

# S-FC05: Prescribe, fit, train and review an off-loading device for foot protection

## Scope and objectives of clinical task

This CTI will enable the health professional to:

- prescribe an off-loading device for a foot at high-risk, as identified on foot wound assessment
- safely measure and fit the client for the prescribed off-loading device
- train the client and carer/s or facility staff (if relevant) in the care and use of the prescribed off-loading device including safety checks, maintenance and hygiene requirements, limitations and risks associated with use
- review use of the prescribed off-loading device including further adjustments and evaluation of the benefits and risks associated with its use

### VERSION CONTROL

Version: 1.0

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The CTI reflects best practice and agreed process for conduct of the task at the time of approval and should not be altered. Feedback, including proposed amendments to this published document, should be directed to AHPOQ at: [allied\\_health\\_advisory@health.qld.gov.au](mailto:allied_health_advisory@health.qld.gov.au).

This CTI should be used under a skill sharing framework implemented at the work unit level. The framework is available at: <https://www.health.qld.gov.au/ahwac/html/calderdale-framework.asp>

Please check <https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp> for the latest version of this CTI.

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- if the prescription of a removable cast walker (RCW) is in the planned scope of the skill share-trained health professional prescribe and review an ankle joint stiffness prophylactic exercise program.

Note 1: the local service will determine which off-loading devices are included in the scope of this CTI for an individual health professional. This CTI includes the following off-loading techniques: RCW, post-operative shoe with semi-compressed felt.

Note 2: The purpose of this CTI is to provide timely intervention for a client with a high-risk foot as part of the management plan informed by the skill shared foot assessment. It is intended to support comprehensive wound management and may be part of a collaborative practice service delivery model, for example as a bridging intervention until reviewed at the local high-risk foot service or to support telehealth service delivery.

Note 3: This CTI refers specifically to the application of a RCW and a post-operative shoe with semi-compressed felt for a foot with a foot wound or at high risk of developing a foot wound. Additional training and competency assessment would be required if the skill share-trained health professional is to assess, prescribe, fit, train and/or review these devices for other purposes in the local service e.g. after hallux valgus surgery, metatarsal stress fracture, fibula fracture, chronic plantar fasciitis.

Note 4: This CTI refers to the application of semi-compressed felt to be applied to the plantar surface of the foot with an aperture to accommodate the wound and in conjunction with a post-operative shoe. Applications of semi-compressed felt that include multiple layering or adjustments for foot deformity are note included and clients should be reviewed at the local high-risk foot service.

## Requisite training, knowledge, skills and experience

### Training

- Mandatory training requirements relevant to Queensland Health/HHS clinical roles are assumed knowledge for this CTI.
- If not part of mandatory requirements complete patient manual handling techniques, including the use of walk belts, and sit to stand transfers.
- Competence in the following CTIs:
  - CTI S-FC01: Assess the risk of foot complications
  - CTI S-FC02: Doppler ultrasound of the foot and ankle
  - CTI S-FC03: Calculate an Ankle Brachial Pressure Index (ABI) and Toe Brachial Pressure Index (TBI)
  - CTI S-FC04: Assess a foot wound and provide basic/bridging intervention.

### Clinical knowledge

To deliver this clinical task a health professional is **required** to possess the following theoretical knowledge:

- purpose and rationale for applying an off-loading device for a high-risk foot including basic clinical reasoning for deciding between removable and non-removable devices
- the range of off-loading devices including, indications for use for each, limitations, safety features and maintenance requirements
- method to measure, fit, and adjust each device for off-loading within the service or defined in the scope of this skill shared task in the local service
- if RCWs are in the planned scope of the skill share-trained health professional for the local service, the common exercises prescribed to prevent ankle stiffness whilst wearing a RCW

- equipment hire/purchase protocols, processes, suppliers and schemes including the Department of Veterans' Affairs (DVA) and Medical Aids Subsidy Scheme (MASS) as relevant to the local service.
- The knowledge requirements will be met by the following activities:
  - review of the 'Learning resource'
  - receive instruction from the lead health professional in the training phase
  - read and discuss the following references/resources with the lead health professional at the commencement of the training phase:
    - local client handouts and resources used for the task including ankle exercises, care of a RCW
    - manufacturers guidelines for each device available in the local service
    - guidelines and processes for supplying clients with an off-loading device including eligibility criteria local processes for falls risk assessment and functional mobility assessments.

