Deep vein thrombosis (DVT)

Clinical overview

Definitions
- **Deep vein thrombosis (DVT):** The presence of a blood clot in a deep vein[1]
- **Thrombophlebitis:** Inflammation of a vein that can cause a blood clot to form[2]
- **Thrombus:** A blood clot that develops inside a blood vessel and stays in place[1]
- **Embolus:** A blood clot that develops inside a blood vessel and subsequently breaks loose and travels to another location[3]
- **Pulmonary embolus (embolism):** A deep vein thrombosis that breaks loose and travels to the lungs[3]

Causes[1]
- Damage to the inner lining of a vein (due to surgery, injury, inflammation or infection)
- Prolonged inactivity (e.g., immobility after surgery or prolonged sitting while traveling)
- Any condition that causes blood to be thicker than normal (e.g., certain medications or medical conditions that increase blood clotting)

Signs and symptoms[1]
- Edema (swelling) of affected extremity
- Pain or tenderness in the affected extremity
- Increased warmth or redness of affected extremity

Diagnostic tools[4]
- Medical history and physical exam
- D-dimer test (measures a protein in the blood that is released when a blood clot dissolves)
- Imaging tests (e.g., ultrasound, venous doppler, venography, CT or MRI)

Treatment[5]
- Medications (e.g., anticoagulants, thrombin inhibitors or thrombolytics)
- Compression stockings
- Interventions (e.g., IVC [inferior vena cava] filter placement [interventional radiology] or surgery to remove clot)

Best documentation practices for healthcare providers

Subjective[6]
- The HPI sets the background for the patient's presenting problem, from when first diagnosed until this encounter.
- May include Review of Systems (ROS), Past, Family, and/or Social History (PFSH), Active Problems List.
- Document any current symptoms related to the presence of a DVT (e.g., pain, swelling, redness, etc.).

Objective[6]
Document any objective data, including edema, redness, warmth, and related diagnostic testing results.

Assessment/Impression
Specificity: Describe each final diagnosis clearly, concisely and to the highest level of specificity. Use all applicable descriptors and include the following:
- **Acuity/Chronicity: Acute vs. chronic**
  - Acute DVT – new and symptomatic thrombosis at the initiation of anticoagulation therapy, also includes office visit to follow-up on ED visit for DVT
  - Chronic DVT – old or established thrombosis managed with ongoing anticoagulation therapy

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- **Status: Clearly distinguish between**
  - Recurrent DVT - development of a blood clot in a deep vein after a previous DVT episode has occurred (present at the time of the encounter)
  - Versus a history of recurrent DVTs (not present at the time of the encounter)
  - Versus Personal History of DVT – when DVT has resolved, may or may not be on prophylactic anticoagulation
- **Location and Laterality:**
  - Upper or lower extremity, calf, thigh
  - Laterality (left, right or bilateral)
  - Affected vein (femoral, tibial, etc.)

Plan[6]

- Document a clear and concise treatment plan for the condition (e.g., medication, compression stocking, intervention, etc.).
- Document details of medications prescribed with clear linkage to the diagnosis or referrals for intervention, if necessary.
- Address any additional steps being taken to treat the patient.

ICD-10-CM coding tips

Long-term anticoagulation therapy

- Z79.Ø1 is assigned for long-term (current) use of anticoagulants.[7]
- Chronic anticoagulant therapy does not equal chronic DVT and does not represent a coagulation defect.
  - Anticoagulation therapy is a medical treatment, whereas chronic DVT is a medical condition.
  - Chronic anticoagulation therapy is a long-term treatment that can be used for both current (chronic) and historical DVTs.
- The blood-thinning action of the anticoagulant is the desired therapeutic effect of the medication and should not be coded as a coagulation defect.

History of DVT

- Z86.718 represents Personal history of other venous thrombosis and embolism.[7]

Additional reminders

- Category I8Ø excludes (Excludes1) venous embolism and thrombosis of lower extremities (I82.4-, I82.5-, I82.81-). An Excludes1 note indicates that the excluded code should not be used at the same time as the code above the Excludes1 note.[7]
- There are no specific timelines for when DVT becomes chronic. Code assignment is based solely on the provider's specific description of the condition as current.

