

Clinical Task Instruction

Delegated Task

D-CH01: Otoscopy

Scope and objectives of clinical task

This CTI will enable the Allied Health Assistant to:

- safely and effectively conduct screening otoscopy in clients nine months of age or older, including visually inspecting the ear, ear canal and ear drum for signs of ear disease, grommets and foreign bodies.

Note: the local service should determine the minimum client age for delegation for this task.

Additional risks and training requirements may be necessary for infants under nine months of age.

This CTI does not support training for clients under nine months.

VERSION CONTROL

Version: 1.1

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Acknowledgements:	Targeted Hearing Screening Clinic – Healthy Hearing		

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 the Office of the Chief Allied Health Officer (OCAHO) 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/html/ahassist>

Prior to use 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 TAFE NSW [The EarTrain Program](#). The following modules are relevant for this CTI:
 - About Otitis Media
 - Ear anatomy and physiology
 - Otoscopy
 - Safe practice
 - Identifying conditions of the ear

Available at: <https://www.tafensw.edu.au/eartrain>

- Implementation of this CTI by some local services may include protocol-driven processes that support additional information collection about the client's hearing status such as local triaging protocols or processes to access other services. Where this is the case, additional training is required e.g. workplace instructions, audit tools and/or CTIs that support the model.

Clinical knowledge

- The following content knowledge is required by an AHA delivering this task:
 - basic anatomy of the external ear, canal and eardrum.
 - the purpose and rationale for performing otoscopy including risks.
 - the process for conducting an otoscopy examination including equipment care and maintenance, client positioning and documentation requirements.
 - common abnormalities observed on otoscopy e.g. swelling, inflammation, discharge, wax, fungal infection and/or foreign body.
 - basic ability to identify the presence of a grommet in the tympanic membrane and/or ear canal and distinguish from a foreign body.
 - the audiology hold position, including indications for use and instructions used to train a carer to hold a young child to access the ears for examination.
 - if required for the local service model, triage checklists, flowcharts and processes that support care planning.
- The knowledge requirements will be met by the following activities:
 - complete 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 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:
 - if during the task the client indicates, or the carer is concerned the client is experiencing pain or discomfort in the area of examination, or if an ear canal has notable discharge, a foreign body is present or the skin in the auditory pathway is noted to be swollen, broken or inflamed, cease the examination of the affected ear. If the other ear has not been examined replace the specula tip to avoid cross contamination and examine the other ear. Inform the delegating health professional of observations as part of feedback and if part of the local service model, implement local processes for review by a medical practitioner e.g. inform the client to attend their general practitioner.
 - if the client's external ear appears not completely developed (microtia) or their ear canal is absent or closed (atresia), cease the task and inform the delegating health professional.
 - the client may be unable to remain still due to physical, intellectual or other problems. If prior to, or during, examination the client moves their head frequently, or becomes distressed, pause the task. Instruct the carer in the audiology hold position to minimise movement during otoscopy - see the Learning resource section. Ensure the client is still prior to recommencing the task and reinserting the specula tip. If the client continues to be unable to remain still, cease the task. If part of the local service model, implement local processes for alternative hearing testing e.g. diagnostic audiology assessment.

Equipment, aids and appliances

- The otoscope should be charged and have a bright working light. If the light is dim or not working replace the battery or place on charge and locate an alternative otoscope for the task.
- The otoscope should be switched off between uses. When the otoscope is not required for a period of time remove the batteries, as they may leak.
- Specula tips are available in two sizes, child or adult. Choose the correct size if available.
- Specula tips are single use items. A clean tip is required for each client. Used tips should be disposed of consistent with local procedures.
- To prevent the specula tip from penetrating the ear drum during unexpected head movements, the bracing grip should be used, whereby part of the hands or fingers are anchored against the clients's face/cheek e.g. pencil or pistol grip. See the Learning resource section.

Environment

- Nil

Performance of clinical task

1. Delegation instructions

- Receive the delegated task from the health professional

Note: the delegation instruction for this task may be provided directly from a health professional or as part of a local work instruction or clinical protocol. For an example see the Targeted Hearing Screening Protocol Flow Chart and workplace instruction document listed in the Learning resource section.

- 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.

2. Preparation

- Collect the:
 - otoscope and specula tip
 - local otoscopy examination recording form.

3. Introduce task and seek consent

- The AHA introduces themselves 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 use this torch to look into your ears/ear. Sit nice and still. It won’t take long. This just allows me to check that your ears are clear and safe for further screening in today’s appointment.”
- The AHA seeks informed consent according to the Queensland Health Guide to Informed Decision-making in Health Care, 2nd edition (2017). If seeing clients under the age of 18 years this includes Section 3: Informed decision-making for children and young persons for comprehensive information.

