What is venous thromboembolism (VTE)?

Venous thromboembolism (VTE) is the name given to blood clots that may form in people during illness, injury, or after surgery. These clots can be serious, so it is important you know how to reduce your risk of developing them, starting from when you are first admitted to hospital.

There are two different kinds of blood clots:

- **Deep vein thrombosis (DVT):** occurs when blood clots form in veins, usually deep inside the legs or in the pelvis, where they may cause symptoms like pain, tenderness, redness, or swelling of the leg.

- **Pulmonary embolism (PE):** occurs when a blood clot breaks off and moves through the veins to block blood vessels in the lungs. This may cause symptoms like shortness of breath, coughing up blood, chest pain, faintness, and loss of consciousness. If the clot blocks enough blood vessels in the lungs, the person can die.

What is the Venous Thromboembolism Prevention Clinical Care Standard?

The *Venous Thromboembolism Prevention Clinical Care Standard* contains seven quality statements describing the care that you should expect to receive during and after your hospital stay to help reduce your risk of blood clots.

This fact sheet explains each quality statement, what it means, and what you can do to have an active role in your care.

For more information or to read the full clinical care standard visit: [www.safetyandquality.gov.au/ccs](http://www.safetyandquality.gov.au/ccs)

### 1 Assess and document VTE risk

**What the standard says**

A patient potentially at risk of VTE (as determined by local hospital/unit policy) receives a timely assessment of VTE risk using a locally endorsed evidence-based tool to determine their need for VTE prevention. The result is documented at the time of the assessment, in a place that is easily accessible to all clinicians involved in the patient’s care.

**What this means for you**

If you are going to hospital, your doctor or another member of your clinical team (such as a nurse or midwife) will conduct a thorough assessment to see what risk you have of developing blood clots during or following your hospital stay. Your risk depends partly on the reason why you are in hospital and the treatment you need to have, and partly on other risk factors you may have. Therefore, you will be asked about the things that can increase your risk including:

- Your general health and mobility
- Whether you or a family member have had blood clots before
- Other health conditions you might have such as cancer, an infection, heart disease (such as heart failure), or a history of stroke
- Any medicines you are taking (including over-the-counter and complementary medicines), as some medicines, like an oral contraceptive, can make blood clotting more likely.

Once your risk of developing blood clots has been assessed, the findings will be recorded so that all the clinicians involved in your care understand what your risk is and whether you need preventive care.

**Top tip:** Ask if you are at risk of blood clots, and tell your doctor about your medical conditions and any medicines you are taking.
2 Develop a VTE prevention plan, balancing the risk of VTE against bleeding

What the standard says
A patient assessed to be at risk of VTE has a prevention plan developed that balances the risk of thrombosis against the risk and consequences of bleeding (as an adverse effect of VTE prevention medicines). Other contraindications to VTE prevention methods are also considered before offering any to the patient.

What this means for you
If you are assessed to be at risk of developing blood clots, your clinician will develop a clot-prevention plan with you by weighing up your risk of clotting against your risk of bleeding, and what the consequences could be if you unexpectedly bleed. This is important as the medicines used to prevent clots can increase the risk of bleeding in some people and make it harder to stop bleeding if it starts. Your risk of bleeding depends on the reason why you are in hospital and the treatment you need to have, as well as other risk factors you might have that can make you more likely to bleed. Therefore, you will be asked about:

• Whether you or a family member have a history of a bleeding disorder or a health condition that may increase your risk of bleeding such as kidney or liver disease, high blood pressure, stroke, or peptic ulcer disease

• Whether you have had any recent bleeding (for example, in the last week)

• Any medicines you might be taking (including over-the-counter and complementary medicines) as some medicines may increase your risk of bleeding

• Whether you have any other conditions where clot-prevention might further increase your risk of bleeding.

The information you provide will then help your clinician weigh up your risk of bleeding against your risk of clotting, and help to develop the best clot-prevention plan for you.

Top tip: Be involved in the development of your clot-prevention plan by asking what will be done in hospital to help reduce your risk of blood clots and how this affects your risk of bleeding.

3 Inform and partner with patients

What the standard says
A patient at risk of VTE receives information and education about VTE and ways to prevent it tailored to their risks and needs, and shares in decisions regarding their VTE prevention plan.

What this means for you
Your doctor or another member of your clinical team will provide you with information and education about blood clots and explain why you may be at risk. Information about the possible ways to prevent blood clots will be tailored to your risk factors and presented in a format that you understand so that you can share in decisions about your care, and participate in activities to help prevent blood clots forming.

You will have the opportunity to ask questions and be involved in the development of your clot-prevention plan, which will be based on the results of your risk assessment. Your clinician will also consider the methods you prefer to use to reduce your clotting risk if there are different options available.

Methods commonly used to prevent VTE include anti-clotting medicines and/or mechanical methods (such as compression stockings). Information about the different types of prevention methods suitable for you will therefore include:

• The risks and benefits
• Correct use
• Any monitoring that may be needed
• Precautions you should take while using clot-prevention

• The symptoms of blood clots in the leg (such as pain, swelling, or tenderness of the leg or ankle) or lung (such as unexpected shortness of breath or chest pain), or bleeding, and what to do if these occur.

Unless told otherwise, you will also be encouraged to get out of bed as soon as possible during your hospital stay and to remain hydrated regardless of whether you need anti-clotting medicines or mechanical methods to prevent blood clots. This is because not moving for long periods of time and dehydration can increase your risk of developing blood clots.

