## D-CM01: Pulse oximetry recordings

#### Scope and objectives of clinical task

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

- correctly measure and document a client's oxygen saturation level (SpO2) using finger pulse oximetry.
- identify indications for initiating pulse oximetry.

#### **VERSION CONTROL**

Version: 2.1

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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: <a href="mailto:allied\_health\_advisory@health.qld.gov.au">allied\_health\_advisory@health.qld.gov.au</a>.

This CTI should be used under a delegation framework implemented at the work unit level. The framework is available at: <a href="https://www.health.qld.gov.au/ahwac">https://www.health.qld.gov.au/ahwac</a>

Please check https://www.health.gld.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.
- 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.
  - deliver and monitor a client-specific physiotherapy program
    - o 3.3 Monitoring requirements

NB: Services may elect to complete the entire module if monitoring will be performed as part of an exercise program.

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

• Completion of the Clinical Skills Development Service Oxygen Therapy eLearning course is desirable.

#### Clinical knowledge

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

- awareness of the types of oxygen delivery equipment used in the local service setting including:
  - basic anatomy and physiology to the extent required to undertake this task, including terminology such as oxygen saturation, and positioning of the pulse oximetry probe.
  - the indications for initiating pulse oximetry.

The knowledge requirements will be met by the following activities:

- completing the training program/s (listed above).
- reviewing the Learning resource section.
- receiving instruction from an allied health professional in the training phase.

## Skills or experience

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.
- 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.

#### Equipment, aids and appliances

- Ensure the pulse oximeter is clean and in a safe working order e.g. no frayed chords and if in a
  Queensland Health facility test and tag insitu and current.
- Oxygenation saturation is affected by oxygen therapy administered to the client. Clients who are
  receiving oxygenation therapy may be wearing nasal prongs or a mask. Oxygen therapy equipment is
  for single client use.

#### **Environment**

Ensure that an appropriate level of client privacy is maintained during the task e.g. draw curtains.

### 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 e.g. if the client's acceptable oxygen saturation level varies from normal parameters.
- The delegating health professional 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 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 oxygen saturation level 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:
    - o light headedness, when standing from a sitting or lying position
      - o dizziness e.g. swaying, balance problems, unable to focus eyes on AHA
      - o weakness
      - o blurred vision
      - o fatique
      - o fainting
      - o feeling hot or sweaty or clammy
      - o shortness of breath or difficulty breathing
      - nausea or vomiting
      - o recent surgery or trauma
      - o low haemoglobin level (<90 g/L).

### 2. Preparation

- · Check the pulse oximeter 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 the 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 check the oxygen saturation level in your blood using this pulse oximeter. Is that ok?" and "I am going to place this probe on your finger to check the oxygen saturation level in your blood.".
- The AHA seeks informed consent according to the Queensland Health Guide to Informed Decisionmaking in Health Care, 2<sup>nd</sup> edition (2017).

### 4. Positioning

- The client's position during the task should be:
  - at the bedside/in bed with an over bed table positioned in front of the client, including using a clip board or seated at a table and supported in a chair.
- The AHA's position during the task should be:
  - standing or sitting at the client's side so that the client's oxygen saturation level can be effectively measured.

#### 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 probe on the client's finger (thumbs should not be used), and ensure the finger remains still. The fingernail should be free of nail varnish.
  - 2. Await a response from the machine. A good reading is indicated by a strong flow (up and down) of the LED lights next to the reading.
  - 3. Note if the client is on room air or having oxygenation therapy. See Safety and quality section.
  - 4. Record the client's oxygen saturation level as per local health service guidelines.
  - 5. Provide feedback to the client on their oxygen saturation level at the completion of the task.
  - 6. Remove the probe and clean in line with infection control protocols.
  - 7. During 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.
  - 8. At the conclusion of the task:
  - take appropriate actions including CTI D-WTS01 When to stop if indicated by the client's oxygen saturation level.
  - encourage feedback from the client on the task.
  - provide summary feedback to client, emphasising positive aspects of performance and areas to work on.
  - provide instructions for independent practice of the task (including reinforcing safety considerations) if this was requested by the delegating health professional.