4. Positioning

- The client’s position during the task should be:
 - in a supported sitting position e.g. chair, or for a child this may be on the carers lap.
- The AHA’s position during the task should be:
 - beside the client in a comfortable position (seated or standing) that allows the otoscope tip to be observed as it is inserted into the client’s ear.

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. If part of the local service model, the AHA completes any triage checklists and confirms that the client meets eligibility criteria and is suitable for the clinic. For example, checks the date of birth on the client record and confirms the client is more than nine months of age.
 2. Demonstrate the otoscope light to the client e.g. show them on their hand that it does not hurt.
 3. Determine if the client will need the audiology hold position – see the Safety and quality section. If required train the carer in the audiology hold position – see the Learning resource section.
 4. To avoid confusion when recording information, the right ear is routinely examined first.
 5. Observe the outer ear (pinna). It should be clean and dry – see the Safety and quality section.
 6. Hold the otoscope using a pistol or pencil grip. Brace against the client's cheek or side of head. Pull the ear (pinna) upwards and back, this straightens the ear canal to improve the view of the eardrum. Insert the otoscope tip carefully into the ear canal maintaining bracing. Observe the client's facial reaction. If any signs of discomfort are observed remove the otoscope and cease the task.
 7. Observe the ear canal, it should be clear of inflammation, discharge, wax, fungal infections and/or foreign body.
 8. Observe the colour and landmarks of the ear drum (tympanic membrane), malleus and the cone of light. The ear drum should be intact (not perforated). Identify if a grommet is present in the tympanic membrane and/ or ear canal.
 9. Remove the otoscope and repeat steps 5-8 on the other ear.
 10. If part of the local service model, the AHA implements the local care pathway management plan e.g. implements further hearing screening task/s or informs the client to visit their general practitioner (GP) for review and management.
- During the task:
 - provide feedback and correct errors in the performance of the task including:
 - if the client begins to turn/move their head or speak during the examination gently instruct the client to keep still and quiet and provide reassurance e.g. 'please keep still and quiet, we are nearly finished'. If movement or vocalising does not cease, remove the otoscope from the ear. Determine the reason the client is moving e.g. pain, discomfort, wanting to see something. See Safety and quality section. If able, resume the task. If problems continue, cease the task and inform the delegating health professional.
 - 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.
 - provide summary feedback to client, emphasising positive aspects of performance and areas to work on If part of the local service model, inform the client and/or carer of implications of observations. For example:
 - "Pass" – "Otoscopy today has shown that your ear is clear and we can proceed with further hearing screening." OR "Otoscopy today has shown that a grommet is present in the (left/right or both) eardrum/s and/or ear canal/s. The ear canal is dry and we can proceed with a modified hearing screening assessment."

- “Refer” – “Otoscopy today has shown that your ear canal has discharge/blood/foreign body/perforated eardrum. We will need to stop the appointment. You will need to visit your GP for review and management. Once your GP has advised you that your ears are clear, we will see you again to complete the hearing screen.”
- 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:
 - abnormal observations of the outer ear, ear canal and/or tympanic membrane, including side (left or right) and action taken i.e. client instructed to visit their general practitioner for review and management.
 - if grommet visualised in eardrum or ear canal, note the side (left and/or right) and any relevant actions for the local service model e.g. modified hearing screening assessment required as client not suitable for Tympanometry, implemented CTI D-CH03: Transient Evoked Otoacoustic Emissions as patient \leq 3.5 years or CTI D-CH04: Pure Tone Screening as patient $>$ 3.5 years.
 - if unable to visualise the eardrum or complete the task comments as to the cause e.g. could not evaluate as child became distressed or was unable to remain still for the task.
 - if otoscopy clear any actions taken relevant to the local service model e.g. implementation of a process or protocol client suitable for hearing screening implemented CTI D-CH02: Tympanometry (226Hz).
- For protocol driven delegation the local process may require co-signing and confirmation of the appropriate management pathway by an audiologist before the report can be finalised.

