

The Aged Care Infection Prevention and Control Guide

A supplementary resource for the **Australian
Guidelines for the Prevention and Control of
Infection in Healthcare** for aged care settings

Chapter 5

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Published by the Australian Commission on Safety and Quality in Health Care

Level 5, 255 Elizabeth Street, Sydney NSW 2000

Phone: (02) 9126 3600

Email: mail@safetyandquality.gov.au

Website: www.safetyandquality.gov.au

ISBN: 978-1-922880-81-9

© Australian Commission on Safety and Quality in Health Care 2024

All material and work produced by the Australian Commission on Safety and Quality in Health Care is protected by copyright. The Commission reserves the right to set out the terms and conditions for the use of such material.

As far as practicable, material for which the copyright is owned by a third party will be clearly labelled. The Commission has made all reasonable efforts to ensure that this material has been reproduced in this publication with the full consent of the copyright owners.

With the exception of any material protected by a trademark, any content provided by third parties, and where otherwise noted, all material presented in this publication is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International licence](https://creativecommons.org/licenses/by-nc-nd/4.0/).



Enquiries about the licence and any use of this publication are welcome and can be sent to communications@safetyandquality.gov.au.

The Commission's preference is that you attribute this publication (and any material sourced from it) using the following citation:

Australian Commission on Safety and Quality in Health Care. Aged Care IPC Guide. Sydney: ACSQHC; 2024.

Disclaimer

The content of this document is published in good faith by the Australian Commission on Safety and Quality in Health Care for information purposes. The document is not intended to provide guidance on particular healthcare choices. You should contact your healthcare provider on particular healthcare choices.

Chapter 5: Wound care, procedures and invasive devices

Key points

- **A clinical procedure is the set of steps required to perform a specific clinical activity safely. Invasive clinical procedures are performed by trained aged care workers (such as enrolled or registered nurses) and usually require clinical instruments such as catheters, scalpels and forceps to conduct the procedure.**
- **Effective wound care and infection prevention strategies are essential to maintaining wellbeing and quality of life.**
- **Using an aseptic technique protects older people from developing an infection from invasive clinical procedures.**
- **Many clinical procedures performed in aged care settings require the insertion, removal or management of invasive devices, such as urinary catheters and percutaneous endoscopic gastrostomy (PEG) tubes.**
- **Invasive medical devices are a common source of infections and provide a route for microorganisms to enter the body.**
- **Invasive devices should only be used when absolutely necessary and for the shortest period of time necessary.**
- **There should be clear documentation of the insertion, and maintenance of the device and a plan for its removal, as well as daily review of the ongoing need for the device.**
- **Resources for the management of invasive devices in aged care covered in this chapter are:**
 - **indwelling urinary devices**
 - **enteral feeding tubes**
 - **suprapubic catheters**
 - **subcutaneous catheters**
 - **peripherally inserted vascular catheters (PIVCs)**
 - **peripherally inserted central catheter (PICC) lines**
 - **central venous catheter devices**
 - **stoma care**
 - **fistula care and management.**

Clinical procedures

A clinical procedure is a set of steps that is required to perform a specific clinical activity safely. In aged care, there are many clinical procedures that have a direct risk of spreading an infection to the older person. Invasive clinical procedures are those that are performed by a trained aged care worker (such as an enrolled or registered nurse) and usually require clinical instruments such as catheters, scalpels and forceps to conduct the procedure.

All clinical procedures involve some level of infection risk. When performing each procedure, infection risks should be identified and minimised. All clinical procedures should have documented processes that show aged care workers how to perform the procedure safely and minimise the spread of infections. Aseptic technique as discussed in **Chapter 4** is a set of practices that helps to protect older people during invasive clinical procedures by employing infection control measures that minimise, as far as practicable, the presence of microorganisms.



Resources

Aseptic technique processes and equipment is discussed in further detail in **Chapter 4**.

