

# Clinical Task Instruction

DELEGATED TASK

## D-CM03: Blood Pressure measuring

### Scope and objectives of clinical task

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

- correctly measure and document a client's blood pressure taken at the arm using an observation machine
- identify indications for initiating blood pressure measurement

#### VERSION CONTROL

Version V1.0

Endorsed: (Professional) Allied Health Professions' Office of Queensland

Date approved: April 2016

Approved: (Operational) Chief Allied Health Officer, AHPOQ

Date approved: April 2016

Document custodian: Chief Allied Health Officer, AHPOQ

Review date: April 2019

The CTI reflects best practice and agreed process for conduct of the task at the time of publication and should not be altered. Requests for amendment or review of this document should be directed to AHPOQ: [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/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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# Requisite training, knowledge, skills and experience

## Training

- Completion of CTI D-WTS01 When to stop
- Mandatory training requirements relevant to Queensland Health / HHS clinical roles are assumed knowledge for this CTI.
- Achievement of the following competencies (which relate to HLT - Health Training Package qualification HLT43015 Certificate IV in Allied Health Assistance) would be beneficial:
  - Deliver and monitor a client-specific physiotherapy program

Note: if above competencies have not been achieved by the AHA as part of the formal Certificate training program, the workplace may implement workplace-based training that encompasses these competencies and provides equivalency of knowledge and skills.

## Clinical knowledge

The following content knowledge is required by an AHA delivering this task:

- Knowledge of basic anatomy and physiology to the extent required to undertake this task, including terminology such as systolic, diastolic and mean blood pressure, and positioning of blood pressure measurement devices.
- Knowledge of the indications for initiating blood pressure measurement.

The knowledge requirements will be met by the following activities:

- Completing training programs (listed above)
- Reviewing the Learning Resource
- Receiving instruction from an allied health professional in the training phase.

## Skills or experience

The following skills or experience are required by an AHA delivering this task:

- Nil

The following skills or experience are desirable for an AHA delivering this task:

- Nil

## Safety and quality

### Client

- The AHA will apply CTI D-WTS01 When to stop at all times.
- This CTI should be administered in conjunction with CTI D-WTS01 When to stop which includes normal values for a range of standard clinical observations and actions to implement if observations fall outside these ranges.
- 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:
  - Avoid using an arm with IV infusions attached, recent surgery or fracture, mastectomy or axillary (arm pit) lymph node removal, lymphoedema, poor vascularisation or contagious skin conditions. If both arms are affected, seek advice from a health practitioner.

### Equipment, aids and appliances

- Observation machine in the healthcare facility: Ensure the observation machine is clean and in safe working order.
- Observation machine client owned: Within the client's home environment the AHA may need to use the client's own observation machine if one is not available through the community-based resources. In this situation look for indicators of potential problems with the machine's accuracy by asking the client how long they have had their machine and if they have had the accuracy of the machine checked recently and by checking the client's blood pressure record for any unusual variability in blood pressure readings.
- Correct sized cuff.

### Environment

- Ensure that an appropriate level of client privacy is maintained during the task.

## Performance of Clinical Task

### 1. Delegation instructions

- Receive delegated task from the allied 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. The delegating practitioner should provide guidance regarding the timing of the measurement in the broader intervention if relevant e.g. at the commencement, at 15 minute intervals, at conclusion. The delegation instruction may also specify the position in which the blood pressure measurement is to be undertaken e.g. lying and repeated in standing for monitoring of orthostatic (postural) hypotension.

