

Management of Peripheral Intravenous Catheters

Clinical Care Standard

The *Management of Peripheral Intravenous Catheters Clinical Care Standard* describes the care that you should receive if you have a peripheral intravenous catheter (PIVC) inserted during your hospital stay. This fact sheet lists 10 statements about the expected standard of care, and explains what each statement means for you.



What is a peripheral intravenous catheter (PIVC)?

If you need to have medicines or fluids directly into your bloodstream, a small flexible tube will be inserted into a vein. This device is called a PIVC or an IV, cannula or drip. It is usually inserted into a vein in your arm, hand or foot and is connected to medicines and fluids when you need them.



What is a clinician?

We use the word 'clinician' to mean any member of your healthcare team. A clinician can mean a doctor, nurse, midwife, Aboriginal health worker, pharmacist, or another qualified healthcare professional involved in your care.

1 Assess intravenous access needs



What the standard says

A patient requiring medicines or fluids is assessed to identify the most appropriate route of administration for their clinical needs.

What this means for you

If you need to have medicines or fluids, your clinician will assess what is the best way for you to have them. It might be as a tablet or liquid that you can swallow, or as an injection into your muscle or under your skin.

Sometimes the best way might be directly into your bloodstream. Your clinician will talk with you about whether a PIVC is right for you. In some cases, a different way of delivering treatment into your bloodstream might be needed. This may depend on:

- How long you need to have treatment
- The condition of your veins and the chances of being able to successfully insert a PIVC

- The treatment you need to have and whether it could damage your veins, especially if given for a long time
- Your history of having PIVCs inserted and whether there were any problems, such as finding your veins
- Where the PIVC should be inserted, taking into account your preferences and whether therapy can be delivered safely
- Whether you already have a device in place for receiving medicines and fluids intravenously.

2 Inform and partner with patients



What the standard says

A patient requiring intravenous access receives information and education about their need for the device and the procedure. Their consent is obtained and they are advised on their role in reducing the risk of device-related complications.

What this means for you

Unless you are unconscious or unable to respond, your clinician will explain why you need to have a PIVC before it is inserted. If your PIVC is inserted in an emergency or while you are unconscious, a carer, relative, or someone who is authorised to make decisions for you, if available, will receive this information.

Your clinician will discuss the risk of complications that might happen if you have a PIVC, how likely they are, and their potential impact. Complications could include blockage, pain, redness, swelling, skin irritation or infection. Information will be presented in a way that you understand so that you can make an informed decision about having a PIVC, and know how you can help prevent complications.

You may need to have a PIVC inserted as part of another procedure you are having. For example, if you are having surgery, a PIVC might be needed to give you the anaesthetic. In these instances, the need for a

PIVC will be explained to you as part of your broader treatment plan.

Your clinician will ask questions to make sure you understand the information you have been given. You can ask questions and tell them about problems you have had in the past with PIVCs, or anything that you are concerned about. The information you provide your clinician is important for your comfort and to reduce the risk of complications.

Your healthcare team will also check with you to make sure your PIVC continues to function properly and is safe for use. You can ask questions and discuss any concerns you have while your PIVC is in place, as well as after it has been removed.

3 Ensure competency



What the standard says

A patient's PIVC is inserted and maintained by clinicians who are trained and assessed as competent in current evidence-based practices for vessel health preservation and preventing device-related complications, relevant to their scope of practice. Insertion by a clinician working towards achieving competency is supervised by a clinician who is trained and assessed as competent.

What this means for you

If you need to have a PIVC inserted, you have a right to expect that the member of your healthcare team who performs the procedure has relevant training and assessment of their skills in this area. In some instances, clinicians who are in training may insert your PIVC under supervision. You can also expect that the clinicians inserting and looking after your PIVC will keep their skills and knowledge up to date.

4 Choose the right insertion site and PIVC

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What the standard says

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What this means for you

- Your clinician will assess you to see where your PIVC should be placed, considering:
- Your preferences for its location and whether therapy can be delivered safely there
- The condition of your veins and skin
- How much you can move
- Whether it will be painful
- How likely it is that they will be able to insert it on the first attempt.

If possible, your PIVC will be placed in the arm that you use the least and locations where problems are more likely to develop will be avoided.

