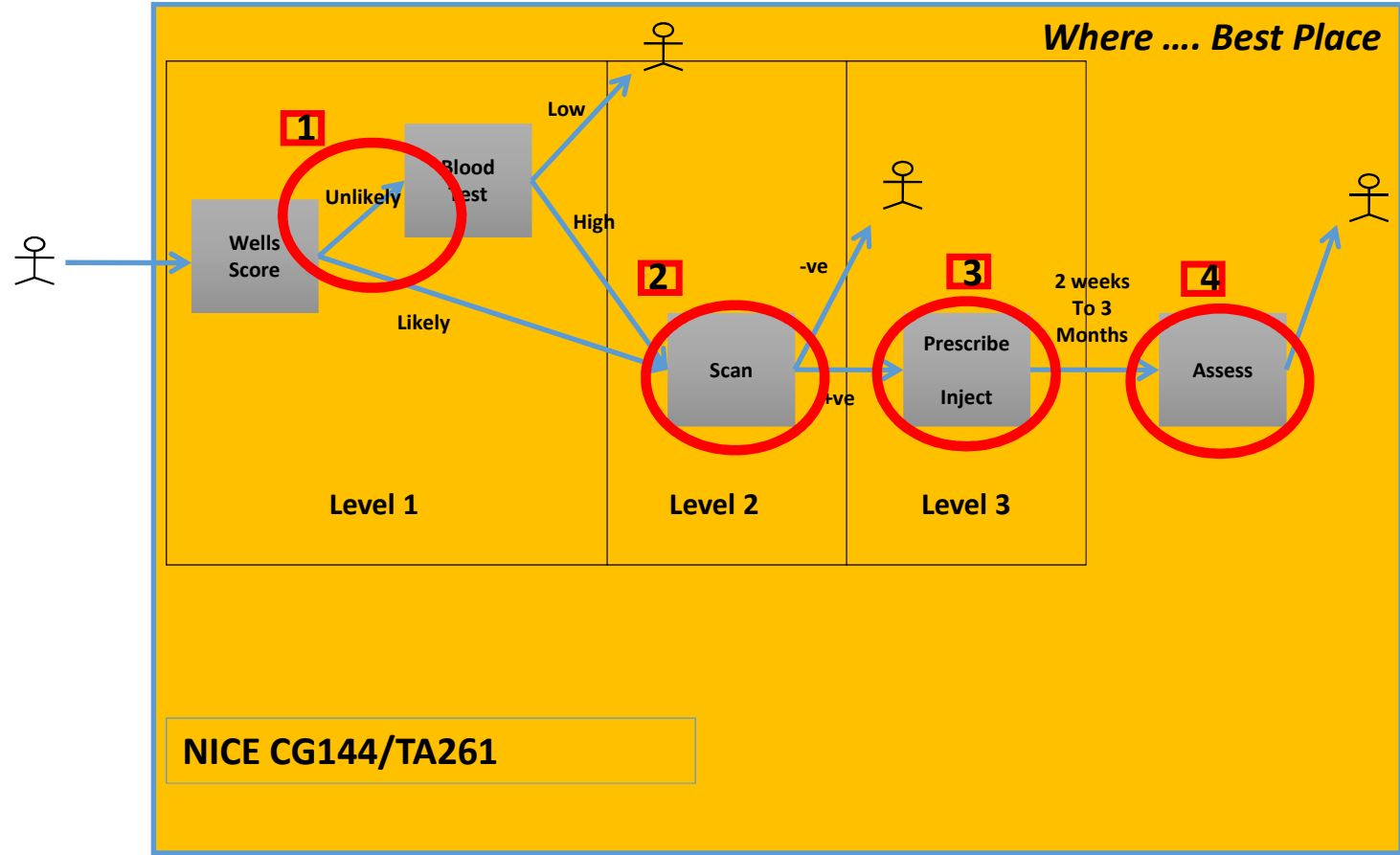


DVT Service – One Service – One Team



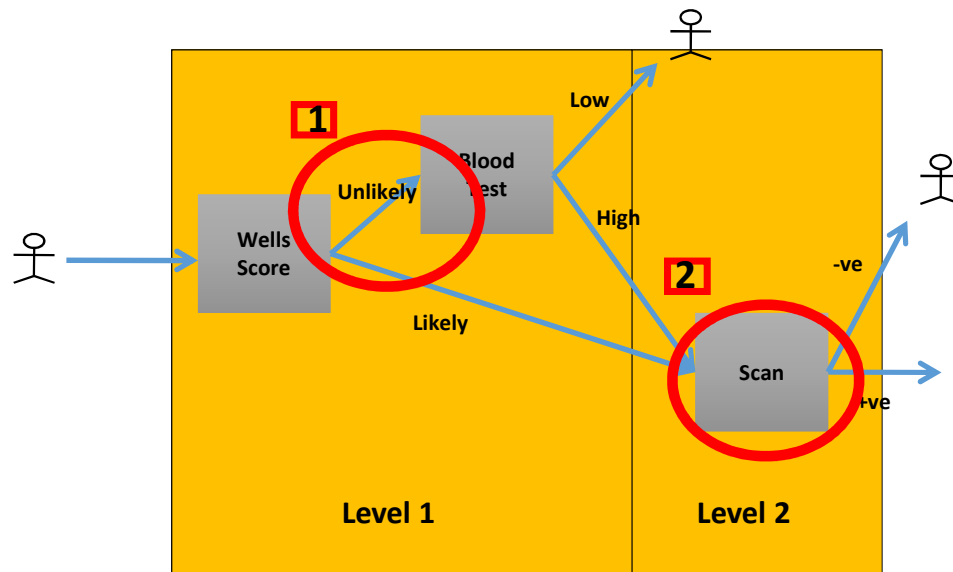
**Programmed to think “Primary Care – Secondary Care”
Reprogram to Specialist-generalist – not site specific**

DVT Service – One Service – One Team



Programmed to think “Primary Care – Secondary Care”
Reprogram to Specialist-generalist – not site specific

DVT Service – One Service – One Team



NICE CG144/TA261

Where Best Place

QS29

1. People with suspected DVT are offered an interim therapeutic dose of anticoagulant therapy if diagnostic investigations are expected to take longer than 4 hours from first clinical suspicion
2. People with suspected DVT have all their diagnostic investigations within 24 hours of first clinical suspicion

**Programmed to think “Primary Care – Secondary Care”
Reprogram to Specialist-generalist – not site specific**

QS29

4. People with proximal DVT are offered below knee GECs within 3 weeks of diagnosis

5. People with unprovoked DVT or PE who are not already known to have cancer are offered timely investigation for cancer

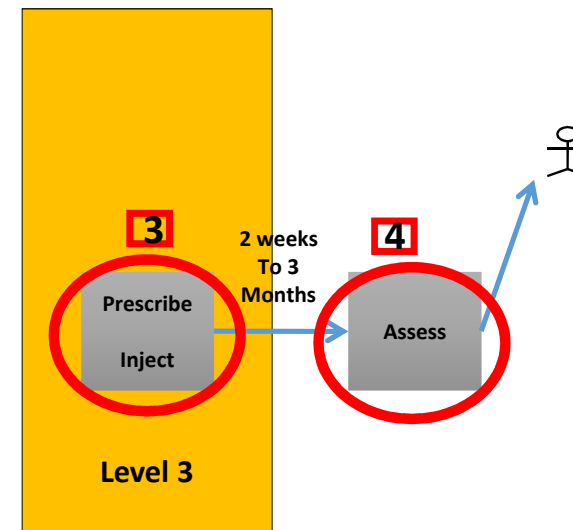
6. People with provoked DVT or PE are not offered thrombophilia testing

7. People with active cancer and confirmed DVT or PE are offered anticoagulation

8. People w/o Ca receive a/c therapy have a r/v within 3/12 to discuss risks and benefits if ongoing a/c

9. People with active Ca on a/c have r/v within 6/12 to discuss risks and benefits of ongoing a/c

Where Best Place



Moving from the old.....