## Skills or experience

- The following skills or experience are not specifically identified in the task procedure but support the safe and effective performance of the task or the efficiency of the training process and are:
  - **required** by a health professional in order to deliver this task:
    - objectively assess and determine the risk of developing a pressure injury using local procedures, guidelines and/or processes
    - provide general advice and education regarding reducing the risk of pressure injury.
  - **relevant but not mandatory** for a health professional to possess in order to deliver this task:
    - experience in fitting client plasters, splints, braces and/or orthotic devices.

## Indications and limitations for use of a skill shared task

The skill share-trained health professional shall use their independent clinical judgement to determine the situations in which he/she delivers this clinical task. The following recommended indications and limitations are provided as a guide to the use of the CTI but the health professional is responsible for applying clinical reasoning and understanding of the potential risks and benefits of providing the task in each clinical situation.

### Indications

- The client has participated in a foot wound assessment and is identified as having a wound or at high risk of developing a wound on a load bearing aspect of the foot i.e. plantar surface of the foot, medial or lateral borders and dorsum and/or apex of digits.

### Limitations

- The client requires application of an off-loading device including a RCW that the local health service has determined to be out of scope of this skill sharing CTI or that the individual health professional has not been trained and assessed as competent to implement.
- The client's initial presentation is for the fit and supply of medical grade footwear. Implement local processes for access to medical grade footwear services.
- The client has orthopaedic, surgical or medical restrictions. These will be documented via protocols, theatre notes, or medical orders e.g. on bed rest, weight bearing status (non, touch, partial, full), total hip replacement precautions, mobilise within range of a movement brace only or sternotomy

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precautions for upper limb weight bearing. The client with restrictions must be cleared to undertake the task by the medical team or through a protocol/care pathway and any restrictions must be adhered to during the task. If restrictions are unable to be maintained during the task, it should be ceased. If restrictions are unclear, consult with the treating team.

- The wound is due to a pressure injury related to bed rest and/or positioning. The site includes the posterior heel, lateral malleolus or apex of digits. Implement local guidelines and processes for pressure injury management. If unclear, liaise with the healthcare team.
- The client uses a wheelchair as their primary method of mobility. Determine if the foot is at risk due to wheelchair fitting e.g. poor foot placement on the foot rests. If yes, liaise with a health professional with expertise in wheelchair prescription. Off-loading principles should be addressed by correct wheelchair prescription. If a wound is present implement a foot wound dressing management plan e.g. CTI S-FC04.
- The client is unable to meet the care requirements of the device as required for use e.g. to remove the RCW to change the dressing and inspect the foot, to keep the semi-compressed felt dry during bathing. This may be due to cognitive problems, arthritic hands, finger dexterity, low back pain, body dimensions or compliance problems. Consider alternative off-loading strategies and if prescription is unclear, liaise with a high-risk foot service and/or implement local processes for access.
- The client has a deformity to the foot that makes prescription difficult e.g. Charcot foot, history of significant foot trauma, significant fore foot spreading or retracted digits. Implement local processes for access to a high-risk foot service.
- The client presents with a spreading infection. Apply a dressing and implement local procedures for immediate medical review.
- If the client's skin appears fragile i.e. papery, thin, waxy skin appearance or a history of skin tears, cease the task and implement local processes for access to a high-risk foot service.