5 Maximise first insertion success

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What the standard says

The likelihood of inserting a PIVC successfully on the first attempt is maximised for each patient, according to a health service organisation's process for maximising first-time insertion success.

What this means for you

Your health service will have a process that describes what your healthcare team should do to avoid too many attempts at inserting your PIVC. For example, if your clinician cannot locate your veins, the process outlines what steps they should follow. They might need to refer you to another clinician or use an ultrasound to help, or use other supportive therapies such as local anaesthetics to help keep you comfortable while your PIVC is inserted.

If they try to insert your PIVC and cannot, it can cause your treatment to be delayed. This is why it is important for your clinician to conduct a thorough assessment of the risk factors that might make inserting your PIVC difficult, and for you to say if you have had any issues with PIVCs in the past.

6 Insert and secure



What the standard says

A clinician inserting a patient's PIVC uses standard precautions, including aseptic technique. The device is secured and a sterile, transparent, semi-permeable dressing is applied unless contraindicated.

What this means for you

Standard precautions are steps your clinician will use to help reduce your risk of infection when they are providing care for you, including when they insert your PIVC. This will include thoroughly cleaning their hands immediately before they touch you and your PIVC, using gloves, and other techniques to prevent germs from getting onto your PIVC and into your bloodstream.

If there is any hair at the insertion site, your clinician may remove it with clippers. They will not shave the hair with a razor as this increases the risk of infection. An antiseptic liquid will be used to clean your skin before your PIVC is inserted, and a dressing will be applied after insertion to help the PIVC stay in place and prevent infection. This is why it is important to tell your clinician about any allergies you have, including allergies to any tapes, so the antiseptics and dressings that are used are best for you.

7 Document decisions and care

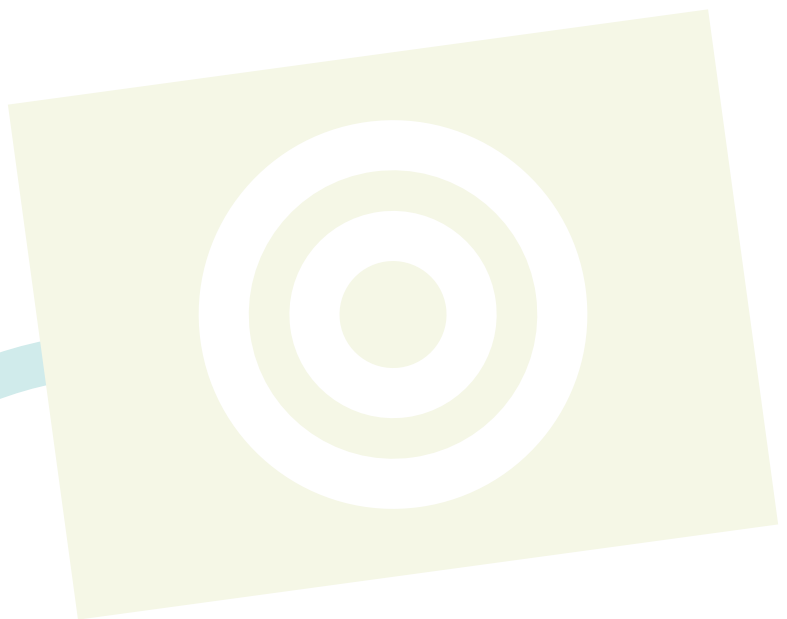


What the standard says

A patient with a PIVC will have documentation of its insertion, maintenance and removal, and regular review of the insertion site.

What this means for you

Information about your PIVC will be discussed with you and recorded in your healthcare record or chart. This may include why the PIVC is needed, the type of PIVC, when it was inserted and by whom, its location, the therapy you are receiving, when the PIVC is expected to be removed and when it is actually removed. Your PIVC will be checked regularly and the findings will be noted down. If complications develop, the complications and what your clinician did about them will also be recorded. This will help your healthcare team to be aware of decisions made about your PIVC and any problems that arise.



8 Routine use: inspect, access and flush

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What the standard says

A patient's PIVC and insertion site is inspected by a clinician for signs of complications at least once per shift or every eight hours, when accessing the device, and if the patient raises concerns. Standard precautions including aseptic technique are used when performing site care and accessing the PIVC. Patency is checked and flushing is performed at intervals according to local policy to assess device function and minimise risk of device failure.