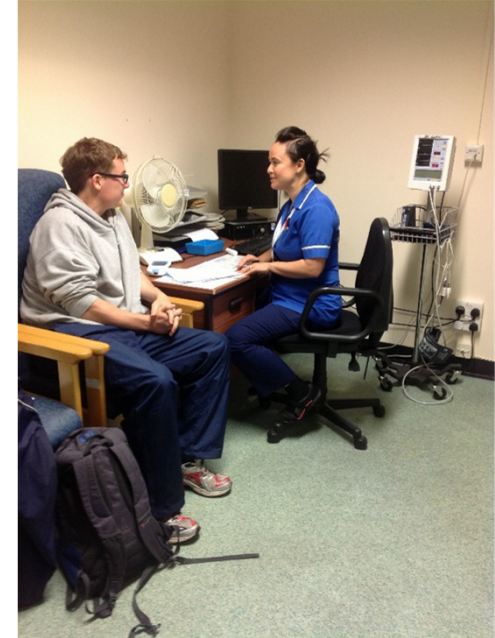


to the new – AMBULATORY CARE CENTRE – sandwiched between ED and radiology





**Our new home –
August 2013**



**'Fit for purpose'
right space
efficient patient flow for current
numbers and projected increases**



	Scanned (% of total scanned)	+ve (% of total +ves)	% +ves in ambulatory and non ambulatory settings
Acute ambulatory DVT service	2928 (70%)	657(76%)	22%
Non ambulatory	1237(30%)	204(24%)	16.5%
Total	4165	861	21%

Positive scans ie DVT	N=660	Further detail
Proximal	437 (66%)	39 HATs, 49 IF (30 IVDU,6 cancer,1 PP,2 HATS), 53 STP
Distal	223 (33%)	50 calf muscle (22%), 57 HATS
Known cancer	70 (11%)	44 proximal, 6 IF, 25 distal, 25 LMWH
LMWH	96 (14.5%)	25 cancer, 53 STP
Rivaroxaban	7 (1%)	541 eligible for rivaroxaban if 1 st DVTs treated (474 if cancer patients treated with LMWH)
rDVT	119(18%)	NOT ELIGIBLE FOR RIVAROXABAN