## Safety and quality

### Client

The skill share-trained health professional shall identify and monitor the following risks and precautions that are specifically relevant to this clinical task:

- if the client has a large calf, oedema or swelling present in the lower limb, a RCW will not be able to be fitted correctly. Consider alternative off-loading strategies i.e. semi-compressed felt or post-operative shoe.
- Client's that have been identified as having signs of peripheral arterial disease through Doppler ultrasound and/or ABI testing are not suitable for a RCW. Consider alternative off-loading strategies (semi-compressed felt or surgical footwear) and implement local processes for ongoing management at a high-risk foot service.
- if the client has a local infection, confirm a review will occur with a medical practitioner within 24 hours. Apply a dressing and continue with the off-loading prescription.
- if the client reports falls or presents with a high risk of falling, a RCW should not be prescribed. See the 'Learning resource' for the Guide to conducting a walking history. Implement local processes for falls risk assessment and management. Consider a post-operative shoe and/or semi-compressed felt as part of the management plan.
- As part of the prescription process the client will need to mobilise with the planned off-loading device in situ. If the client appears unsteady while walking or reports unsteadiness with the off-loading device in situ, a functional mobility assessment is required for safety. The assessment must be undertaken

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by a trained health professional with expertise in mobility assessments, including the prescription of walking aids e.g. CTI S-MT01 and S-MT02.

- Clients should be checked for allergies to adhesives prior to prescribing semi-compressed felt. If present, consider alternative off-loading strategies.
- Clients who are at high risk for recurrent foot wounds should be assessed for medical grade footwear while the off-loading device is being implemented. Co-ordination with the high-risk foot service while wound healing with an off-loading device is occurring, will improve timeliness of care.

## Equipment, aids and appliances

- RCWs are single client use devices and should not be re-used on other clients. Clients should always wear a sock during the fitting process. Once fitted and supplied, the client should be educated how to clean and maintain the boot. Spare linings are available to aid washing and cleaning. Wash the linings as per the manufacturer's guidelines. Refer to local processes for the supply of spare linings.
- To avoid walking injuries due to unequal leg lengths, clients wearing a RCW should wear a shoe of the same height on the unaffected side. It is likely that the contralateral shoe will need a 'build-up'. This can be done via an adjustable heel lift, removable even-up device or by adding an additional sole at the shoe repairers. See the 'Learning resource'.
- Post-operative shoes are designed with a narrower fit for women's sizes and a wider fit for men's sizes. When fitting post-operative shoes to the client, determine the foot width requirement and match appropriately, irrespective of gender.
- Semi-compressed felt is available in a variety of thicknesses. The required thickness is determined by the client's weight and the size of the deformity. The heavier the client and the larger the deformity, the thicker the semi-compressed felt required. However, if the felt is too thick it can increase the risk of pressure areas elsewhere. If uncertain regarding the required felt thickness, liaise with the podiatrist as part of the prescription process.
- When cutting semi-compressed felt ensure the edges are angled to assist with pressure distribution. If the edges are perpendicular, pressure will be increased at the boundary, this can be uncomfortable and also place the client at further risk of injury.

## Environment

- The bottom of the post-operative shoe and RCW is designed with a rocker sole and can be slippery. Clients should be cautioned to take extra care when walking, including reducing the speed of walking to match the environment e.g. in wet and slippery environments like bathroom and toilet areas including reinforcing the use of water management strategies, when using stairs always use the rail.

# Performance of Clinical Task

## 1. Preparation

- Semi-compressed felt, post-operative shoes or a RCW planned for supply and fit.
- Client resources for the planned off-loading device and prophylactic ankle exercise program.

## 2. Introduce task and seek consent

- The health professional checks three forms of client identification: full name, date of birth **plus one** of the following: hospital UR number, Medicare number, or address.
- The health professional introduces the task and seeks informed consent according to the Queensland Health Guide to Informed Decision-making in Health Care, 2<sup>nd</sup> edition (2017).

## 3. Positioning

The client's position during the task should be:

- sitting comfortably in a supportive chair or on a height adjustable plinth.

The health professional's position during the task should be:

- in a position to allow access to the lower limb for sizing and fitting of the off-loading device.

## 4. Task procedure

- The task comprises the following steps:
  1. Use information collected from the medical chart to determine the indication for the client to use an off-loading device. This includes the outcome of the foot assessment, wound assessment and information on mobility. See the 'Learning resource'.