Wound prevention and management


Effective wound care and infection prevention strategies are essential to maintaining wellbeing and quality of life. Wound infections can occur when a significant number of microorganisms enter an area of broken skin and the body is unable to fight them off. If a wound is infected, it will usually show signs such as purulent discharge, spreading redness, increased pain, swelling and being hot to touch. Alternatively, the older person may present with systemic symptoms such as fever, tachycardia or changes in blood pressure. The process of a wound becoming infected is usually gradual and is dependent on the amount and severity of the microorganisms on the wound and the older person's immune response. **Figure 2** shows the impact that microorganisms can have on wound healing.

Preventing avoidable wounds and the breakdown of skin are important to reduce harm to the older person. All clinical aged care workers should have a basic understanding of the signs and symptoms of wound infection to ensure a proactive approach to care, including appropriate escalation or intervention. Wound prevention and reducing the risk of the wound becoming infected can be achieved through:

- Improving an older person's immune response through nutrition, enough sleep, and good management of pre-existing health needs
- Take steps to avoid pressure ulcers from developing
- Keeping wounds clean and using appropriate dressings
- Removing non-viable tissue (also known as debridement) by a qualified worker
- Skin moisturisation to assist with the prevention of dried, cracked skin and skin tears and the application of barrier creams to prevent incontinence-associated dermatitis
- Implementing standard and transmission-based precautions (such as hand hygiene, aseptic technique and personal protective equipment)
- Maintaining good hygiene practices when providing wound care

- Providing education to older people, families, and carers about wound care (especially about preventable wounds such as pressure injuries and skin tears) and preventive health care (such as diabetes management)
- Falls prevention education, strategies, and programs.

Figure 2: The effects of increasing numbers of microorganisms

<div style="display: flex; justify-content: space-between; align-items: center;"> Fewer More </div> 					
Phase	Contamination	Colonisation	Local infection	Spreading infection	Systemic infection or sepsis
MO* activity	MOs are on the wound; however, there is no multiplication	MOs multiply on the wound. Biofilm may develop	MOs have invaded the local tissue	MOs have invaded the surrounding tissues	MOs have entered the bloodstream and may spread and/or damage tissues and organs
Clinical progression	No impairment to healing	Impaired healing	Impaired healing	Impaired healing	Impaired healing
Clinical symptoms	No obvious clinical signs of infection	Clinical signs of infection may not be obvious	Usually clinical signs of infection localised to wound	Usually obvious clinical signs of infection and may include systematic symptoms such as fever and body aches	The older person is usually severely unwell

* MO = microorganism, also known as microbial burden

Source: Adapted from: [International Wound Infection Institute: Wound Infection in Clinical Practice 2022](#).

It is important to understand the factors that may be contributing to preventable wounds and infections so that interventions can be put in place. These interventions may include **auditing** (aseptic technique), **infection monitoring** and **feedback** to regularly review the incidence of wounds and the cause of preventable wounds.

Further information on auditing, infection monitoring, and feedback can be found in **Chapter 9**.

Invasive devices

Many clinical procedures performed in aged care settings require the insertion, removal or management of invasive devices. These devices provide a route for microorganisms to enter the body and are a common source of infections. Appropriate use of an invasive device is important in reducing the risk of that procedure. The procedure is the process of inserting the device, and the invasive device is the piece of equipment that enters the body – such as a catheter.

Invasive devices are those devices which in whole or part enter the body through an opening (such as the mouth or nose or through the skin) or through any surface of the body (through the skin such as a stoma), including catheters inserted for drainage (for example, urinary catheters), catheters for intravascular access (for example, peripheral intravenous catheter via the skin) or devices for feeding (for example, a PEG tube).

Many invasive devices that are inserted in hospital settings are often left in place for too long. It is likely that similar overuse or unnecessary prolonged use occurs in aged care. Before any invasive device is put in place, aged care workers should assess whether it is essential but also decide on when it should be removed and clearly document that plan.