Acute ambulatory DVT clinic database April 2013-EO March 2014

Questionnaire (Ernest (18/01/) # /) - New record

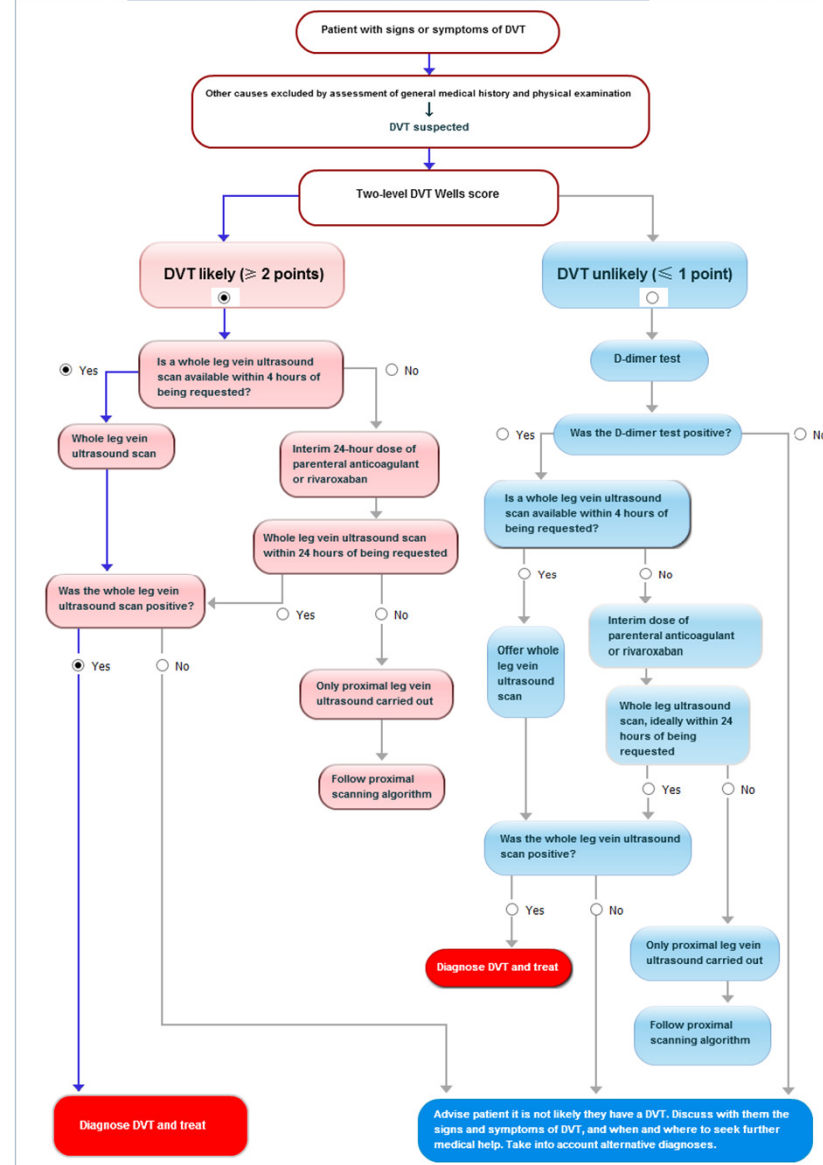
Ernest 18/01

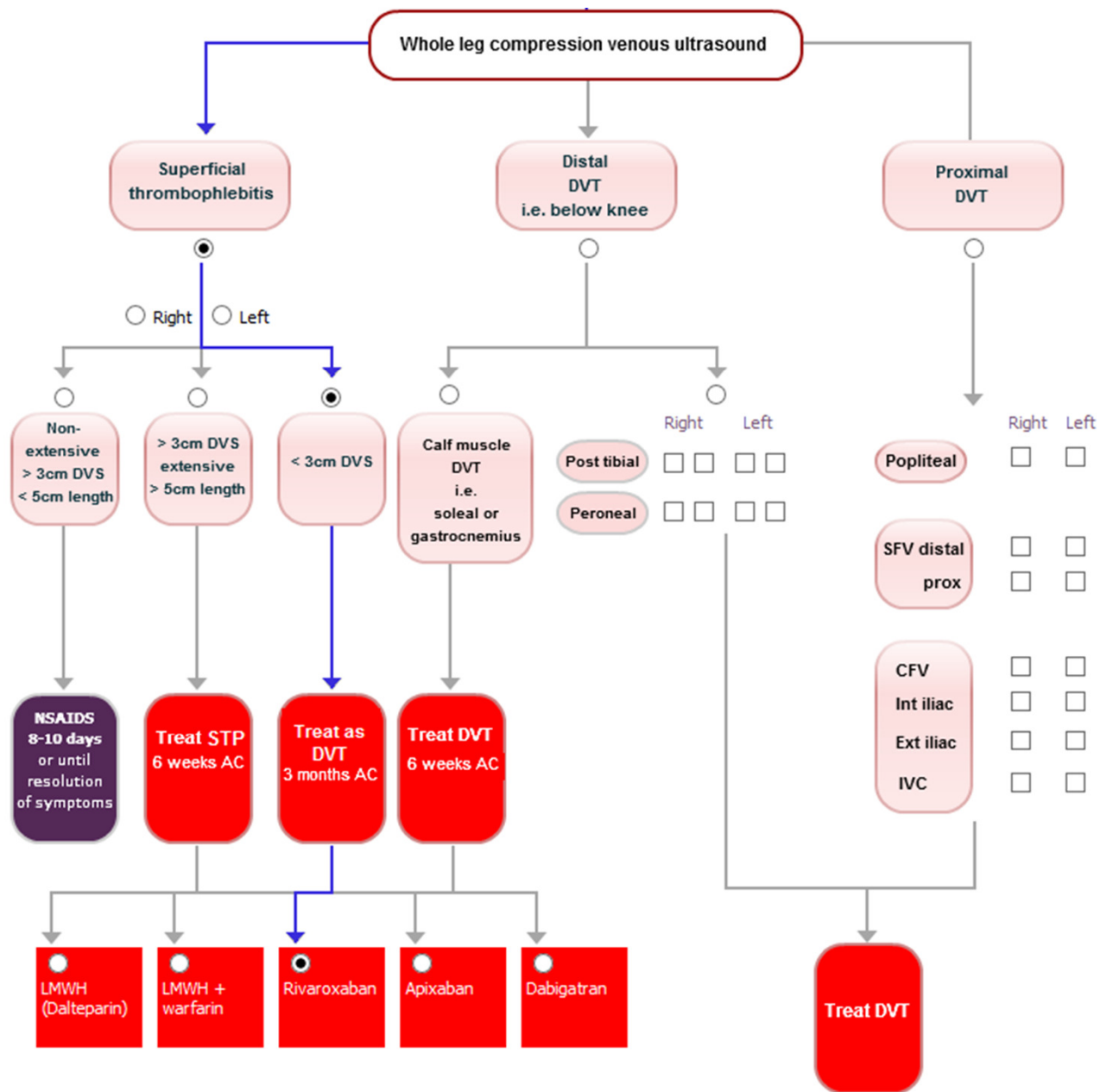
Is DVT likely?	Answer	Score
Undergoing active or palliative cancer treatment in last 6 months	<input checked="" type="radio"/> No <input type="radio"/> Yes	1
Leg paralysis, paresis or plaster immobilization within last 12/52	<input type="radio"/> No <input checked="" type="radio"/> Yes	1
Bedridden for more than 3 days or surgery under general or regional anaesthesia, in last 12/52	<input type="radio"/> No <input checked="" type="radio"/> Yes	1
Localised tenderness along deep venous system distribution	<input checked="" type="radio"/> No <input type="radio"/> Yes	1
Record thigh circumference of each leg	L 64 cm R 65 cm	1
Entire leg swollen	<input checked="" type="radio"/> No <input type="radio"/> Yes	
Record calf circumference 10cm distal to tibial tuberosity before determining the next feature	L 33 cm R 35 cm	
Affected calf larger than the other side by 3cm or more (see above)	<input checked="" type="radio"/> No <input type="radio"/> Yes	1
Pitting oedema (NB: tick only if found in symptomatic leg only)	<input checked="" type="radio"/> No <input type="radio"/> Yes	1
Collateral superficial veins (non varicose)	<input checked="" type="radio"/> No <input type="radio"/> Yes	1
Previously documented DVT	<input checked="" type="radio"/> No <input type="radio"/> Yes	1
Alternative diagnosis as likely or greater than that of DVT	<input type="radio"/> Yes <input checked="" type="radio"/> No	-2
	Wells Score	2