Top tip: Ask for information about blood clots, how you can tell if they are developing, and what you can do to help reduce your risk (for example, whether you need to do any physical activity such as walking). Where there are options, talk to your doctor about your preferences for clot prevention.
4 Document and communicate the VTE prevention plan

What the standard says
A patient’s VTE prevention plan is documented and communicated to all clinicians involved in their care.

What this means for you
When your clot-prevention plan has been discussed with you and decided upon, your clinician will document your plan so that all the clinicians involved in your care know what clot-prevention method you need.

Top tip: Know that all of the clinicians involved in your care should be aware of your clot-prevention plan.

5 Use appropriate VTE prevention methods

What the standard says
A patient requiring a VTE prevention plan is offered medicines and/or mechanical methods of VTE prevention according to a current, locally endorsed, evidence-based guideline taking into consideration the patient’s clinical condition and their preferences.

What this means for you
Your clot-prevention plan will be based on current guidelines for VTE prevention. The clot-prevention method that is best for you depends on several factors, including your other health conditions, other medicines you are taking (including all prescribed, over-the-counter and complementary medicines), and the methods of prevention you prefer to use.

Your clinician will provide you with information and education about the specific clot-prevention methods you are using, including their risks and benefits, how they should be used, how long they should be used for, possible side effects and how to manage these, and any precautions you should take while using clot-prevention. You will have the opportunity to discuss your clot-prevention plan with your clinicians, and to ask questions to make sure you understand how to use the prevention methods correctly. Your clinician may also ask you questions to confirm that you understand the information you have been given.

Top tip: Ask questions to make sure you understand how to use your clot prevention correctly, and the risks and benefits of its use.

6 Reassess risk and monitor the patient for VTE-related complications

What the standard says
During hospitalisation, a patient’s thrombosis and bleeding risk is reassessed and documented at intervals no longer than every seven days, whenever the patient’s clinical condition or goals of care change, and on discharge from hospital. The patient is also monitored for VTE-related complications each time risk is reassessed.

What this means for you
Your risk of developing blood clots, bleeding, or other problems relating to clot-prevention will be regularly reassessed throughout your hospital stay to make sure you continue to get the care you need.

If there are any changes to your risk or if you have had any problems because of your clot-prevention (for example a clot or bleed), your doctor or other member of your clinical team will discuss this with you. There may be a need to adjust your clot-prevention plan or to review whether you might be at further risk of clotting or bleeding.

Top tip: Tell your clinician if you think your condition has changed, or if you think you have had any problems as a result of your clot-prevention (such as a bleed), or symptoms that might be caused by a clot that is developing.
7 Transition from hospital and ongoing care

What the standard says

A patient at risk of VTE following hospitalisation receives a written discharge plan or care plan before they leave hospital, which describes their ongoing, individualised care to prevent VTE following discharge. The plan is discussed with the patient before they leave hospital to ensure they understand the recommended care and follow-up that may be required. The plan is also communicated to the patient’s general practitioner or ongoing clinical provider within 48 hours of discharge so that ongoing care to prevent VTE can be completed in accordance with the plan.

What this means for you

Before you leave hospital, your doctor or another member of your clinical team will provide you with a written discharge plan or care plan, as well as information and education about the ongoing care you need to help prevent blood clots after you leave hospital.

You will be involved in the development of your plan, which may need to be updated as your condition changes. The plan will summarise the reason why you came to hospital, any clot-prevention methods you received, whether you require clot-prevention blood tests or follow-up appointments after you leave hospital, and a list of any medicines you need to keep taking. You will also be provided with information to ensure you know to use any medicines safely.

Your general practitioner or other ongoing clinical provider will also receive a copy of your plan within two days of you leaving hospital so that they can ensure the care you need to prevent blood clots is completed in line with your plan.

Top tip: Before you leave hospital, ask what you need to do to help reduce your risk of blood clots after you have been discharged (for example, whether you need to see your general practitioner). It is important that you continue any care that is recommended to prevent blood clots after a hospital stay.

To help reduce your risk of blood clots during and after your hospital stay

1. Ask if you are at risk of blood clots, and tell your doctor about your medical conditions and any medicines you are taking
2. Be involved in the development of your clot-prevention plan by asking what will be done in hospital to help reduce your risk of blood clots and how this affects your risk of bleeding
3. Ask for information about blood clots, how you can tell if they are developing, and what you can do to help reduce your risk (for example, whether you need to do any physical activity such as walking). Where there are options, talk to your doctor about your preferences for clot prevention
4. Know that all of the clinicians involved in your care should be aware of your clot-prevention plan
5. Ask questions to make sure you understand how to use your clot prevention correctly, and the risks and benefits of its use
6. Tell your clinician if you think your condition has changed, or if you think you have had any problems as a result of your clot-prevention (such as a bleed), or symptoms that might be caused by a clot that is developing
7. Before you leave hospital, ask what you need to do to help reduce your risk of blood clots after you have been discharged (for example, whether you need to see your general practitioner). It is important that you continue any care that is recommended to prevent blood clots after a hospital stay.

The Australian Commission on Safety and Quality in Health Care has produced this clinical care standard to support the delivery of appropriate care for a defined condition. The clinical care standard is based on the best evidence available at the time of development. Healthcare professionals are advised to use clinical discretion and consideration of the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian, when applying information contained within the clinical care standard. Consumers should use the information in the clinical care standard as a guide to inform discussions with their healthcare professional about the applicability of the clinical care standard to their individual condition.