

## D-VO02: Circumferential measurements of the lower limb

### Scope and objectives of clinical task

This CTI will enable the Allied Health Assistant (AHA) to:

- complete circumferential measures of the lower limb, including the foot and toes, in accordance with the Australasian Lymphology Association (ALA) guidelines.

#### VERSION CONTROL

Version: 1.0

Endorsed: (Professional) State-wide Directors of Occupational therapy and Physiotherapy Date approved: 13/08/2020

Approved: (Operational) Chief Allied Health Officer, Allied Health Professions' Office of Qld Date approved: 24/08/2020

Document custodian: Chief Allied Health Officer, Allied Health Professions' Office of Qld. Review date: 24/08/2020

Acknowledgements: Cairns and Hinterland Hospital and Health Service and Metro North Hospital and Health Services

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 delegation framework implemented at the work unit level. The framework is available at: <https://www.health.qld.gov.au/ahwac>

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

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# Requisite training, knowledge, skills and experience

## Training

- Completion of CTI D-WTS01 When to stop.
- Mandatory training requirements relevant to Queensland Health/Hospital and Health Service (HHS) clinical roles are assumed knowledge for this CTI.
- If not included in mandatory training, complete patient manual handling training including assisting a client from sitting to lying.

## Clinical knowledge

- The following content knowledge is required by an AHA delivering this task:
  - basic surface anatomy required to locate relevant anatomical landmarks used as measurement points for the task i.e. medial and lateral malleoli, mid-point of the metatarsal-phalangeal joints of the foot, mid-point of the tarsal-metatarsal joints of the foot (mid-foot).
  - the precautions for conducting circumferential measurements of the lower limb including common adaptations to the standardised measuring process and how to record these. Adaptations may be required due to the client being unable to lay supine, poor skin integrity, fragility or wounds.
- The knowledge requirements will be met by the following activities:
  - completing the training program/s (listed above).
  - reviewing the Learning Resource.
  - receiving instruction from an allied health professional in the training phase.

## Skills or experience

- The following skills are required by an AHA delivering this task:
  - use of the equipment and recording tools for conducting circumferential measurements of the upper limb.
- The following skills or experience are not identified in the task procedure but support the safe and effective performance of the task, and are required by an AHA delivering this task:
  - nil.

# Safety and quality

## Client

- The AHA will apply CTI D-WTS01 When to stop at all times.
- In addition, the following potential risks and precautions have been identified for this clinical task and should be monitored carefully by the AHA during the task:
  - for accurate measuring, the tape measure is placed against the client's skin. If the client needs to disrobe, provide a gown or towel to maintain modesty.
  - extra care with friction from the tape measure and limb movement on the board is required when wounds, fragile skin or exudate are present. Generally, dressings should be present over wounds or point/s of exudate. The location and size of dressing is recorded as a variation to standard measurements. Where dressings are not present over wounds or exudate, liaise with the

delegating health professional and implement any local processes to engage a team member with expertise in applying dressings.

- some clients may have specific positioning requirements due to pain, equipment limitations, orthopaedic or other restrictions. This information should be included in the delegation instruction and may include equipment safe working loads, hip precautions, weight bearing status, range of motion limitations or wounds/pressure area care and handling requirements. Restrictions must be adhered to at all times during the task. If during the task restrictions cannot be maintained, cease the task and inform the delegating health professional. If instructions are unclear or do not appear to match the client's requirements, liaise with the delegating health professional.

## Equipment, aids and appliances

- When placing the tape measure, the tape should fit snugly against the skin. The skin should not be indented or bulging over the tape measure. A synthetic retractable tape measure is recommended. A narrow measuring tape for toes can improve accuracy. If using a standard tape measure, avoid over tightening which may cause skin tears to the client or reduce measurement accuracy.
- If the lower limb is too long or wide for the measurement board, cease the task and liaise with the delegating health professional.

## Environment

- The safe working load of the plinth must be suitable for the client. If required equipment is unavailable, liaise with the delegating health professional prior to commencing the task.
- Ensure that an appropriate level of client privacy is maintained during the task e.g. door/curtains closed.

# Performance of clinical task

## 1. Delegation instructions

- Receive the delegated task from the health professional.
- The delegating allied health professional should clearly identify parameters for delivering the clinical task to the specific client, including any variance from the usual task procedure and expected outcomes. This may include:
  - patient handling or mobility requirements e.g. level of assistance with transfers, weight bearing status, orthopaedic restrictions or special positioning needs.
  - limb/s to be measured i.e. left, right or both.
  - required adjustments to standardised measurements. For example, the location of wounds and dressings or if the client is unable to lay supine, the alternative position and measurements to be taken.

## 2. Preparation

- The measuring board, set square, retractable tape measure and if required, toe measuring tape should be wiped over in preparation for measuring using the local cleaning procedures
- Skin marking pen
- Local measurement recording sheet.

### 3. Introduce task and seek consent

- The AHA introduces him/herself to the client.
- The AHA checks three forms of client identification: full name, date of birth, **plus one** of the following: hospital unit record (UR) number, Medicare number, or address.
- The AHA describes the task to the client. For example:
  - “I am going to measure around your leg/s and foot/feet at set points using this measuring board and tape and record the measurements. I will need to place a small pen mark on your skin”.
- The AHA seeks informed consent according to the Queensland Health Guide to Informed Decision-making in Health Care, 2<sup>nd</sup> edition (2017).