D-Dimer: Not done

Relevant History	
History of present complaint	Presented with DVT like symptoms following hospitalisation and plaster immobilisation for broken leg
Relevant clinical history	No previous history of VTE
Family history of VTE	<input type="radio"/> No <input checked="" type="radio"/> Yes
Family history of thrombophilia	<input checked="" type="radio"/> No <input type="radio"/> Yes
Hormonal risk factor	<input checked="" type="radio"/> No <input type="radio"/> Yes
Recent long distance travel	<input checked="" type="radio"/> No <input type="radio"/> Yes
Surgery in past 6 months	Yes - reset broken leg
Smoker	Yes - 20 per day
Malignancy	No
- Chemotherapy	No
- Radiotherapy	No

Observations	
Weight	85 kg
Blood Pressure	130 over 90 mmHg
Respiration	17 breaths per min
Temperature	37 °C
Pulse	72 beats per min
Oxygen Saturation	92 %
Leg length	86.3 cm





Outcome: **Superficial Thrombophlebitis - 3 months anticoag**

Scan performed:

☒ Within 4 hours | ☐ Within 24 hours | ☐ Over 24 hours | ☐ Over 48 hours | ☐ Over 72 hours

Send GP Letter/Email

☐

Stop Treatment Plan

☐

QS29

1. People with suspected DVT are offered an interim therapeutic dose of anticoagulant therapy if diagnostic investigations are expected to take longer than 4 hours from first clinical suspicion

2. People with suspected DVT have all their diagnostic investigations within 24 hours of first clinical suspicion

1. Interim a/c - choices
2. Time to scan audit



	Oct 13	Nov 13	Dec13	Jan14	Feb14	Mar14
Total scans	288 (+25%)	217(+26%)	254(+26%)	260(+28%)	264(+23%)	291(+21%)
Rescans	20 (7%)	11(5%)	13(5%)	15(6%)	15(6%)	23(8%)
Scan<4hours	78%	85%	83%	84%	83%	78%
Scan<24hours	19%	12%	12%	10%	11%	16%
SCANNED WITHIN 24HRS	97%	97%	95%	94%	94%	94%

DIRECT LINE: 0116 258 5972

DVT CLINIC

Jesmond
Newcastle Upon Tyne

19 September 2014

Dear [REDACTED]

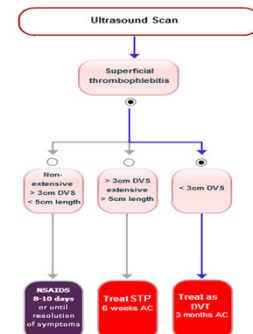
Outcome: Superficial Thrombophlebitis requiring 3 months anticoagulation

(please see below pathway of decision making)

Re: Ernest [REDACTED] Hosp No: [REDACTED]
[REDACTED] NHS No: [REDACTED]
Broadstairs Date of Birth: [REDACTED]

Ernest [REDACTED] attended the DVT Clinic today with a suspected Deep Vein Thrombosis.

