

H | Deep vein thrombosis (DVT)

Clinical overview

Definitions

- **Deep vein thrombosis (DVT):** The presence of a blood clot in a deep vein (Mayo Clinic, 2022b)
- **Thrombophlebitis:** Inflammation of a vein that can cause a blood clot to form (Mayo Clinic, 2017)
- **Thrombus:** A blood clot that develops inside a blood vessel and stays in place (Mayo Clinic, 2022b)
- **Embolus:** A blood clot that develops inside a blood vessel and subsequently breaks loose and travels to another location (Mayo Clinic, 2022c)
- **Pulmonary embolus (embolism):** A deep vein thrombosis that breaks loose and travels to the lungs (Mayo Clinic, 2022c)

Causes

- 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)
(Mayo Clinic, 2022b)

Signs and symptoms

- Edema (swelling) of affected extremity
- Pain or tenderness in the affected extremity
- Increased warmth or redness of affected extremity
(Mayo Clinic, 2022b)

Diagnostic tools

- Medical history and physical exam
- D-dimer test (measures a protein in the blood that is released when a blood clot dissolves)
- Ultrasound/Venous Doppler
- Venography (dye is injected into the vein followed by X-ray of the extremity)
- MRI (magnetic resonance imaging) and CT (computed tomography) scanning (used less frequently)
(Venous Thromboembolism - Deep Vein Thrombosis [DVT] | NHLBI, NIH, 2022)

Treatment

• Medications

- Anticoagulants (blood thinners) decrease the blood's clotting ability and prevent existing clots from getting bigger (blood thinners do not break up existing clots; existing clots usually dissolve with time). Anticoagulant therapy may be used for three to six months or longer, or indefinitely, to prevent recurrence of blood clots.
- Thrombin inhibitors interfere with the blood-clotting process; they may be used for patients who cannot tolerate heparin.
- Thrombolytics break up blood clots quickly; they are used only in life-threatening situations, as they can cause sudden bleeding.

• Compression stockings

- **Inferior vena cava (IVC) filter** (to catch clots that break loose to prevent them from traveling to the lungs or other locations)

• Surgery to remove clot

(Mayo Clinic, 2022a)

Best documentation practices for healthcare providers

Subjective

The subjective section of the office note should document the presence of any current symptoms related to deep vein thrombosis (e.g., pain, swelling, redness, etc.).

Objective

The objective section of the office note should include any current associated physical exam findings (e.g., edema, redness, warmth, related diagnostic testing results, etc.).

Assessment

Describe each final diagnosis to the highest level of specificity, for example:

- Acute versus chronic
- Recurrent – distinguish between a **history of** recurrent DVTs (not present at the time of the encounter) versus a **current** recurrent DVT (present at the time of the encounter)
- Exact location
 - Upper or lower extremity, calf, thigh,
 - Laterality (left, right or bilateral)
 - Affected vein (femoral, tibial, etc.)

Plan

- Document a clear and concise treatment plan for DVT, linking related medications to the diagnosis.
- Include orders for diagnostic testing.
- Indicate in the office note to whom or where any referral or consultation requests are made.
 - Document when the patient will be seen again, even if only on an as-needed basis.

Coding tips

Long-term anticoagulation therapy

- Z79.01 is assigned for long-term (current) use of anticoagulants.
- 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 venous thrombosis and embolism.

Additional Reminders

- Category I80 excludes (Excludes1) venous embolism and thrombosis of lower extremities (I82.4-, I82.5-, I82.81-). An Excludes1 note indicates that the code excluded should not be used at the same time as the code above the Excludes1 note.
- There are no specific timelines for when DVT becomes chronic. Code assignment is based solely on the provider's specific description of the condition.
- Z86.718 represents Personal history of venous thrombosis and embolism.
(AAPC, 2023)

Coding examples

Example 1	
Medical record documentation	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 reviewed with and given to patient. Recheck 1 month.
Assessment	<ul style="list-style-type: none"> Long-term anticoagulant therapy for DVT
ICD-10-CM code	Z79.01 Long term (current) use of anticoagulants
Comments:	Documentation is vague and ambiguous. The coder should query the provider for clarification regarding whether Coumadin therapy is being administered as active treatment of a current 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	<ul style="list-style-type: none"> Acute right posterior tibial DVT
ICD-10-CM code	<ul style="list-style-type: none"> I82.441 Acute embolism and thrombosis of right tibial vein
Comments:	Documentation clearly supports the presence of a current, acute DVT with a specific site noted.

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	<ul style="list-style-type: none"> Hypertension controlled. Deep vein thrombosis left lower leg
ICD-10-CM code(s)	I10 Essential (primary) hypertension Z86.718 Personal history of other venous thrombosis and embolism
Comments:	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 (international normalized ratio) 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	I82.502 Chronic embolism and thrombosis of unspecified deep veins of left lower extremity Z79.01 Long term (current) use of anticoagulants
Comments:	DVT is specified as "chronic" and "slowly resolving" confirming it is still current.

References

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