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:
  - if the task was performed on room air or with oxygen. If with oxygen the method of delivery and the amount (flow rate in L/min).
  - the oxygen saturation level (%).

#### 7. Report to the delegating health professional

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

## References and supporting documents

- Queensland Health (2015). Clinical Task Instruction D-WTS01 When to stop. https://www.health.gld.gov.au/ahwac/html/clintaskinstructions.asp
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2<sup>nd</sup> edition).
   <a href="https://www.health.qld.gov.au/">https://www.health.qld.gov.au/</a> data/assets/pdf\_file/0019/143074/ic-guide.pdf
- The Joanna Briggs Institute. (2016). Pulse Oximetry. Retrieved 14 April 2014 from http://ovidsp.tx.ovid.com/sp-3.19.0a/ovidweb.cgi
- World Health Organization. (2011). Pulse oximetry training manual. Retrieved 7 April 2016 from <a href="http://www.who.int/patientsafety/safesurgery/pulse oximetry/who ps pulse oxymetry training manual\_en.pdf">http://www.who.int/patientsafety/safesurgery/pulse oximetry/who ps pulse oxymetry training manual\_en.pdf</a>

# Assessment: Performance Criteria Checklist

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Name: Position: Work Unit:

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Per	formance 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		
	nonstrates knowledge of fundamental concepts uired to undertake the task.					
hea	ains all required information from the delegating lth professional, and seeks clarification if required, r to accepting and proceeding with the delegated					
with	npletes preparation for task including compliance infection control and obtaining appropriate ipment.					
Introduces self to the client and checks client identification.						
	cribes the purpose of the delegated task and ks informed consent.					
	itions self and client appropriately to complete the and ensure safety.					
	vers the task effectively and safely as per egated instructions and CTI procedure.					
a)	Clearly explains the task, checking the client's understanding.					
b)	Places probe on finger, ensuring finger is kept still.					
c)	Awaits response from machine.					
d) e)	Notes current oxygenation therapy in situ.  Records reading clearly and accurately as per local health service guidelines.					
f)	Removes probe and ensures infection control protocol is completed.					
g)	Provides feedback to client on their oxygen saturation level at completion of task.					
h)	Takes appropriate actions if indicated by the oxygen saturation level.					
i)	During the task, maintains a safe clinical environment and manages risks appropriately					
reco	uments the outcomes of the task in the clinical ord, consistent with relevant documentation adards and local procedures.					
	vides accurate and comprehensive feedback to delegating health professional.					
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Comments:							
Record of assessment competence:							
Assessor name:	Assessor position:	Competence / / achieved:					
Scheduled review:							
Review / / date:							

## Pulse oximetry recordings: Learning resource

## Relevant training program

- Queensland Health (2017). Physiotherapy Learner Guide Deliver and monitor a client-specific physiotherapy program.
  - 3.3 Monitoring requirements.

Available at: https://www.health.qld.gov.au/ahwac/html/ahassist-modules.

#### Oxygen Therapy eLearning course

 Clinical Skills Development Service: Oxygen Therapy eLearning course. Available at: https://www.sdc.qld.edu.au/courses/122.

#### How to use a pulse oximeter

World Health Organization (2011). Pulse oximetry training manual. Pages 7-11. Available at:
 <a href="http://www.who.int/patientsafety/safesurgery/pulse oximetry/who ps pulse oxymetry training manual en.pdf">http://www.who.int/patientsafety/safesurgery/pulse oximetry/who ps pulse oxymetry training manual en.pdf</a>.

## Images of oxygen therapy equipment

 Oxford medical education (n.d.) Oxygen: delivery devices. Available at: <a href="http://www.oxfordmedicaleducation.com/prescribing/oxygen-delivery/">http://www.oxfordmedicaleducation.com/prescribing/oxygen-delivery/</a>.