7. Report to the delegating health professional

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

References and supporting documents

- Children's Health Queensland Hospital and Health Service. Child and Youth Community Health Service. Work Instruction. Hearing Clinic – Secondary Hearing Screening V1.3 (Draft).
- Children's Health Queensland Hospital and Health Service (2014). Child and Youth Health Practice Manual, Statewide Child and Youth Clinical Network – Child Health Sub-Network.p85-89.
- Feeney M.P & Sanford C.A. (2008). Middle-Ear Measurements in Infants and Children. In Madell JR & Flexer C (Eds). Paediatric Audiology: Diagnosis, technology and management. (p115-122). Thieme: New York..
- 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
- Touma, J.B. & Touma, B.J. (2006). Atlas of Otoscopy: Plural Publishing, Inc. San Diego.

Assessment: performance criteria checklist

D-CH01: Otoscopy

Name:

Position:

Work Unit:

Performance criteria	Knowledge acquired	Supervised task practice	Competency assessment
	<i>Date and initials of supervising AHP</i>	<i>Date and initials of supervising AHP</i>	<i>Date and initials of supervising AHP</i>
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 obtaining relevant form and materials and ensuring client and environment are prepared for the task.			
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.			
<p>Delivers the task effectively and safely as per delegated instructions and CTI procedure.</p> <p>a) Clearly explains the task, checking the client and/or carer's understanding (as relevant).</p> <p>b) If part of the local service model completes triage checklist and confirms client's eligibility for the service.</p> <p>c) Demonstrates the otoscope light to the client.</p> <p>d) Determines if the client will need the audiology hold position. If required trains the carer in the audiology hold position.</p> <p>e) Assesses the right ear first unless variance from usual procedure is clinically indicated.</p> <p>f) Observes the outer ear (pinna) is clean and dry.</p> <p>g) Holds the otoscope in the bracing position. Pulls the ear upwards and back and inserts the otoscope tip carefully into the ear canal. Maintains observation of the client's face and the otoscope bracing position, removing the otoscope if required.</p> <p>h) Observes the ear canal.</p> <p>i) Observes the colour and landmarks of the ear drum, including identifying abnormalities, grommets and or foreign bodies.</p> <p>j) Removes the otoscope and repeats steps f-i on the other ear.</p>			

k)	Informs the client (and carer) of the result.			
l)	If part of the service model uses decision support tools to identify and implement any relevant protocol driven actions e.g. proceeds to further hearing screening tasks, medical review.			
m)	During the task, maintains a safe clinical environment and manages risks appropriately.			
n)	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:

Record of assessment competence:

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

Review date:	/ /	
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Otoscopy: Learning resource

Required reading

- Stanford Children's Health (2019). Microtia. Available at: <https://www.stanfordchildrens.org/en/service/microtia/faq>
- Welch Allyn (2018). Otoscopy pathologies. Available at: <https://www.welchallyn.com/en/students/otoscopy-pathologies.html>

Required viewing

- Melbourne ENT Group (n.d.) Glue Ear and Grommets. Available at: <https://www.youtube.com/watch?v=xaT4SWUgasI>
- MJSylvesterMD. Ear pain 5: otoscope examination. Available at: <https://www.youtube.com/watch?v=b80LyZRZOFY>

Example protocols used in Queensland Health services

- Children's Health Queensland Hospital and Health Service (2019). Healthy Hearing Targeted Hearing Screening Clinic – Resources. Available by emailing: hearing.screening@health.qld.gov.au
- Queensland Health (2018). Allied Health Assistant Hearing Screen. V4.00 – 10/2018. Available at: https://qheps.health.qld.gov.au/_data/assets/pdf_file/0025/2118805/659018.pdf

Audiology hold position

- The client will be required to sit still during the ear examination. For clients who are unable to sit still the 'hold' position may be required. The hold position is often required for young clients undergoing ear examination who are between 6 months and 3 years of age - see Safety and quality section.
- To train a carer to perform the hold position to access the child's right ear:
 - the child sits across the carer's lap, the child's body and legs facing towards the left of the carer
 - the child's left shoulder should be leaning inward against the carer.
 - the child's left arm should be tucked under the carer's right arm, such that it is behind the carer.
 - the carer's right arm should be placed across the child's right arm, hugging the child's arm and body firmly into theirs.
 - the carer's left hand should be placed just above the child's right ear, holding the child's head to the carer's chest, such that the child's right ear faces outward.
 - if the child's legs are kicking, the carer may place the child's feet between their legs, or a second person may be required to hold the child's legs at the knees or below the knees to prevent the child from being hurt or hurting others.
- The reverse positioning of the child is applied to access the left ear.



Figure 1: Access to the right ear



Figure 2: Access to the left ear



Figure 3: Access to the right ear with legs secured

Figure 1: Example decision making flow chart for Otoscopy results and actions