A diagnosis of Superficial Thrombophlebitis, requiring 3 months anticoagulation with **Rivaroxaban**, was made using the following pathway.



ACTION REQUIRED BY GP:

1. Prescription for below knee graduated elasticated compression (GECs) hosiery (Class2) - 2 pairs on repeat prescription for replacement every 3 - 4 months
2. Reinforce healthy lifestyle advice

INFORMATION GIVEN TO PATIENT:

1. To wear below knee class 2 GECs; put on first thing in am and take off when going to bed
2. Signs and Symptoms of DVT
3. DVT prevention measures at times of immobility
4. Anticoagulation information and follow up
5. Lifestyle advice

Ernest [REDACTED] has been informed of these results and has now been referred back to you. The patient has been given the scan results.

Dawn Support
DVT and Anticoagulation Specialist Sister
pp. Dr J Strong, Consultant Haematologist - Head of Service - Tel: 0116 258 3500

Trust Headquarters, Qwendolen House, Qwendolen Road, Leicester, LE5 4GF
Chairman: Mr Martin Hindle; Chief Executive: Mr John Adler; Website: www.uhls-tr.nhs.uk

4S Dawn Clinical Software & Internet Applications. - Internet Explorer

Close all Tabs System Menu Patient Search Help

Patient Questionnaire X

Questionnaire (Ernest (18/01/) # /)

LMWH (Dalteparin) LMWH + warfarin Rivaroxaban Apixaban Dabigatran Treat DVT

Outcome: **Superficial Thrombophlebitis - 3 months anticoag**

Scan performed:

☒ Within 4 hours | ☐ Within 24 hours | ☐ Over 24 hours | ☐ Over 48 hours | ☐ Over 72 hours

LMWH Dose:

☐ (None selected)

☐ Prophylactic Dose (5000 Units OD)

☒ Treatment (Weight-based)

☐ Treatment (Bleeding risk)

☐ Treatment (Renal dose: eGFR 20-29)

Please select dose:

(None selected)

5000 units OD + Anti-Xa

5000 units OD

7500 units OD

10,000 units OD

12,500 units OD

15,000 units OD

18,000 units OD

10,000 units BD (18,000 units OD Day 1) + Anti-Xa

12,500 units BD (18,000 units OD Day 1) + Anti-Xa

15,000 units BD (18,000 units OD Day 1) + Anti-Xa

18,000 units BD + Anti-Xa

Send GP Letter/Email

Stop Treatment Plan

Dear Ms Marshall ,

Outcome: Superficial Thrombophlebitis requiring 3 months anticoagulation

(please see below pathway of decision making)

Re:



Hosp No:

NHS No:

Date of Birth:



Ernest [redacted] attended the DVT Clinic today with a suspected Deep Vein Thrombosis.

A diagnosis of Superficial Thrombophlebitis, requiring 3 months anticoagulation with **LMWH (Dalteparin) 18,000 units OD (treatment dose - weight based)**, was made using the following pathway.

History	Personal	Treatment plans	Questionnaires	Test Results	Interface Warnings
DVT: DVT Assessment					
stopped					
Start date	27/06/2014				
Duration	Treatment stopped - Stopped at: 19/09/2014 12:28 PM				
Diagnosis	-				
TherapyTemplate	DVT Assessment				
Referring Physician	Prince Regent Infirmary - Marshall Maggie				
Consultant	-				
Notes	<div>[Scan performed: Within 4 hours]</div>				
Cessation Reason	Superficial Thrombophlebitis - 3 months anticoag				

Conclusions

- Quality improvement
- Safety improvement
- Lean and accountable
- Dedicated vs general
- Benchmarking
- Commissioners, patients, secondary care


Finally....

- It makes sense
- Vision but without a team – impossible
- Vision with a bad team – a nightmare
- Vision and a great team – inevitable



The Team





The Team- over250
years experience