

OCCG SERVICE SPECIFICATION (2019-20) PRIMARY CARE SERVICE FOR DVT TESTING

1. Background

DVT has an annual incidence of about 1 in 1,000 people in the UK¹. The assessment and treatment of patients with suspected Deep Vein Thrombosis (DVT) is a significant source of admissions to the Oxford Haemophilia and Thrombosis Centre (OHTC) and the Medical Assessment Unit at Horton Hospital.

Developments in the assessment and identification of DVT mean that this condition can be identified in primary care in an effective and safe way when combined with improved access to Ultrasound. This service is designed to aid the introduction of a primary care DVT assessment service.

This service is underpinned by NICE Clinical guideline 144² setting out diagnostic assessment of DVT based on the Wells score, D-dimer measurement, ultrasound and radiological imaging. In primary care settings, if the Wells score is 2 or more then a d-dimer is not required and the patient should be immediately referred to the DVT service at the Churchill Hospital. If the Wells score is less than 2, a negative point of care (POC) D-dimer can be useful to rule out DVT. In addition guidelines³ updated in January 2014 by the OHTC provide advice on DVT assessment and access arrangements for the DVT service based at the Churchill Hospital.

No part of this specification by commission, omission or implication defines or redefines essential or additional services.

2. Service Scope

This service will support practices to provide DVT assessment and identification in practice premises, or within the community. The treatment of suspected DVTs is not included in this service, which only covers the identification of potential DVTs in line with local guidance

- [Direct Oral Anticoagulants 'DOACs' for Treatment and Secondary Prevention of Deep Vein Thrombosis \(DVT\) and Pulmonary Embolism \(PE\) in Primary Care](#)
- [Dalteparin – Guideline and Shared Care Protocol for Prescribing in Primary Care](#)

Please refer to [Appendix 2](#) for Primary Care overview of DVT diagnosis, referral and follow-up.

Patients with suspected DVT should be referred to the DVT clinic for investigations. If the patient is found to have a DVT treatment will be started by the DVT clinic in secondary care. **If a patient has a suspected DVT and cannot be seen for investigations within 4 hours (outside of the clinic opening hours) interim anticoagulation in the form of low molecular weight heparin (LMWH) or a direct oral anticoagulant (DOAC) should be provided by the GP prior to their appointment and an appointment arranged for the DVT Clinic the following day.**

Patients will be switched to warfarin or DOAC prior to discharge to primary care. It is not expected that GPs should administer low molecular weight heparin following diagnosis.

¹ [Pulmonary embolism](#); NICE CKS, January 2015

² NICE Clinical Guideline CG:144 June 2012, page 6 <https://www.nice.org.uk/guidance/cg144>

³ [OUH - Oxford Haemophilia and Thrombosis Centre OP DVT service protocols](#)

A blood sample for D-dimer testing **MUST** be taken before anticoagulation is given. This should be given to the patient to bring in to their DVT appointment. Note: D-dimers cannot be used as part of the diagnostic algorithm once patients have received a dose of anticoagulant, and this sample is therefore critical for effective diagnosis and use of resources. Patients will commonly need to return for a second scan one week after their original review if a D-dimer is not taken and this will limit the DVT clinic's ability to see new patients.

NICE Quality Standard ([QS29](#)) states that people with suspected deep vein thrombosis are offered an interim therapeutic dose of anticoagulation therapy if diagnostic investigations are expected to take longer than 4 hours from the time of first clinical suspicion.

- Dose of dalteparin

Body weight (kg)	Dose of dalteparin by subcutaneous injection using a pre-filled syringe (units)
Less than 46 Consider discussing with haem SpR if less than 40kg	7,500 once daily
46-56	10,000 once daily
57-68	12,500 once daily
69-82	15,000 once daily
83-98	18,000 once daily
99-112	10,000 twice daily
113-137	12,500 twice daily
138-165	15,000 twice daily
More than 166 Consider discussing with haem SpR if greater than 180kg	18,000 twice daily

Dose of apixaban: 10 mg bd - supply four to six 5 mg tablets in order to ensure a dose is not missed before review at DVT clinic (patient to take 10 mg stat and 10 mg 12 hours later).