Reducing the risk of infection

To reduce the risk of infection related to invasive devices, it is important to only use an invasive device when absolutely necessary. It is also important to ensure:

- The device is removed if it is no longer needed; for example, if an older person has an intravenous catheter inserted, once the clinical issue has been improved, and once an older person can consume fluid orally, the intravenous catheter should be removed, and oral therapy started
- All relevant aged care workers are trained and competent in the skills required for safe insertion, maintenance and removal of devices
- Older people and/or their carers who manage their own indwelling device, have received training on how to safely maintain the device
- The most appropriate device is selected for the older person if a device is needed
- The device is checked at every shift or service and removed as soon as no longer necessary
- The insertion, maintenance and removal of the device is documented, as are daily inspections and the ongoing need for the device
- The older person's clinical condition is monitored, including the insertion site and the device, for any signs and symptoms of infection
- The older person or their carer is aware of the infection risks associated with the device
- Appropriate systems are in place to monitor infection rates associated with invasive devices in residential and centre-based aged care organisations
- Processes and policies are developed that describe the proper insertion, use, management and removal of invasive devices.

Management of an invasive device

Before inserting any invasive device, older people should always be assessed to decide if their condition can be managed without the device.

If an invasive device is required, there should be clear documentation of its insertion and maintenance, and a plan for its removal, as well as regular reviews that confirm the ongoing need for the device. Older people who have an invasive device in place should receive regular monitoring, including observations of the insertion site and the invasive device for signs and symptoms of infection. In general, the time that an invasive device is in place should be as short as possible. The longer the time the invasive device is in place, the greater the risk of infection or other complications related to the device.

Practical strategies that can be used to minimise the risk of device-related infection during insertion and while managing invasive devices include the use of single-use sterile equipment, appropriate skin preparation solutions (for example, normal saline), appropriate personal protective equipment and adherence to aseptic technique including the [5 Moments for Hand Hygiene](#). An older person who has an invasive device should also be provided with education on the infection risk and the importance of self-care, hygiene and proper device maintenance.

The following steps can be taken to reduce the amount of time an invasive medical device is in place:

- Organisations should use best clinical evidence to provide advice on the maximum dwell time for invasive devices in local policies or procedures
- Clinicians (this may be the general or nurse practitioner) who have ordered the insertion of an invasive device should include instructions for the removal of the device in the older person's care plan or clinical notes
- The ongoing need for an invasive device should be reviewed routinely as part of the older person's care
- The insertion site should be regularly reviewed and details about the site condition should be documented in the clinical care notes
- If the older person develops signs of infection or other indications of complications related to the invasive device, their GP should be notified immediately to consider removal of the device, if safe
- Remove the device as soon as it is no longer necessary.



Practice point

An invasive device management plan

If an invasive device is inserted during an older person's hospital stay and there is no documented plan for removal, aged care organisations should contact either the hospital to request that a plan for removal is provided or a healthcare professional to review the plan (such as a nurse practitioner or the GP).

If the older person lives in the community, the home and community aged care organisation should encourage and support the older person to contact the hospital for further information or a discharge plan.

Types of invasive devices and clinical procedures in aged care

Indwelling urinary catheters

An indwelling urinary catheter is a flexible, hollow tube passed into the bladder through the urethra and is used to empty urine from the bladder. Indwelling urinary catheters are used in several situations, including urinary retention or obstruction, injury or surgery affecting urinary function, and urinary incontinence management associated with wound care or end-of-life care.

Most bacterial infections that are linked to urinary catheterisation gain access to the body through the urinary tract either through:

- A break in aseptic technique when managing or inserting the catheter (the infection may come from the aged care worker's hands)
- A reflux of bacteria from a contaminated urine drainage bag.

Many urinary tract infections are linked to catheterisation. Healthcare-associated urinary tract infections are associated with a range of negative outcomes including an increased hospitalisation rate and increased length of stay in hospitals. The risk of infection is related to the method and duration of catheterisation, the quality of catheter care and host susceptibility.



