

Clinical Task Instruction

SKILL SHARED TASK

S-MT06: Outdoor walking assessment

Scope and objectives of clinical task

This CTI will enable the health professional to:

- assess through observation a client's ability to safely and effectively walk 'outdoors', with their usual walking aid, if relevant,
- identify and manage potential risks associated with outdoor walking to ensure client safety during the assessment task,
- develop and implement an appropriate plan to address any identified outdoor walking deficits.

VERSION CONTROL

Version: 1.0

Approved (document custodian): Chief Allied Health Officer, Allied Health Professions' Office of Queensland, Clinical Excellence Division.

Date: 31/07/2017

Review: 31/07/2020

This Clinical Task Instruction (CTI) has been developed by the Allied Health Professions' Office of Queensland (AHPOQ) using information from locally developed clinical procedures, practicing clinicians, and published evidence where available and applicable.

This CTI should be used under a skill sharing framework implemented at the work unit level. The framework is available at:

<https://www.health.qld.gov.au/ahwac/html/calderdale-framework.asp>

Skill sharing can only be implemented in a health service that possesses robust clinical governance processes including an approved and documented scope of skill sharing within the service model, work-based training and competency assessment, ongoing supervision and collaborative practice between skill share-trained practitioners and health professional/s with expertise in the task. A health professional must complete work-based training including a supervised practice period and demonstrate competence prior to providing the task as part of his/her scope of practice. When trained, the skill share-trained health professional is independently responsible for implementing the CTI including determining when to deliver the task, safely and effectively performing task activities, interpreting outcomes and integrating information into the care plan. Competency in this skill shared task does not alter health professionals' responsibility to work within their scope of practice at all times, and to collaborate with or refer to other health professionals if the client's needs extend beyond that scope. Consequently, in a service model skill sharing can augment but not completely replace delivery of the task by profession/s with task expertise.

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

© State of Queensland (Queensland Health) 2017



This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. In essence, you are free to copy and communicate the work in its current form for non-commercial purposes, as long as you attribute Queensland Health and authoring unit listed above, and abide by the licence terms. You may not alter or adapt the work in any way. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/au/deed.en>.

For further information contact Allied Health Professions' Office of Queensland, PO Box 2368, Fortitude Valley BC QLD 4006, email allied_health_advisory@health.qld.gov.au, ph. 07 3328 9298. For permissions beyond the scope of this licence contact: Intellectual Property Officer, Queensland Health, GPO Box 48, Brisbane Qld 4001, email ip_officer@health.qld.gov.au, phone (07) 3328 9862.

Disclaimer

Queensland Health has made every effort to ensure that the information in this resource, at the time of distribution, is correct. The information in this resource will be kept under review and future publications will incorporate any necessary amendments.

The information in this resource does not constitute clinical advice and should not be relied upon as such in a clinical situation. The information is provided solely on the basis that readers will be responsible for making their own assessment of the matters presented herein and readers are advised to verify all relevant representations, statements and information. Specialist advice in relation to the application of the information presented in this publication must be sought as necessary to ensure the application is clinically appropriate.

In no event, shall Queensland Health be liable (including negligence) for any claim, action, proceeding, demand, liability, costs, damages, expenses or loss (including without limitation, direct, indirect, punitive, special or consequential) whatsoever brought against it or made upon it or incurred by Queensland Health arising out of or in connection with a person's use of information in this publication

Note: 'Outdoor' in this CTI refers to locations and settings away from the client's usual residential or care setting (ward) and may include different surfaces (grass, cement, etc.) and environments (shopping centres, friend's home, etc.) that are likely to increase the complexity of walking. This skill shared task is a functional assessment of the client's ability to safely walk outdoors. Standardised or more specific testing of cognition, planning and visuospatial perception are outside the scope of the CTI.

Local implementation

The local health service will define the parameters for the local implementation of this CTI. The health service will determine the scope of the individual health professional with regard to:

- weight bearing status i.e. full weight bearing, weight bearing as tolerated, partial weight bearing, touch weight bearing,
- types of walking aid/s e.g. 4 wheeled walker, hopper frame, crutches, walking stick,
- stairs,
- environments, particularly outdoor walking/community settings.

The local scope of the skill shared task will be approved by the health service and recorded in the CTI Performance Criteria Checklist.

Requisite training, knowledge, skills and experience

Training

- Mandatory training requirements relevant to Queensland Health / HHS clinical roles are assumed knowledge for this CTI.
- If not part of mandatory requirements complete patient manual handling techniques, including the use of walk belts, and sit to stand transfers.
- Completion of the following CTIs or equivalent professional competence:
 - CTI S-MT05: Standing balance assessment.
 - CTI S-MT01: Functional walking assessment
- And if the use of mobility aids and/or stairs is within the scope of the local implementation:
 - CTI S-MT02: Prescribe, train and review of walking aids.
 - CTI S-MT04: Stairs mobility assessment

Clinical knowledge

To deliver this clinical task a health professional is required to possess the following theoretical knowledge:

- the rationale for assessment of outdoor walking, including the range of environments and associated risks and mitigation strategies e.g. terrain, distance, time constraints, crowds etc.,
- the client capabilities required to perform outdoor walking safely including physical, perceptual, visual, cognitive, etc.,
- essential elements to include in an outdoor walking assessment, and
- common compensatory strategies to assist outdoor walking performance including scanning, cueing and assistance.