Note: if the client has not completed a foot and wound assessment, cease the task. If indicated, complete an assessment of the foot and wound with the client i.e. CTI S-FC01 and CTI S-FC04.
  2. Determine any additional client requirements, including any off-loading preferences, physical or financial limitations. Refer to the 'Limitations' and 'Safety and quality' sections and required readings in the 'Learning resource'.
  3. Select the most appropriate off-loading device for trial. See Table 1 in the 'Learning resource'. If the prescription decision is unclear, liaise with a health professional with expertise in this task prior to proceeding with the prescription process.
  4. Educate and demonstrate (if necessary) the use of the off-loading device to the client and/or carer.
  5. Adjust and fit the selected device to the client using the manufacturer's instructions.
  6. Review the client's ability to mobilise with the off-loading device in situ. See the 'Safety and quality' section.
  7. If required, make adjustments to the off-loading device for comfort and function. Repeat step 6.
  8. Instruct the client to check their feet after 30 minutes of wear. If signs of abrasion or signs of pressure injury occur, instruct the client to cease wearing the device and contact for immediate review. If the examination is normal, double the review period of wear and inspection i.e. 1 hour, 2 hours, 4 hours, 8 hours. The client should then maintain wear and resume their daily foot care inspection regime.
  9. Provide education to the client for the care of the device including maintenance, periods of review, personal hygiene and if using a RCW, prophylactic ankle exercise program.
  10. Based on the information collected, determine if the off-loading device provides the goals of prescription and make a recommendation to the client and team regarding the client's use of the device and/or any further management plans.



## 5. Monitoring performance and tolerance during the task

- Common errors and compensation strategies to be monitored and corrected during task include:
  - the equipment creates a new falls risk e.g. the client is unable to position themselves to fit and adjust the RCW or post-operative shoe to the lower limb without loss of balance or when mobilising with the device appears unsteady. See the ‘Safety and quality’ section.
  - new devices should be reviewed within 7 days to identify any complications, adverse reactions and to review the clinical effectiveness. If the wound has deteriorated at review, consult with the medical team immediately.
- Monitor for adverse reactions and implement appropriate mitigation strategies as outlined in the ‘Safety and quality’ section above.

## 6. Progression

- Task progression strategies include:
  - The off-loading device should continue until the wound has healed and continue for 2 weeks post healing.
  - If the client requires a long-term device for foot protection due to deformity or recurrent foot wounds, this should be determined prior to the wound being healed. Long term footwear strategies are generally prescribed by a podiatrist and can be prescribed whilst off-loading strategies are occurring or should commence as soon as possible after wound healing.

## 7. Document

- Document the outcomes of the task as part of the skill share-trained health professional’s entry in the relevant clinical record, consistent with documentation standards and local procedures, commenting on the:
  - location of the wound or deformity
  - off-loading device prescribed including any particulars e.g. the location of semi-compressed felt (plantar aspect), the size and style of post-surgical shoe or RCW fitted and supplied
  - education provided to the client e.g. wear and care of the device, prophylactic ankle exercise program, warnings for safety including inspection frequency
  - the period for review and plan for ongoing management e.g. review at high-risk clinic, functional mobility assessment or falls assessment local pathway commenced.
- The skill shared task should be identified in the documentation as “delivered by skill share-trained (insert profession) implementing S-FC05: Prescribe, fit, train and review an off-loading device for foot protection” or similar wording.

## References and supporting documents

- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2<sup>nd</sup> edition). [https://www.health.qld.gov.au/\\_data/assets/pdf\\_file/0019/143074/ic-guide.pdf](https://www.health.qld.gov.au/_data/assets/pdf_file/0019/143074/ic-guide.pdf)

# Assessment: Performance Criteria Checklist

S-FC05: Prescribe, fit, train, and review an off-loading device for foot protection