Resources

The longer a urinary catheter is in place, the greater the risk of a urinary tract infection (UTI). Aged care workers should know the signs and symptoms of a suspected UTI in an older person.

For more information on the clinical symptoms of a UTI, please refer to the Aged Care Safety and Quality Commission resources:

- [Clinical pathway for older people in aged care homes: suspected UTI \(with catheter\)](#)
- [Clinical pathway for older people in aged care homes: suspected UTI \(without catheter\)](#).

Steps for reducing the risk of infection from indwelling urinary devices include:

- **Assessing the need for catheterisation:** Limiting catheter use and reducing the amount of time they are in place are important strategies for reducing the risk of catheter-associated urinary tract infections. All aged care workers should clearly document the indications for the catheter before insertion
- **Education of aged care workers:** Aged care workers performing catheterisation or managing devices should be trained and competent in the technique and familiar with policies and procedures for insertion, maintenance and removal of indwelling urinary devices. Training should also include good record keeping practices about the insertion, maintenance and removal of catheters
- **Educating older people:** It is important to provide older people and their carer with information about the need for catheterisation and details about the insertion, and maintenance of their catheter and the plan for review and removal or changes

- **Implementing appropriate monitoring:** Monitoring of indwelling catheters is recommended. It can include monitoring for compliance with indications for insertion and documentation of processes and infections. It is important to analyse monitoring data to understand the rate of infections and why the infections are occurring. This promotes continuous quality improvement interventions to prevent these infections. Auditing compliance with the use of the aseptic technique is also recommended. As part of appropriate monitoring, aged care workers should know how to recognise UTIs (clinical symptoms and signs). UTIs are frequently overdiagnosed in health care and can contribute to antibiotic overuse.

Subcutaneous catheters

A subcutaneous catheter is a hollow, very thin tube inserted under the skin, directly into subcutaneous tissue (fat tissue) to deliver fluids or medicines for people who may have trouble swallowing or digesting medicines via the mouth.

Subcutaneous catheters are often used in palliative care to minimise the need for repeated injections.

Indwelling subcutaneous catheters can be used to deliver medicines as a bolus (once off) or via a continuous infusion (medicines delivered via a pump over a long period of time), which is usually delivered by a syringe driver.



Resources for safe management

- [Management of Subcutaneous Infusions in Palliative Care](#), Queensland Health
- [Guidelines for Subcutaneous Infusion Device Management in Palliative Care and other settings](#), Queensland Health, Centre for Palliative Care Research and Education

Suprapubic catheter

A suprapubic catheter is a tube that goes into the bladder through the lower abdominal wall above the symphysis pubis (pelvic bone). This tube is held in place by an internal balloon and the tubing continuously drains urine from the bladder.



Resources for safe management

- [Supra Pubic Catheter \(SPC\) – Adult Clinical Guideline, Competencies & Patient Information Leaflet](#), NSW Agency for Clinical Innovation
- [Urinary catheter insertion or change: \(7\) Change of suprapubic catheter](#), Queensland Health
- [Best practice guideline: long-term suprapubic catheter related care at home](#), Continence Nurses Society Australia

Percutaneous endoscopic gastrostomies

A PEG tube is a short tube surgically inserted into the stomach through the abdomen to deliver long-term nutrition. Contamination of feeds (the type of food delivered through the PEG) is a key concern in aged care settings, with contamination largely occurring during the preparation or administration of feeds and being linked to serious clinical infection. Most evidence concerning enteral feeding (feeding directly into the stomach or intestine) relates to gastrostomy or PEG.



