

D-VO01: Circumferential measurements of the upper limb

Scope and objectives of clinical task

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

- complete circumferential measures of the upper limb, including the hand and fingers, in accordance with the Australasian Lymphology Association (ALA) guidelines.

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.

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.
- Completion of the following Queensland Health allied health assistant training modules (or corresponding units of competency in HLT43015 Certificate IV in Allied Health Assistance) or equivalent work-based learning:
 - Physiotherapy Learner Guide: Deliver and monitor a client-specific exercise program
 - 2.2. Positions and planes
 - 2.3 Anatomical movements

Access the module/s at: <https://www.health.qld.gov.au/ahwac/html/ahassist-modules>

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. ulna styloid process.
 - understanding the planes of movements and measurements at the shoulder for the purpose of positioning the limb for measurement e.g. understanding adaptation to usual 90° shoulder position.
 - the precautions for conducting circumferential measurements of the upper limb including common adaptations to the standardised measuring process and how to record these. Adaptations may be required due to 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.

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 fingers can improve accuracy. If using a standard tape measure, avoid over tightening which may cause skin tears or reduce measurement accuracy.

Environment

- To ensure measurement accuracy, equipment should be positioned at 90° abduction to the outstretched limb. A height adjustable, firm surface (plinth, tray table) and chair will assist. If the equipment cannot be adjusted to the correct position, liaise with the delegating health professional prior to taking measurements.
- The safe working load of the seat must be suitable for the client.

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:
 - limb/s to be measured i.e. left, right or both.
 - required adjustments to standardised measurements. For example, adjustments may be required if the client is unable to abduct the shoulder to 90° or to accommodate the location of dressings.

2. Preparation

- The measuring board, set square, retractable tape measure, and if required, finger measuring tape should be wiped over in preparation for measuring
- 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 arm/s and hand/s 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, 2nd edition (2017).

4. Positioning

- The client's position during the task should be:
 - seated with the arm abducted (out to side) and pronated (palm down) in a horizontal position, resting on the measuring board which is supported on a stable, flat surface.
 - with the end of the measuring board positioned at least two finger widths from the anterior axillary fold. On the recording datasheet note (in centimetres) the board position from the tip of the third finger, excluding the fingernail. At all times, ensure that the tip of the third finger is not touching the end of the measuring board (0cm).
- The AHA's position during the task should be:
 - standing behind the client with easy access to the limb to be measured. Adjust the plinth height to avoid bending or awkward postures. Be aware that the client's seat height may also require adjustment to maintain shoulder abduction at 90°.

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 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 hand 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 fingers.
 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:
 - to reduce strain on the structures at the shoulder, clients should be encouraged to stay sitting up during the task. If the client's posture changes during the task, instruct the client to sit back up and provide a timeframe. For example, “Try and stay sitting up. I have (x) measurements to go. Are you able to continue?”. If the client is unable or unwilling to resume the posture, cease the task.

- the client may turn their hand over (supinate) during the task or try and reach to the end of the board. During the task re-check the client's position. If required, pause the task and re-position the client using verbal cueing and/or manual guidance. If the client cannot maintain the required position, cease the task.
- 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.
 - any adaptations or variances to standard measurements such as location of dressings or alternative shoulder position.

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 (2004). 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
- 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
- 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 (2nd edition). Available at: https://www.health.qld.gov.au/_data/assets/pdf_file/0019/143074/ic-guide.pdf

Assessment: performance criteria checklist

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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"> a) Clearly explains the task, checking the client's understanding. b) Places required markings along the limb using the correct technique. 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. d) If required, accurately measures the fingers. e) During the task, maintains a safe clinical environment and manages risks appropriately. f) Provides feedback to the client on performance during and at completion of the task. 			
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:

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Record of assessment competence:

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

Review date: / /

Circumferential measurements of the upper 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
- 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
- National Lymphedema Network (2011). Position statement: screening and measurement for early detection of breast cancer-related lymphedema. Available at: <https://lymphnet.org/position-papers>
- Local measurement recording form