- The AHA may implement this task in variance to the timing or frequency in the delegation instruction, or initiate the task if indicated by circumstances outlined in CTI D-WTS01 When to stop. The following may indicate blood pressure monitoring is required:
  - Instructed by delegating allied health professional
  - One or more of the following is reported by the client or is documented in the client's chart:
    - light headedness, when standing from a sitting or lying position
    - dizziness e.g. swaying, balance problems, unable to focus eyes on AHA
    - weakness
    - blurred vision
    - fatigue
    - fainting
    - feeling hot or sweaty or clammy
    - recent surgery or trauma
    - low haemoglobin level (<90 g/L)
  - Also consider if client has any of the following which may affect blood pressure:
    - known postural drop (this may require blood pressure to be taken in lying and sitting)
    - significant pain or distress or recent administration of pain relief
    - the client has not eaten/had anything to drink for a substantial amount of time
    - extreme drowsiness
    - eating or exercising immediately before the blood pressure reading is taken
    - caffeine or cigarette smoking within 30 minutes of the blood pressure reading
    - the room temperature makes the client feels cold
    - a full bladder

## 2. Preparation

- Check the observation machine is fully charged.
- Turn power on to allow time for the machine to self-test or initialise.

## 3. Introduce task and seek consent

- The AHA introduces him/herself to client.
- The AHA checks three forms of client identification: full name, date of birth plus one of the following; hospital UR number, Medicare number, or address
- The AHA describes the task to the client. For example: “I would like to take your blood pressure using this observation machine. Is that Ok?” and “I’m going to place this cuff on your arm to check your blood pressure. The cuff will feel tight when it inflates.”
- The AHA seeks informed consent according to the Queensland Health Guide to Informed Decision Making in Healthcare.

## 4. Positioning

The client's position during the task should be:

- sitting upright or near upright for standard blood pressure measuring
- otherwise in the position as delegated e.g. lying for the first stage of orthostatic (postural) hypotension.

The AHA's position during the task should be:

- standing or sitting at the client's side so that the client's blood pressure can be effectively measured.

## 5. Task procedure

- Explain the task to the client.
- Check the client has understood the task and provide the opportunity to ask questions.
- The task comprises the following steps:
  1. Position the cuff on the client's arm.
  2. Activate observation machine.
  3. Record the blood pressure reading clearly and accurately as per local health service guidelines.
  4. Provide feedback to the client on their blood pressure at the completion of the task.
  5. Remove the cuff and clean it in line with infection control protocols.
- During the task:
  - Provide the client with assurance. This is particularly important if the client is anxious, as this may impact on the blood pressure readings.
  - Monitor the client's expression for signs of discomfort as the cuff pressure nears its peak and reassure the client that it will soon reduce.
  - If an abnormal blood pressure reading is returned which is inconsistent with the client's presentation (e.g. blood pressure reading is very low but the client is lively and conversing) or if the reading returns an error, consider the following:
    - Re-take the blood pressure.
    - Adjust the position of the cuff.
    - Try the other arm if there are no contra-indications.
    - Try another observation machine.
- At the conclusion of the task:
  - Take appropriate actions including CTI D-WTS01 When to stop if indicated by the blood pressure reading.

## 6. Document

- Document the blood pressure reading in the clinical record, consistent with relevant documentation standards and local procedures.

## 7. Report to delegating health professional

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

## References and supporting documents

- Queensland Health. (2015). CTI D-WTS01 When to stop.  
<https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp>
- Queensland Health. (2012). Guide to Informed Decision Making in Healthcare.  
<http://www.health.qld.gov.au/consent/default.asp>

# Assessment: Performance Criteria Checklist

## D-CM03 Blood Pressure measuring

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 delegating health professional, and seeks clarification if required.			
Completes preparation for task including compliance with infection control and obtaining appropriate equipment.			
Introduces self to client and checks client identification.			
Describes purpose of delegated task and seeks informed consent.			
Positions self and client appropriately to complete task and ensure safety.			
Delivers task effectively and safely as per delegated instructions and CTI procedure. a) Clearly explains task, checking client's understanding. b) Positions cuff on client's arm correctly. c) Activates observation machine correctly. d) Records blood pressure readings clearly and accurately as per local health service guidelines. e) Removes cuff and ensures infection control protocol is completed. f) Provides feedback to client on their blood pressure at completion of task. g) Takes appropriate actions if indicated by the blood pressure reading.			
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 of competence**