Resources for safe management

- [*A Clinician's Guide: Caring for people with gastrostomy tubes and devices*](#), NSW Agency for Clinical Innovation

Intravascular catheters

Peripherally inserted vascular catheter: A PIVC is a small, flexible tube that is inserted through the skin into a small vein in the arm, hand or foot (peripheral vein). A PIVC is also known as a peripheral venous line or peripheral intravenous cannula, and commonly referred to as an 'IV' or a 'drip'. PIVCs are usually inserted in the arm. They allow medicines, hydration fluids, radiographic contrast media and blood products to be given directly into the bloodstream. They are associated with much higher rates of serious infections (for example, bloodstream infections) if left in place for more than 72 hrs or inserted with poor technique and/or in an emergency situation.



Resources for safe management

- [*Recommendations for the prevention of infection in intra-vascular device \(IVD\)*](#), Queensland Health
- [*Management of Peripheral Intravenous Catheters Clinical Care Standard*](#), ACSQHC
- [*Peripheral Intravenous Catheter \(PIVC\) Infection Prevention Clinical Directive*](#), SA Health, Government of South Australia

Peripherally inserted central catheter line: A PICC is a long, flexible tube that that is usually placed in one of the large veins in the upper arm in a hospital setting using a local anaesthetic. The tube is placed into a large vein above the heart. PICCs are used to administer medicines into the bloodstream without continually needing to insert a needle or intravenous catheter. PICCs can often be in place for months at a time and can be managed in either a residential and centre-based aged care setting or a home environment.

For many clinical conditions, including the treatment of infections, oral therapy can be as effective as intravenous therapy. Even if intravenous therapy is needed initially, the sooner the older person can be changed to oral therapy, and the catheter removed, the greater the reduction in the risk of acquiring serious infections.



Resources for safe management

- [*Peripherally Inserted Central Catheter \(PICC\) Dressing Management Clinical Guideline*](#), SA Health, Government of South Australia

Central venous catheter devices (CVC): A CVC can be a long or short tube inserted in the internal jugular, subclavian or femoral vein to deliver long-term intravenous medicine. There are a variety of reasons why a CVC may be inserted. Those managed outside of an acute care setting (such as the hospital) will usually be for outpatient chemotherapy treatment or haemodialysis/renal replacement therapy.

There are a variety of types of CVCs available – most commonly, aged care workers will be required to manage ports that are implanted underneath the skin with no exit site. The tube (or catheter) sits in a large vein to deliver medicine; however, the end of the tube exits the vein into the subcutaneous tissue and is attached to a subcutaneous infusion port that is in the upper chest of the older person. Serious and life-threatening bloodstream infections are commonly associated with CVCs. If their use can be avoided, then that infection risk is eliminated.



Resources for safe management

- [Central Venous Access Device: Clinical practice guide](#), NSW Health Agency for Clinical Innovation

Stoma care

The word stoma translates to ‘mouth’ or ‘opening’. A stoma is an opening on the body where an internal organ is attached to an exit site, allowing an exit site for body substances. Stomas are created for people who have experienced an injury or disease and cannot breathe or toilet normally. They include tracheostomies and colostomies.



Resources for safe management

- [Clinical Guidelines for Stomal Therapy Nursing Practice](#), Australian Association of Stomal Therapy Nurses
- [Managing peristomal skin complications](#), Wounds International

Fistula care and management of dialysis

An arterio-venous (AV) fistula is a vein that is created by connecting an artery and vein together. An AV fistula is a common access point used for haemodialysis (a blood cleaning process when the kidneys can no longer clean the blood on their own) that allows greater blood flow and makes inserting needles easier.



Resources

- [Fistula – caring for your fistula once you have started dialysis](#), Department of Health, Tasmania
- [Haemodialysis Access](#), National Kidney Foundation

Chapter 5 references

Agency for Clinical Innovation. ACI Urology Network – nursing. Supra pubic catheter (SPC) adult: clinical guideline, competencies & patient information leaflet. Sydney: ACI; 2014. https://aci.health.nsw.gov.au/_data/assets/pdf_file/0018/256131/ACI_SPCv2.pdf (accessed Apr 2024).

Agency for Clinical Innovation. Central venous access device: clinical practice guide. Sydney: ACI; 2021. <https://aci.health.nsw.gov.au/networks/icnsw/clinicians/cvad> (accessed Apr 2024).