The knowledge requirements will be met by the following activities:

- review of the Learning Resource,
- receive instruction from the lead health professional in the training phase.

Skills or experience

The following skills or experience are not specifically identified in the task procedure but support the safe and effective performance of the task or the efficiency of the training process and are:

- required by a health professional in order to deliver this task:
 - competence in measurement of clinical observations relevant to mobilising/exertion where this is relevant to the healthcare setting and client group. This may include blood pressure, heart rate, pulse oximetry, pain scales, exertion scales, etc.
 - competence in the use of mobile oxygen units where this is relevant to the healthcare setting and client group.
- relevant but not mandatory for a health professional to possess in order to deliver this task:
 - experience working with clients in rehabilitation or community settings.

Indications and limitations for use of skill shared task

The skill share-trained health professional shall use their independent clinical judgement to determine the situations in which he/she delivers this clinical task. The following recommended indications and limitations are provided as a guide to the use of the CTI but the health professional is responsible for applying clinical reasoning and understanding of the potential risks and benefits of providing the task in each clinical situation.

Indications

- The client has been assessed as safe to mobilise, with or without an aid, in their usual residential or care environment and will be resuming activities in the community. These activities may include gardening, shopping, attending to health needs and socialising.
- The client is living/planning to live in the community e.g. home, retirement village, residential care and would benefit from being able to walk 'outside'.
- The client is medically stable and there is no medical prohibition to outdoor walking. For example the medical record indicates that the client can be mobilised beyond the ward environment and vital signs are within expected limits, the client is living in the community and is not acutely unwell, or the client has met all care pathway requirements to mobilise outside e.g. haemoglobin level or x-ray review and clearance and is safely mobilising on the ward.

Limitations

Limitations listed in CTI S-MT01 and CTI S-MT05 apply. If walking aids are used the limitations from CTI S-MT02 apply and if stairs are relevant the limitations in CTI S-MT04 apply.

Precautions

If precautions are identified consider whether an outdoor walking assessment is necessary and safe for the client and staff. If risks are unclear, discuss with the lead health professional.

Examples include:

- The client requires frequent rests or is only be able to walk short distances on the flat due to pain, shortness of breath, or fatigue. Determine the outdoor walking goals (Table 1: A guide to determining a client's outdoor activities and Table 2: A guide to developing an observational checklist for outdoor walking assessment in the learning resource). Decide if the client's goals are realistic for their physical capacity. If yes, consider timing of the task to coincide with any medication regimes, conducting the task over multiple sessions or in simulated environments before accessing community environments. If no, discuss with a health professional with expertise in walking aids, wheelchair prescription, community access/transport options to assist the client to access the community and meet their goals etc.
- Visual or perceptual deficits including poor vision or hemianopia. Ensure the client is wearing the correct glasses if applicable (distance not reading glasses). Confirm the client is able to clearly see their feet in standing and at least 3-4 metres in front. Have the client use their usual self-management techniques e.g. scanning of the environment. Scan the environment for lighting, contrasting colour and observe and intervene where necessary to maintain client safety throughout the task. This may include environment changes, verbal prompting, physical assistance/guidance or cessation of the task.
- Cognitive deficits including dementia, brain injury, mental health conditions. Confirm the client is able to follow simple/basic instructions or respond to directions to maintain safety in their usual care setting before proceeding with the task i.e. stop, wait, stand still, slow down, etc. Consider initially performing the task in simulated environments before proceeding to outdoor environments.
- Expected changes to weather conditions including excessive heat/cold, rain, wind etc. Determine the risk to the client including increased physiological demand, chance of slips, concentration requirements etc. Check the client's understanding and self-management strategies. Provide increased supervision during the task and cease the task if hazards are not able to be suitably managed.
- The client reports having concerns about falling outdoors. Confirm whether the client has had a fall outdoors. Where this is the case confirm that client has had a falls assessment, including identifying the cause of the fall, assessment of any injuries and the client has been cleared to mobilise outdoors. Discuss the concerns about falling outdoors with the client including current management strategies. Provide advice regarding suitable management strategies, if required. Confirm the client's goals and that the client consents to an outdoor walking assessment before proceeding with the task. If the client's concerns remain refer to a health professional with expertise in outdoor walking assessment.

Contraindications

The points below are contraindications for the delivery of this task by the skill shared trained health professional. If contraindications are identified the risk of implementing an outdoor walking assessment is likely to outweigh the potential benefits. Consult with a health professional with expertise in the clinical task if a contraindication is noted. If the observation is a new acute onset and not consistent with the expected presentation immediately notify the medical team.

- The client usually uses a walking frame to mobilise and wishes to access outdoor environments with rough terrain, stairs, narrow doorways e.g. hopper frame, four wheel walker, forearm support frame. These mobility aids cannot be used on unstable floor surfaces, stairs or in narrow doorways. The client will require assessment for use of an alternative walking aid/s for these environments prior to

undertaking an outdoor walking assessment. This should be provided by a health professional with skills in prescribing the required walking aid e.g. crutches, walking stick.