What this means for you

To make sure your PIVC continues to function properly, your clinician will check your PIVC at least once every shift or every eight hours, each time they use the device, and if you raise any concerns about it.

Specifically, your clinician will check:

- For pain, swelling or redness of your skin around your PIVC
- For any signs of infection, including fever (feeling hot, cold or shivery)
- For leaking or blockage
- That your PIVC is still firmly in place
- That the dressing covering the insertion site has not become bloodstained, wet or loose
- Whether anything else about your PIVC is concerning you.

Your clinician will provide regular care to prevent complications from developing, but it is important that you tell your clinician if you notice any of these problems.

Each time your PIVC needs to be touched, your clinician will thoroughly clean their hands and take precautions to make sure the PIVC stays clean. They will check that your PIVC is flowing properly (patency), and will also flush it from time to time to make sure it does not get blocked.

It is important that you do not touch, fiddle with or move your PIVC.

9 Review ongoing need

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What the standard says

The ongoing need for a patient's PIVC is reviewed and documented at least daily, or more often if clinically indicated.

What this means for you

Your clinician will review your PIVC at least once a day to make sure that it is still needed. If it is not needed any more, it will be removed. If your PIVC has not been used in the last 24 hours, ask your clinician if you still need it.

10 Remove safely and replace if needed

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What the standard says

A patient with a PIVC will have it removed when it is no longer needed or at the first sign of malfunction or local site complications. A new PIVC will be inserted only if ongoing peripheral vascular access is necessary, consistent with the replacement recommendations in the current version of the *Australian Guidelines for the Prevention and Control of Infection in Healthcare*.

What this means for you

Your PIVC will be removed when it is no longer needed. If you are unsure when it will be removed, ask your clinician.

If your PIVC has malfunctioned or there are signs of problems such as pain, redness or swelling, and your treatment is not yet finished, your clinician will need to remove your PIVC and replace it with a new one. Your clinician will also make sure that your PIVC is replaced as often as current Australian guidelines recommend.

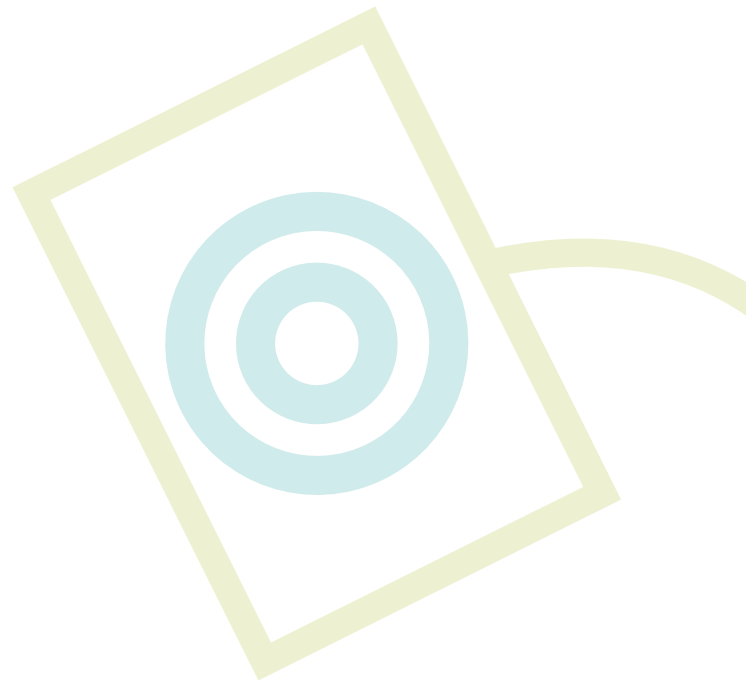
If you are going home and your PIVC is still in place, ask your clinician if it can be removed.

Questions?

If you have any questions about your PIVC talk to your clinician.

For more information about the clinical care standard, please visit: safetyandquality.gov.au/ccs.

You can also contact the Clinical Care Standards project team at: ccs@safetyandquality.gov.au.



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.