**Name:**

**Position:**

**Work Unit:**

Performance Criteria	Knowledge acquired	Supervised task practice	Competency assessment
	Date and initials of supervising AHP	Date and initials of supervising AHP	Date and initials of supervising AHP
Demonstrates knowledge of fundamental concepts required to undertake the task through observed performance and the clinical reasoning record.			
Identifies indications and safety considerations for the task and makes appropriate decisions to implement the task, including any risk mitigation strategies, in accordance with the clinical reasoning record.			
Completes preparation for the task including planned off-loading device (RCW, semi-compressed felt with post-operative shoes) and relevant client resource/s.			
Describes the task and seeks informed consent.			
Prepares the environment and positions self and client appropriately to ensure safety and effectiveness of the task, including reflecting on risks and improvements in the clinical reasoning record where relevant.			
<p>Delivers the task effectively and safely as per the CTI procedure, in accordance with the 'Learning resource'.</p> <ol style="list-style-type: none"> <li>a) Clearly explains and demonstrates the task, checking the client's understanding.</li> <li>b) Uses information collected from foot and wound assessments to determine the indication for and suitability for the selected off-loading device.</li> <li>c) Selects the most appropriate off-loading device for trial.</li> <li>d) Educates the client/carer and demonstrates use of the off-loading device.</li> <li>e) Correctly adjusts and fits the off-loading device.</li> <li>f) Reviews the client's ability to mobilise with the off-loading device in situ.</li> <li>g) If required, makes adjustments to the off-loading device for comfort and function and repeats step 6.</li> <li>h) Instructs the client to check their feet and provides a suitable regime.</li> <li>i) Provides education to the client for the care of the device.</li> <li>j) Develops a plan to assess the effectiveness of the off-loading device and makes a recommendation to the client and team regarding the client's use of the device and/or any further management plans.</li> </ol>			





**Comments:**

**Record of assessment competence:**

Assessor name:	Assessor position:	Competence achieved: / /
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**Scheduled review:**

Review date: / /
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# S-FC05: Prescribe, fit, train and review an off-loading device for foot protection

## Clinical Reasoning Record

The clinical reasoning record can be used:

- as a training resource, to be completed after each application of the skill shared task (or potential use of the task) in the training period and discussed in the supervision meeting
- after training is completed for the purposes of periodic audit of competence
- after training is completed in the event of an adverse or sub-optimal outcome from the delivery of the clinical task, to aid reflection and performance review by the lead practitioner.
- The clinical reasoning record should be retained with the clinician's records of training and not be included in the client's clinical documentation.

Date skill shared task delivered: \_\_\_\_\_

### 1. Setting and context

- insert concise point/s outlining the setting and situation in which the task was performed, and their impact on the task

### 2. Client

#### **Presenting condition and history relevant to task**

- insert concise point/s on the client's presentation in relation to the task e.g. presenting condition, relevant past history, relevant assessment findings

#### **General care plan**

- insert concise point/s on the client's general and profession-specific/allied health care plan e.g. acute inpatient, discharge planned in 2/7

#### **Functional considerations**

- insert concise point/s of relevance to the task e.g. current functional status, functional needs in home environment or functional goals. If not relevant to task - omit.

#### **Environmental considerations**

- insert concise point/s of relevance to the task e.g. environment set-up/preparation for task, equipment available at home and home environment. If not relevant to task - omit.

#### **Social considerations**

- insert concise point/s of relevance to the task e.g. carer considerations, other supports, client's role within family, transport or financial issues impacting care plan. If not relevant to task - omit.

#### **Other considerations**

- insert concise point/s of relevance to the task not previously covered. If none - omit.

### 3. Task indications and precautions considered

#### Indications and precautions considered

- insert concise point/s on the indications present for the task, and any risks or precautions, and the decision taken to implement/not implement the task including risk management strategies.

### 4. Outcomes of task

- insert concise point/s on the outcomes of the task including difficulties encountered, unanticipated responses

### 5. Plan

- insert concise point/s on the plan for further use of the task with this client including progression plan (if relevant)

### 6. Overall reflection

- insert concise point/s on learnings from the use of the task including indications for further learning or discussion with the lead practitioner

#### Skill share-trained health professional

Name:

Position:

Date this case was discussed in supervision:

Outcome of supervision discussion:

#### Lead health professional (trainer)

Name:

Position:

/ /

e.g. further training, progress to final competency assessment

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# Prescribe, fit, train and review an off-loading device for foot protection: Learning resource

## Background

Off-loading is the process of redistributing force, from the wound and pressure points at risk, to a wider area of contact. Non-removable cast walkers are considered to be best practice for the treatment of diabetic foot wounds on the plantar surface of the foot. Non-removable devices, such as contact casts, require specialist skills and training to apply and services may be limited or unavailable in some areas. Non-removable cast walkers also add additional risks for the client if not appropriately prescribed or properly applied. The skill share-trained health professional will need to assess the client's suitability for a non-removable cast walker, be aware of which services are available locally including referral pathways to facilitate best practice.