Agency for Clinical Innovation, Gastroenterological Nurses College of Australia. A clinician's guide: caring for people with gastrostomy tubes and devices. Sydney: ACI; 2014. https://aci.health.nsw.gov.au/_data/assets/pdf_file/0017/251063/ACI-Clinicians-guide-caring-people-gastrostomy-tubes-devices.pdf (accessed Apr 2024).

Agency for Clinical Innovation. Pressure injury toolkit for spinal cord injury and spina bifida: signs of infection. Sydney: ACI; 2024. <https://aci.health.nsw.gov.au/networks/spinal-cord-injury/pi-toolkit/assessment/wound-assessment/signs-of-infection> (accessed Apr 2024).

Australian Association of Stomal Therapy Nurses. Clinical guidelines for stomal therapy nursing practice. AASTN; 2013. <https://stomalthrapy.au/wp-content/uploads/2022/03/2013-Clinical-Guidelines-Book.pdf> (accessed Apr 2024).

Australian Commission on Safety and Quality in Health Care. Infection prevention and control workbook 2023. Sydney: ACSQHC; 2023. <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/infection-prevention-and-control-workbook-2023> (accessed Apr 2024).

Australian Commission on Safety and Quality in Health Care. Management of Peripheral Intravenous Catheters Clinical Care Standard. Sydney: ACSQHC; 2021. <https://www.safetyandquality.gov.au/standards/clinical-care-standards/management-peripheral-intravenous-catheters-clinical-care-standard> (accessed Apr 2024).

Australian Commission on Safety and Quality in Health Care. The 5 Moments for Hand Hygiene in aged care – fact sheet. Sydney: ACSQHC; 2023. <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/5-moments-hand-hygiene-aged-care-fact-sheet> (accessed Apr 2024).

Best Practice Journal. When and how to use a syringe driver in palliative care. Best Practice Journal 2012;48. <https://bpac.org.nz/bpj/2012/november/syringedrivers.aspx> (accessed Apr 2024).

Centre for Palliative Care Research and Education. Guidelines for subcutaneous infusion device management in palliative care and other settings, 3rd edition. Queensland Health; 2021. https://www.health.qld.gov.au/_data/assets/pdf_file/0029/155495/guidelines.pdf (accessed Apr 2024).

Chopra V. Central venous access: device and site selection in adults. UpToDate; 2024. <https://www.uptodate.com/contents/central-venous-access-device-and-site-selection-in-adults> (accessed Apr 2024).

Cousins S, Blencowe NS, Blazeby JM. What is an invasive procedure? A definition to inform study design, evidence synthesis and research tracking. BMJ Open 2019;9(7):e028576.

Department of Health Tasmania. Fistula – caring for your fistula once you have started dialysis. Tasmanian Government. <https://www.health.tas.gov.au/health-topics/kidney-renal/kidney-treatments/fistula-caring-your-fistula-once-you-have-started-dialysis> (accessed Apr 2024).

Haesler E, Carville K. Australian standards for wound prevention and management, 4th edition. Australian Health Research Alliance, Wounds Australia and WA Health Translation Network; 2023. [https://woundsaustralia.org/int/woundsaus/uploads/Shop/Merchandise/2023%20Australian%20Standards%20for%20Wound%20Prevention%20and%20Management%204th%20\(1\).pdf](https://woundsaustralia.org/int/woundsaus/uploads/Shop/Merchandise/2023%20Australian%20Standards%20for%20Wound%20Prevention%20and%20Management%204th%20(1).pdf) (accessed Apr 2024).

Infection Prevention Helpline. Principles of IPC in wound care. Australian Primary Health Care Nurses Association; 2022. <https://www.apna.asn.au/files/Co-Branded%20Wound%20Care%20Fact%20Sheet.pdf> (accessed Apr 2024).