### 4. Positioning

- The client's position during the task should be:
  - lying on a plinth with the measuring board underneath the leg and the leg slightly abducted, and with,
  - the sole of the foot placed flat against the end of the measuring board and the dorsal surface of the foot aligned and facing upward.
  - The contralateral leg should be supported during measurement.
  - A folded towel placed against the contralateral hip can be used to reduce rotation of the pelvis.
- The AHA's position during the task should be:
  - standing beside the client with easy access to the limb to be measured. Adjust the plinth height to avoid bending or awkward postures.

### 5. Task procedure

- Explain and demonstrate (where applicable) the task to the client.
- Check the client has understood the task and provide an opportunity to ask questions.
- The task comprises the following steps.
  1. Place the required markings medially and laterally along the limb for measurement by using the set square. Ensure vertical alignment of the set square is maintained. Markings should be placed on the distal side of the set square.
  2. Circumferentially measure the limb, including the foot by placing the measuring tape distal to the marking on the skin. Measurements are read from the proximal edge of the tape.
  3. If part of the delegation instruction, measure the toes.
  4. Repeat steps 1-3 for the contralateral limb, unless instructed otherwise. Bilateral measurement allows for side to side comparison and monitoring of each limb.
- During the task:
  - provide feedback and correct errors in the performance of the task including:
    - the client may experience discomfort lying on the measuring board. Once the leg is marked remove the board promptly.
    - the client's heel may lose contact with the foot board during the marking process. If observed, pause the task. Re-position the foot and leg and instruct the client to remain relaxed with their heel touching the foot plate. Check markings are accurate and re-mark if required.

- if the client is unable to remain in a lying position e.g. due to pain or shortness of breath, reposition the client for comfort. This may include returning the client to sitting or standing. Liaise with the delegating health professional for an alternative measuring posture and points.
- monitor for adverse reactions and implement appropriate mitigation strategies as outlined in the “Safety and quality” section above including CTI D-WTS01 When to stop.
- At the conclusion of the task:
  - encourage feedback from the client on the task.
  - ensure the client is comfortable and safe.

## 6. Document

- Document the outcomes of the task in the clinical record, consistent with relevant documentation standards and local procedures. Include observation of client performance, expected outcomes that were and were not achieved, and difficulties encountered or symptoms reported by the client during the task.
- For this task the following specific information should be presented:
  - the limb side (left or right) for each series of measurements.
  - the location of each circumferential measurement. All measurements should be recorded in centimetres to the first decimal place, e.g. 20.8cm.
  - any adaptations or variances to standard measurements such as alternative position or location of dressings.

## 7. Report to the delegating health professional

- Provide comprehensive feedback to the health professional who delegated the task.

## References and supporting documents

- Australasian Lymphology Association (2013). Guideline for a National Standard Technique of Measurement of Lymphoedematous Limbs. Available at: [http://www.lymphoedema.org.au/public/7/files/Comms/ALA\\_Measuring\\_Standards.pdf](http://www.lymphoedema.org.au/public/7/files/Comms/ALA_Measuring_Standards.pdf)
- Australasian Lymphology Association (2012). Position Statement Circumferential Measurement Guideline. Available at: [http://www.lymphoedema.org.au/public/7/files/Comms/ALA\\_Circumferential\\_Measurement\\_Guideline.pdf](http://www.lymphoedema.org.au/public/7/files/Comms/ALA_Circumferential_Measurement_Guideline.pdf)
- Queensland Health (2015). Clinical Task Instruction D-WTS01 When to stop. Available at: <https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp>
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2<sup>nd</sup> edition). Available at: [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

## D-VO01: Circumferential measurements of the lower limb

**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.			
Obtains all required information from the delegating health professional, and seeks clarification if required, prior to accepting and proceeding with the delegated task.			
Completes preparation for the task including gathering and cleaning the following equipment: measuring board, set square, retractable tape measure, skin marking pen and recording sheet.			
Introduces self to the client and checks client identification.			
Describes the purpose of the delegated task and seeks informed consent.			
Positions self and client appropriately to complete the task and ensure safety.			
Delivers the task effectively and safely as per delegated instructions and CTI procedure. <ul style="list-style-type: none"> <li>a) Clearly explains the task, checking the client's understanding.</li> <li>b) Places required markings along the limb using the correct technique.</li> <li>c) Circumferentially measures the limb by placing the measuring tape distal to the skin marking, taking the readings from the proximal edge of the tape.</li> <li>d) If required, accurately measures the toes.</li> <li>e) During the task, maintains a safe clinical environment and manages risks appropriately.</li> <li>f) Provides feedback to the client on performance during and at completion of the task.</li> </ul>			
Documents the outcomes of the task in the clinical record, consistent with relevant documentation standards and local procedures.			
Provides accurate and comprehensive feedback to the delegating health professional.			

**Comments:**

Record of assessment competence:

Assessor name:	Assessor position:	Competence achieved:            /    /
Scheduled review:		
Review date:                    /    /		

# Circumferential measurements of the lower limb: Learning Resource

## Required reading

- Australian Lymphology Association (2004). Guideline for a National Standard Technique for measurement of lymphoedematous limbs. Available at:  
[http://www.lymphoedema.org.au/public/7/files/Comms/ALA\\_Measuring\\_Standards.pdf](http://www.lymphoedema.org.au/public/7/files/Comms/ALA_Measuring_Standards.pdf)
- Australian Lymphology Association (2012). Position paper: circumferential measurement guideline. Measurement of lymphoedematous limbs using an interval circumferential tape measurement technique. Available at:  
[http://www.lymphoedema.org.au/public/7/files/Comms/ALA\\_Circumferential\\_Measurement\\_Guideline.pdf](http://www.lymphoedema.org.au/public/7/files/Comms/ALA_Circumferential_Measurement_Guideline.pdf)
- Local measurement recording form.