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

Review date                /        /
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# Blood Pressure measuring: Learning Resource

## Relevant training program

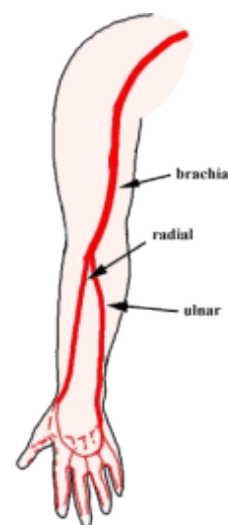
Queensland Health. *Deliver and monitor a client-specific physiotherapy program*.  
<http://qheps.health.qld.gov.au/alliedhealth/html/strategies/allied-health-assistants.htm>

## Blood Pressure information

Better Health Channel. (2016). *Blood Pressure*.  
<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/blood-pressure>

## Taking a Blood Pressure Reading

- For a sitting blood pressure measurement: allow the client to be quiet and comfortably seated for at least five minutes before performing a blood pressure reading. Ensure their back and arms are supported, legs are uncrossed and upper arms are at the level of the right atrium (the mid-point of the sternum). The observer and the client should not talk during the blood pressure measurement.
- Note that for some exercise interventions, the blood pressure should be taken without allowing for rest prior to the measurement. The delegating health professional should indicate variance from the above procedure.
- Remove any clothing or roll up the sleeve to clear the upper arm in preparation for applying a blood pressure cuff. Ensure the rolled up sleeve does not have a 'tourniquet effect'.
- Proper cuff size selection is critical to accurate measurement. Choose a cuff size in accordance with the client's size (80% of the client's arm circumference).
  - The recommended cuff sizes are:
    - For arm circumference of 22 to 26 cm, the cuff should be 'small adult' size: 12x22 cm
    - For arm circumference of 27 to 34 cm, the cuff should be 'adult' size: 16x30 cm
    - For arm circumference of 35 to 44 cm, the cuff should be 'large adult' size: 16x36 cm
    - For arm circumference of 45 to 52 cm, the cuff should be 'adult thigh' size: 16x42 cm
- Fit the cuff securely with the arterial marker aligned with the brachial artery and 2 to 3cm above the elbow joint (see illustration<sup>1</sup> at right for location of brachial artery).
- Figure 1 in the reference by Handler (2009) shows the correct performance of a sitting blood pressure measurement.



<sup>1</sup> Millay J. *Accurate blood pressure measurement for medical instrumentation*. [http://accuratebloodpressure.com/blood\\_pressure.html](http://accuratebloodpressure.com/blood_pressure.html)

- Check the client's medical history and avoid putting the blood pressure cuff on an arm with the following:
  - IV infusions attached
  - Recent surgery or fracture of the upper limb
  - History of mastectomy or axillary (arm pit) lymph node removal at any time in client's past
  - Lymphoedema
  - Poor vascularisation as evidenced by discoloured extremities (white or blue fingers), or a history of poor healing of skin lesions of the arm
  - Contagious skin conditions in the upper arm
- Start the blood pressure reading and allow it to complete the recording process.
- Document the blood pressure reading.
- Remove the cuff and clean in line with infection control protocols.

## References

- Handler, J. (2009). The importance of accurate blood pressure measurement. *The Permanente Journal*, 13(3),51-54. Retrieved 14 April 2016 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2911816/>
- Pickering, T., Hall, J., Appel, L., Falkner, B., et al. (2005). AHA Scientific Statement: Recommendations for blood pressure measurement in humans and experimental animals: Part 1 Blood pressure measurement in humans. *Hypertension*, 45,142-161. Retrieved 14 April 2016 from <http://hyper.ahajournals.org/content/45/1/142.short>