International Wound Infection Institute. Wound infection in clinical practice. London: Wounds International; 2022. <https://woundinfection-institute.com/wp-content/uploads/IWII-CD-2022-web-1.pdf> (accessed Apr 2024).

Lim L-L, Bennett N. Improving management of urinary tract infections in residential aged care facilities. Australian Journal of General Practice 2022;51(8):551–7.

National Health and Medical Research Council. Australian guidelines for the prevention and control of infection in healthcare. Canberra: Australian Government; 2019. <https://www.nhmrc.gov.au/about-us/publications/australian-guidelines-prevention-and-control-infection-healthcare-2019> (accessed Apr 2024).

National Kidney Foundation. Hemodialysis access. The Foundation; 2015. <https://www.kidney.org/atoz/content/hemoaccess> (accessed Apr 2024).

Palliative Care Aged Care Evidence. Syringe drivers. Adelaide: Palliative Care Aged Care Evidence; 2021. <https://www.palliaged.com.au/Evidence-Centre/Evidence-Summaries/Syringe-Drivers> (accessed Apr 2024).

Pickering D, Marsden J. Techniques for aseptic dressing and procedures. Community Eye Health 2015;28(89):17.

Queensland Health. Caring for and changing your supra-pubic catheter (SPC). Brisbane: Queensland Government; 2020. https://www.health.qld.gov.au/data/assets/pdf_file/0024/422619/spc-care.pdf (accessed Apr 2024).

Queensland Health. Management of subcutaneous infusions in palliative care. Brisbane: Queensland Government; 2020. <https://www.health.qld.gov.au/cpcrc/subcutaneous/section3> (accessed Apr 2024).

Queensland Health. Recommendations for the prevention of infection in intra-vascular devices. Brisbane: Queensland Government; 2019. <https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/infection-prevention/intravascular-device-management> (accessed Apr 2024).

Queensland Health. Urinary catheter insertion or change: (7) Change of suprapubic catheter. Brisbane: Queensland Government; 2023. <https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/clinical-pathways/residential-aged-care-clinical-pathways/all-pathways/urinary-catheter-insertion-or-change> (accessed Apr 2024).

SA Health. Peripherally inserted central catheter (PICC) dressing management clinical guideline. Government of South Australia; 2020. <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+programs+and+practice+guidelines/infection+and+injury+management/healthcare+associated+infections/indwelling+medical+device+management/vascular+access+device+management> (accessed Apr 2024).

SA Health. Vascular access device management. Government of South Australia; 2020. <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+programs+and+practice+guidelines/infection+and+injury+management/healthcare+associated+infections/indwelling+medical+device+management/vascular+access+device+management> (accessed Apr 2024).

South Eastern Sydney Local Health District. Subcutaneous needle insertion and management. NSW Health; 2022. <https://www.seslhd.health.nsw.gov.au/sites/default/files/documents/SESLHDPR%2019%20-%20Subcutaneous%20Needle%20Insertion%20and%20Management.pdf> (accessed Apr 2024).

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Sweeney A. Best practice guideline: long-term suprapubic catheter related care at home. Continence Nurses Society Australia; 2021. <https://www.consa.org.au/evidence-for-practice/links-to-clinical-guidelines> (accessed Apr 2024).

Wounds Australia. Factsheet 8: your skin care plan. Melbourne: Wounds Australia. https://woundsaustralia.org/?code=&action=printsippet&snippet=pg_155&printtemplate=on&builder=on&menulitem=Factsheet+8 (accessed Apr 2024).

Wounds International. Managing peristomal skin complications quick guide. Wounds International; 2016. <https://woundsinternational.com/quick-guides/managing-peristomal-skin-complications-quick-guide/> (accessed Apr 2024).

**AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE**

**AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE**

Level 5, 255 Elizabeth Street, Sydney NSW 2000
GPO Box 5480, Sydney NSW 2024

Phone: (02) 9126 3600

Email: mail@safetyandquality.gov.au

Website: www.safetyandquality.gov.au