Dose of rivaroxaban: 15 mg bd - supply two to three 15 mg tablets in order to ensure a dose is not missed before review at DVT clinic (patient to take 15 mg stat and 15 mg 12 hours later). Rivaroxaban should be taken with or immediately after food.

Apixaban and rivaroxaban should not be used in pregnancy or breastfeeding, and are not recommended in patients who weigh more than 120kg

The Practice providing this service must ensure an appropriate record of activity is developed and maintained for audit and payment purposes. Each episode must be recorded in the electronic patient record.

3. Eligibility to Provide the Service

The Practice must adhere to the agreed assessment tool, and treatment guidelines which may be updated periodically.

Staff undertaking diagnostic tests must be adequately trained and supervised as determined by the Practice. For Practice Nurses, this would normally include certification or record of training in anticoagulation. In case of doubt, the Clinical Governance Lead for the CCG should be consulted. Practice clinicians must be able to demonstrate competence following training. The practice must have adequate mechanisms and facilities, including premises and equipment, as are necessary to enable the proper provision of this service.

The practice must adhere to good practice as outlined in the Infection Control Guidance for General Practice.

The services delivered by this service will be subject to clinical audit and monitoring will be carried out as part of the annual review of the contract.

4. Monitoring

Data will be extracted from the Emis practice system by SCWCSU around the 15th of the month following the end of each quarter to monitor activity. Vision practices are requested to submit the necessary evidence for payment in the form of the search output from the clinical system and submit to SCWCSU by the 15th of the month following the end of each quarter. (Deadlines to be confirmed each quarter by SCWCSU).

Key performance indicators (KPI) monthly reporting

- Patients presenting with possible DVT
- Patients Wells Score
- Patients d-dimer result
- Patients referred for ultrasound
- Length of wait for ultrasound
- Number of patients with confirmed DVT
- Number and outcome of investigations for any significant incident/untoward event

Read Codes

Point of care D-dimer assay positive = 42g3

Point of care D-dimer assay negative = 42g4

Wells Score: DVT Score (value of 1 or less) = 388z

Activity Monitoring

- Read Codes for template are available through SCWCSU to enable monitoring of patient pathway
- Number of clinical incidents

6. Clinical Governance

6.1 CQC Essential Standards of Quality and Safety (2010)⁴

It is expected that providers of this service will be able to demonstrate compliance with all CQC Essential Standards of Quality and Safety. Where the provider is not able to demonstrate full compliance on any core standard, this should be notified immediately to the commissioner. This includes any in-year change. The provider may be asked for evidence of action plans and these may be subject to further discussion and monitoring by the Commissioner if required. Should a concern arise regarding the quality of any commissioned service that can be directly related to one or more core standards, these concerns must be raised promptly through formally established processes agreed between the Commissioner and the Provider.

⁴[Care Quality Commission Essential Standards of Quality and Safety \(2010\) Care Quality Commission Essential Standards of Quality and Safety \(2010\)](#)

6.2 Record Keeping and transfer of information All patient records should be kept in accordance with national and local protocols and policies i.e. the NHS Confidentiality Code of Practice, Data Protection Act and any transfer of patient information should be done in accordance with Caldicott regulations.

6.3 Competency and accreditation standards of healthcare professionals providing service.

All healthcare professionals providing the service should be registered with the relevant professional body and have appropriate qualifications and accreditation for the role they perform.

6.4 Professional indemnity cover

All healthcare professionals working within the service should provide evidence of professional indemnity cover appropriate to their role within the service.

6.5 Continuing Professional Development and Training

The Provider shall undertake to facilitate the appropriate appraisal process, continuing professional development and training for healthcare professionals providing the service to ensure that they meet the minimum competency standards.