The next recommended option for off-loading management are removable cast walkers, which demonstrate excellent offloading properties on the plantar surface of the foot provided the device is worn at all times when weight bearing. The use of a removable device allows the client and other health professionals to check the health of the foot and wound frequently. Conversely removable devices are less effective if not worn as recommended.

Some clients have clinical contra-indications for cast walkers (removable and non-removable) and some client's articulate unwillingness to have such devices due to heat discomfort, impact on ability to drive and aesthetics. Where contra-indications or other client factor preclude the use of a removable cast walker for a client with a plantar foot wound the application of semi-compressed felt with post-operative shoe are considered appropriate.

Wounds located on the dorsal, medial or lateral aspect of the foot or digits do not require the use of a removable cast walker for offloading. These wounds may require offloading to reduce pressure and shear from footwear uppers. The use of semi-compressed felt and/or a post-operative shoe is clinically appropriate in these cases.

This CTI includes the use of the following off-loading devices: a removable cast walker (RCW) and semi-compressed felt with a post-operative shoe.

## Required reading

- Diabetic Foot eLearning course. Available through iLearn at: <https://central.csds.qld.edu.au/central/courses/176>
  - Ulceration managementNote this module is revision from CTI: S-FC04: Assess a foot wound and provide basic/bridging intervention
- International Working Group on the Diabetic Foot (2016). IWGDF Guidance on footwear and offloading interventions to prevent and heal foot ulcers in patients with diabetes. Available at: [http://www.iwgdf.org/files/2015/website\\_footwearoffloading.pdf](http://www.iwgdf.org/files/2015/website_footwearoffloading.pdf)
- Raspovic A, Waller K, Wong WM (2016). The effectiveness of felt padding for offloading diabetes-related foot ulcers, at baseline and after one week of wear. Diabetes Research and Clinical Practice 121: 166-172. Available through CKN.
- Richie D (2012). Why are we missing the boat when offloading diabetic foot ulcers? Podiatry Today. Available at: <https://www.podiatrytoday.com/blogged/why-are-we-missing-boat-when-offloading-diabetic-foot-ulcers>

- Manufacturers guidelines for the off-loading devices available in the local service and in the scope for the skill share-trained health professional (RCW, post-operative shoe, semi-compressed felt) including fitting instructions and care of each device.
- Local guidelines and processes for supplying clients with RCW, post-operative shoe including eligibility criteria and co-payment contributions.
- Local client handouts and education resources for the off-loading devices in scope for the local service e.g. care and maintenance of RCW, prophylactic ankle exercise program.

## Required viewing

- RosalindFranklinU (2012). CLEAR – A patient's guide to understanding offloading diabetic foot ulcers. Available at: <https://www.bing.com/videos/search?q=off+loading+techniques+foot+ulcer&qpv=off+loading+techniques+foot+ulcer&view=detail&mid=EE3F8EC0B0AB6E169B53EE3F8EC0B0AB6E169B53&&FORM=VRDGAR>
- Libbyjtlo (2012). How to put on your walking boot. Available at: <https://www.bing.com/videos/search?q=+application+moon+boot+non+removable&&view=detail&mid=F609DCC5EE3EE3B3F991F609DCC5EE3EE3B3F991&&FORM=VDRVRV>

### *Example client handout (Queensland Health employees only)*

- Queensland Government: Metro South Health (2015). Princess Alexandra Hospital: Prosthetic/orthotic and podiatry services department. Nextep Walker (Moon Boot) Patient information. Available at: <http://paweb.sth.health.qld.gov.au/sqrm/qiu/brochures-posters/documents/pros-ort-podiatry-moon.pdf>

## Optional reading

- Mrdjenovich DE (2010). Off-loading practices for the wounded foot: concepts and choices. Journal of American College of Certified Wound Specialists 2(4):73-78. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3601925/>