Coding examples

Example 1	
Medical record documentation	Patient presents for anticoagulant follow-up for deep vein thrombosis (DVT). Exam findings are unremarkable. INR (international normalized ratio) is therapeutic at 2.8. Continue current Coumadin dose: 5mg M-W-F, 2.5 mg others. Written instructions discussed and given to patient. Recheck 1 month.
Assessment	• Long-term anticoagulant therapy for DVT
ICD-10-CM code	• **Z79.Ø1** Long term (current) use of anticoagulants
Rationale	Documentation is vague and ambiguous. The medical record documentation states the patient is being seen for anticoagulant follow-up. The exam findings are documented as unremarkable, indicating that the patient's peripheral pulses were normal, no swelling, no pain, no warmth, and no redness were noted upon exam of the patient by the provider. The coder should query the provider for clarification regarding whether Coumadin therapy is being administered as active treatment of a current (chronic) DVT versus prophylactic treatment of a historical DVT with the goal of preventing a recurrence.

Example 2	
Medical record documentation	Presents with chief complaint of swelling in right leg with calf tenderness for past two days. Asymmetric swelling with the right leg measuring close to 42 cm, the left measuring at 37 cm. Positive Homan's sign. Stat venous Doppler shows DVT in the right posterior tibial. Negative left leg venous Doppler. Started on Coumadin 5 mg daily and Lovenox 80 mg subcutaneous twice daily until INR is therapeutic between 2 and 3.
Assessment	• Acute right posterior tibial DVT
ICD-10-CM code	• **I82.441** Acute embolism and thrombosis of right tibial vein
Rationale	Documentation clearly supports the presence of a current, acute DVT with a specific site noted as confirmed by imaging. Elements lending additional support to the presence of a current DVT are the provider documentation of swelling, calf tenderness and positive Homan's sign.

Example 3	
Medical record documentation	65-year-old female presents for routine follow-up for hypertension. States home blood pressure monitor shows blood pressure running in the 120s over high 80s. Blood pressure in the office today 129/88. Reports headaches have resolved. Has history of DVT left leg 8 months ago; Coumadin therapy was discontinued two weeks ago. Return to office in 2 months. Continue to monitor; record home blood pressure readings and bring record to next visit.
Assessment	• Hypertension controlled • Deep vein thrombosis left lower leg
ICD-10-CM codes	• **I1Ø** Essential (primary) hypertension • **Z86.718** Personal history of other venous thrombosis and embolism
Rationale	DVT is documented as history of and the anticoagulation was discontinued; therefore, this is a personal history of DVT and codes to Z86.718.

Example 4	
Medical record documentation	Patient is here today for follow-up related to DVT in the left leg diagnosed four months ago. Was started on regular daily Coumadin therapy at that time. No redness or inflammation in left leg today; swelling has decreased. INR today is 2.4. Doppler ultrasound today shows DVT in left leg is slowly resolving. Continue current daily Coumadin dosing as directed. Recheck INR in four weeks.
Assessment	• Chronic deep venous thrombosis of left lower extremity
ICD-10-CM codes	• **I82.5Ø2** Chronic embolism and thrombosis of unspecified deep veins of left lower extremity • **Z79.Ø1** Long term (current) use of anticoagulants
Rationale	DVT is specified as "chronic" and "slowly resolving," confirming it is still current.

References

1. Mayo Clinic. Deep vein thrombosis - Symptoms and causes. Mayo Clinic. Published June 11, 2022. https://www.mayoclinic.org/diseases-conditions/deep-vein-thrombosis/symptoms-causes/syc-20352557

2. Mayo Clinic. Thrombophlebitis - Symptoms and causes. Mayo Clinic. Published 2017. https://www.mayoclinic.org/diseases-conditions/thrombophlebitis/symptoms-causes/syc-20354607

3. Mayo Clinic. Pulmonary Embolism. Mayo Clinic. Published Dec. 1, 2022. https://www.mayoclinic.org/diseases-conditions/pulmonary-embolism/symptoms-causes/syc-20354647

4. Venous Thromboembolism - Deep Vein Thrombosis (DVT) | NHLBI, NIH. www.nhlbi.nih.gov. Published Sept. 19, 2022. https://www.nhlbi.nih.gov/health/deep-vein-thrombosis

5. Mayo Clinic. Deep vein thrombosis - Diagnosis and treatment - Mayo Clinic. Mayoclinic.org. Published June 11, 2022. https://www.mayoclinic.org/diseases-conditions/deep-vein-thrombosis/diagnosis-treatment/drc-20352563

6. Lew V, Ghassemzadeh S, Podder V. SOAP Notes. National Library of Medicine. Published Aug. 28, 2023. https://www.ncbi.nlm.nih.gov/books/NBK482263/

7. AAPC. *ICD-10-CM Complete Code Set 2025*. AAPC; 2024.

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