6.6 Risk Management

The Provider shall ensure that the following areas have procedures developed that meet relevant NHS management standards:

- Clinical risk management and reporting systems for clinical and other incidents
- Complaints and accolades management system
- Patient concerns and queries
- Business Continuity Management plans

6.7 Equipment

The Provider shall ensure that the following areas have procedures developed for them:

- All relevant National Guidance and Legislation e.g. Medicines and Healthcare Products Regulatory Agency(MHRA), Healthcare Commission (HCC)
- A system is in place to ensure medicines, consumables and other medical devices are stored appropriately and expiry dates are checked regularly.
- Note: 'Please ensure to read the d-dimer testing kit instructions as different d-dimer testing kits have different times for interpreting results'.

6.8 Prevention and Control of Infection

The Provider shall comply with the Health Protection Agency Guidance on Infection Control, Communicable Diseases for Primary and Community Care within the Thames Valley and CCG Policies.

7. Evaluation of the service

The Provider must make all information available to the commissioner requested for audit purposes, and will be required to support the commissioner in monitoring the quality of the service. This will primarily be available from the practice clinical system and will include:

- Activity and patterns of demand
- Referral information and patient exclusions

Other aspects to include:

Outcome of Significant Event Analysis
 Clinical Audit results including false negatives and false positive results,
 Patient experience
 Incidents / complaints
 Accolades

8. Sustainability

The service should be available 52 weeks of the year and evidence should be provided that appropriate plans have been devised for cover of leave (both anticipated and unanticipated) and succession planning for staff turnover.

9. Accountability

The Provider is ultimately accountable to Oxfordshire CCG as the commissioner of the GP contract.

10. Health and safety

The Provider shall ensure that the services comply with UK Health and Safety Legislation, CCG Health and Safety Policies and procedures.

11. Payment

Payment will be made based on actual activity carried out as reflected in quarterly activity monitoring reports to the CCG. The payment will be staged as follows:

Stage	Activity	Payment per patient	Cumulative total per patient
Stage 0	Initial clinical assessment undertaken (within GMS)	£ 0.00	
Stage 1	D-Dimer (POC) test undertaken where necessary (only following a Wells Scoring of less than 2). If the Wells score is 2 or more d dimer is not required before referral to the DVT clinic *£25.50 administration of test and £20.40 D-Dimer kit	£45.90*	£45.90*

See [appendix 1](#).

12. Termination

This service will terminate on 31st March 2020. For termination ahead of this 3 months written notice must be given.

13. Contact

Clinical lead: ed.capo-bianco@nhs.net

APPENDIX 1:

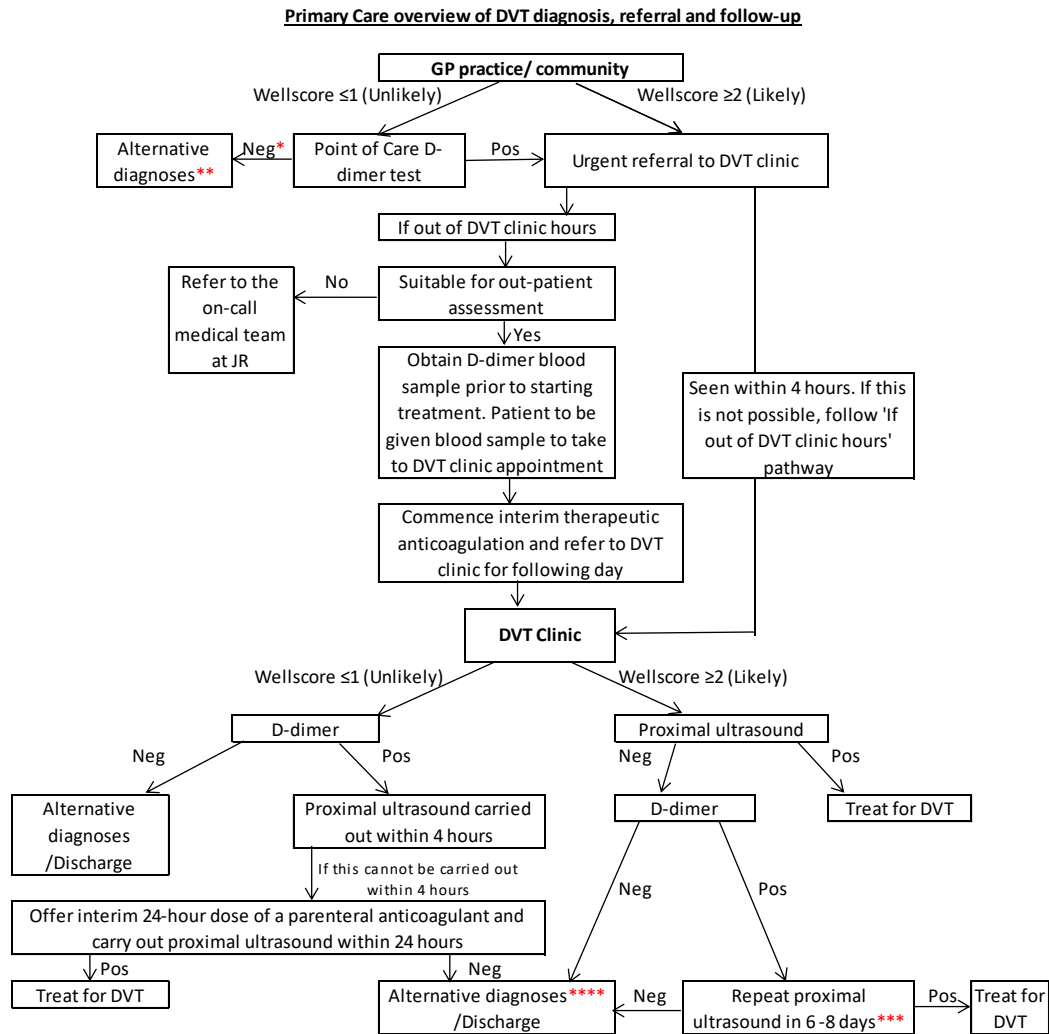
Data Collection Specification for Primary Care Service for DVT 2019-20

Code	Item	Read Code	Code Description
Search Population	Patients with record of Point of care D-dimer assay positive/negative in fiscal year to end of reporting period	42g3 Or 42g4 .	Point of care D-dimer assay positive Point of care D-dimer assay negative
Payment Criterion	Patients with record of Point of care D-dimer assay positive/negative AND Wells score <=1 in fiscal year to end of reporting period	42g3 Or 42g4 AND 388z	Point of care D-dimer assay positive Point of care D-dimer assay negative Wells deep vein thrombosis clinical probability score (value of 1 or less)
For information	Patients in the cohort for payment with a record of referral for ultrasound investigation or to the DVT clinic in the quarter.	8HQ2. 8HTm.	Refer for ultrasound investigation Referral to deep vein thrombosis clinic

Data extraction is cumulative throughout the fiscal year taken at the end of each quarterly period. In all cases, patients who have died or left during the reporting period, but who have received a service within the practice will be included. Temporary residents will be included.

SNOMED codes to be confirmed.

Appendix 2: Primary Care overview of DVT diagnosis, referral and follow-up



* A negative D-dimer results is defined as < 500µg/l FEU.

* Alternative diagnoses should be considered and patients should be advised that they are not likely to have DVT. Discuss and symptoms of DVT and when and where to seek medical help.

*** "Likely" patients who have a positive D-dimer need a repeat scan of the proximal veins in 6 to 8 days time. They remain off anticoagulation whilst awaiting this. An alternative strategy for these patients would be to extend the initial scan to the whole leg i.e. to also scan the calf veins. However please note this is not that this is generally not standard practice at OUH, but can be performed in exceptional circumstances to prevent a patient having to return at 6-8 days.

**** If a patient has a negative scan but has whole leg swelling a pelvic DVT should be considered and a CT venogram can be requested.