## Guide to conducting a walking history

Information regarding the client's walking history may be obtained from the client's medical record and during a subjective examination. It involves determining the following:

- how does the client usually mobilise? Do they use any supports? If yes, what type of supports are required e.g. assistance of another person, verbal cueing, manual guidance, a walking aid (walking stick, 4 wheeled walker), wheelchair or scooter?
- if the client requires assistance or uses a walking aid the client will need a walking assessment by a health professional with competence in walking assessment as part of the prescription process e.g. CTI S-MT01: Functional walking assessment. If the client uses a walking aid, the health professional will require competence in the training and review of walking aids e.g. CTI S-MT02: Prescribe, train and review of walking aids
- has the client had any falls in the previous 12 months whilst walking? Determine the number and cause of these falls e.g. slip, trip, hypotension, dizziness, visual disturbances, medication change. Were any injuries sustained? If the client reports a fall in the previous 12 months or is observed to be unsteady whilst standing or walking, the client will require a falls assessment. Implement local



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processes for a falls assessment as part of implementing this CTI e.g. liaise with a health professional with expertise in falls assessment or implement CTI S-MT08: Assessment and management of falls risk and risk reduction strategies for older persons in community settings using the FROP-Com.

## Risk of pressure injury assessment

As part of this CTI the health professional must demonstrate skills or experience in:

- objective assessment of developing a pressure injury and
- provide general advice and education for reducing the risk of pressure injury by using the local procedures guidelines and/ or processes.

Each service are respondent to the [NSQHS Standard 8 Preventing and managing pressure injuries](#).

Further information is available from the Patient Safety and Quality Improvement Service – Pressure Injury Prevention Resources available at: <http://gheps.health.qld.gov.au/psu/pip/resources.htm> including education sessions on pressure injuries and the lower limb at <https://player.vimeo.com/video/285367901>

## Assessment for off-loading devices

### Non-removable cast walker

Contraindications include:

- Moderate-severe Peripheral Arterial Disease (PAD)
- Moderate-severe infection
- Heavily exudating wound
- Mild PAD WITH mild infection
- Non-adherence to wearing the device, or history of non-compliance
- High falls risk
- Lifestyle factors i.e. driving, work
- Depp sinus tracts
- Extreme dermatitis
- Excessive or fluctuating oedema
- Cast claustrophobia
- Client declines against clinician advice<sup>1</sup>

### Removable cast walker

- Contraindications
- Moderate-severe PAD
- Moderate – severe infection
- Falls risk
- Client declines against clinician advice

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<sup>1</sup> Metro North Hospital and Health Service (n.d.) Plantar forefoot wound offloading pathway (Draft).

## Selecting an off-loading device

When deciding which off-loading device to apply the clinician should use the hierarchy of:

1. Non-removable cast walker/contact casting (not within scope of this CTI, review assessment for off-loading devices and if no contraindications refer to a high-risk foot service for application).
2. RCW
3. post-operative shoe **and** semi-compressed felt
4. post-operative shoe **or** semi-compressed felt

**Table 1 Off-loading devices**

Off-loading Device	Limitations	Possible Performance Errors
<p><b>Removable Cast Walker (RCW)</b></p> <p>A pre-fabricated removable walking cast applied to the lower leg and foot. Fixed with Velcro closures. The ankle may be fixed or moving. Designed to allow walking whilst reducing plantar surface loading.</p> <p>For examples see:</p> <p>Aircast. Available at: <a href="https://www.djoglobal.com/our-brands/aircast">https://www.djoglobal.com/our-brands/aircast</a></p> <p>Vacodiaped. Available at: <a href="http://foot.oped.com.au/vacoped-diabetic/">http://foot.oped.com.au/vacoped-diabetic/</a></p> <p>Ossur Rebound Walker. Available at: <a href="https://www.ossur.com.au/injury-solutions/products/foot-and-ankle/walkers/rebound-diabetic-walker">https://www.ossur.com.au/injury-solutions/products/foot-and-ankle/walkers/rebound-diabetic-walker</a></p>	<ul style="list-style-type: none"> <li>• To be used for plantar surface wounds only. Non-plantar wounds including toe, dorsal or medial/lateral foot wounds are appropriate for a Post-operative shoe</li> <li>• Severe PAD, infection, lower limb wound, falls risk, surgical/medical restrictions, frail skin, deformity. See 'Limitations', 'Safety and quality' sections.</li> <li>• Client declines against clinician advice e.g. due to function including an inability to drive, heat, weight of the device, appearances, previous poor experience wearing the device. Advise the client that they are choosing sub-standard care at their choice. Offer post-operative shoe and semi-compressed felt as an alternative. If client continues to decline an off-loading device, arrange a review at a high-risk foot service for alternative options.</li> </ul> <p>Continue to monitor wound using CTI S-FC04. If indicated, refer to a high-risk foot service for ongoing management.</p>	<ul style="list-style-type: none"> <li>• Ensure the device has adequate width and length to accommodate the foot. Ensure the heel is positioned as far back in the device as possible when making this judgement.</li> <li>• Ensure the device accommodates the lower leg and calf muscle adequately. The device will not function properly if too much space exists around the leg or will cause discomfort and possibly injury if it is too tight in this region</li> <li>• Clients should also be provided with an even-up shoe leveller or similar device to reduce leg length discrepancies with walking as part of the prescribing process. For example, see Evenup shoe balancer available at: <a href="https://www.betterbraces.com.au/procare-evenup-shoe-balancer">https://www.betterbraces.com.au/procare-evenup-shoe-balancer</a></li> </ul>

Off-loading Device	Limitations	Possible Performance Errors
<p>As part of the scope of this CTI semi-compressed felt is to be applied in conjunction with a post-operative shoe. The semi-compressed felt accommodates the wound. The post-operative shoe distributes the plantar force through the rocker sole and accommodates any additional bulk generated by the semi-compressed felt</p> <p><b>Post-operative shoe</b></p> <p>A shoe that is applied to the foot only. Fixed with Velcro closures. Large enough to accommodate bandages and give protection during walking.</p> <p>For an example see: Dacro Post-op shoe. Available at: <a href="https://www.ossur.com.au/injury-solutions/products/foot-and-ankle/shoes/darco-medsurg-shoe">https://www.ossur.com.au/injury-solutions/products/foot-and-ankle/shoes/darco-medsurg-shoe</a></p> <p>Procure post-op shoe. Available at: <a href="https://www.betterbraces.com.au/procure-squared-toe-post-op-shoe-4">https://www.betterbraces.com.au/procure-squared-toe-post-op-shoe-4</a></p> <p><b>Semi-compressed felt</b></p> <p>Self-adhesive padding that can be applied to customise around the wound area and improve force distribution away from the wound and promote healing</p> <p>For examples see: Podopro semi-compressed felt. Available at: <a href="http://www.podopro.com/footcare_products_details.asp?ProductID=1&amp;LanguageID=1">http://www.podopro.com/footcare_products_details.asp?ProductID=1&amp;LanguageID=1</a> Hapla semi-compressed felt. Available at: <a href="http://www.hapla.co.uk/product-range/hapla-mixture-felt/">http://www.hapla.co.uk/product-range/hapla-mixture-felt/</a></p>	<ul style="list-style-type: none"> <li>High falls risk. Ensure client can walk with a steady gait while wearing the device. See 'Limitations', 'Safety and quality' sections.</li> <li>Clients who have an allergy/ skin irritation to adhesive should not have semi-compressed felt applied. They should be fitted and supplied with a post-operative shoe until reviewed by the high-risk foot service.</li> </ul>	<ul style="list-style-type: none"> <li>Need to match to the client's foot size to the semi-compressed felt and post-operative shoe. If device is too short the toes may be subjected to trauma, if too long it will create a trip hazard, if too wide potential to increase friction and cause a pressure injury.</li> <li>Consider the use of Men's sizing for wide or oedematous women's feet or women's sizing for narrow men's feet.</li> <li>Ensure the skin is clean and dry before applying the adhesive felt, consider the use of barrier film if any signs of existing skin irritation exist</li> </ul>

Figure 1 Decision-making flowchart for off-loading device