- The client is required to mobilise with a weight bearing restriction, walking aid or in an environment which is not in the scope of the skill share-trained health professional.
- The client is reliant on carer support for mobilising.
- The client has significant visual or perceptual deficits, including no vision or hemianopia i.e. the client is unable to see their feet and 3-4 metres in front, has a visual neglect for which they do not demonstrate compensatory strategies, etc.
- The client has significant or fluctuating cognitive impairments i.e. inability to consistently follow instructions to maintain safety.
- The client reports or is observed to have chest pain, excessive pain or shortness of breath while at rest and/or mobilising in their usual care environment or walking on the flat.
- The client requires oxygen to mobilise and does not have a portable oxygen unit, or the use of a portable oxygen unit is not within the scope of the health professional performing this task.
- The client has a history of falls outdoors/in the community or reports moderate to severe anxiety/fear of falling when walking outdoors.
- Extreme weather or safety warnings/alerts are in place e.g. storms, flooding, excessive heat/cold temperature predictions, security alerts etc.

Safety & quality

Client

The skill share-trained health professional shall identify and monitor the following risks and precautions that are specifically relevant to this clinical task:

- ensure the client is suitably prepared for the planned environment including clothing, footwear, weather protection (sun, rain, cold etc.).
- appropriate footwear should be worn at all times during this task - enclosed, well-fitting shoes with good traction.
- ensure the client has any required medication such as anginine or insulin, aids, appliances or equipment e.g. distance glasses (not reading), cane, hearing aid, etc.

Equipment, aids and appliances

- Access to communication for safety is required. This may include a mobile phone, personal alarm, etc.
- The client should be assessed using their usual walking aid (if appropriate for the task) and any other required devices e.g. ankle foot orthoses (AFO), knee brace etc.

Environment

- Follow any local procedures/processes for undertaking an outdoor mobility assessment e.g. recording of location and expected duration, raising alarms, risk assessment processes, carrying a mobile phone, etc.

- Assess the weather conditions and include any additional precautions to ensure both staff and client safety. This may include restricting duration of the assessment, use of additional equipment e.g. umbrella, wet weather gear or cessation of the task.
- As this task assesses the capability of the client in an outdoor environment, hazards may include trips, slips, pedestrians, traffic, equipment, time constraints. The health professional should position themselves to provide assistance or cease the task if there is risk of injury to the health professional or client.

Performance of Clinical Task

1. Preparation

- Use information collected from the medical chart to determine the client's mobility, outdoor walking requirements (as per the Table 1: A guide to determining a client's outdoor activities and Table 2: A guide to developing an observational checklist for outdoor walking assessment in the learning resource). Any required pre-mobility checks should have been completed e.g. in the acute care setting x-rays, haemoglobin (Hb) and clinical observations are satisfactory and the client is medically cleared to mobilise outdoors.
- Ensure the client has their usual walking aid (if relevant), required braces/orthoses and suitable footwear available and appropriately prepared prior to commencing the session. Preparation includes performing a safety check as per the manufacturer's guidelines or local service protocols/procedures.
- Appropriately plan the session including the location or route and check weather conditions. Inform relevant staff of the intended route and timeframes, consistent with local safety protocols.

2. Introduce task and seek consent

- The health professional checks three forms of client identification: full name, date of birth plus one of the following: hospital UR number, Medicare number, or address
- The health professional introduces the task and seeks informed consent according to the Queensland Health Guide to Informed Decision Making in Healthcare (2012).

3. Positioning

The client's position during the task should be:

- walking in the outdoor environment.

The health professional's position during the task should be:

- in a position to provide assistance as required, generally to the side (affected side, if relevant) in a position that allows observation of the client and the environment.

4. Task procedure

- The task comprises the following steps:
 1. Check the client has understood the task and provide the opportunity to ask questions.
 2. Confirm with the client their current physical capability including the ability to mobilise, assistance required, aid used and any restrictions (weight bearing status, oxygen requirements,

- etc.) and their outdoor walking goals. Determine the client's suitability to undertake an outdoor walking assessment (refer to the indications and limitations section).
3. Identify the suitable outdoor walking environments and parameters for assessment and develop an outdoor walking plan to guide the assessment process (see example in learning resource).
 4. Review the client's ability to safely walk, with their usual walking aid (if relevant), within their usual care or home environment as per CTI S-MT01: Functional walking assessment
Determine the client's walking is suitable to assess in the outdoor environment, including walking pattern, walking aid (if relevant), safety. If not suitable, cease the task, documenting the observed mobility deficits and/or safety concerns and consult with a health professional with expertise in the area.
 5. Commence the outdoor walking assessment observing the client's ability to perform the task whilst maintaining safety. Note any support/assistance required including physical assistance, cueing or the need to cease the task.
 6. Based on information collected make a recommendation to the client and team regarding the client's ability to perform outdoor walking and/or any further management plans.

5. Monitoring performance and tolerance during the task

- Common errors and compensation strategies to be monitored and corrected during task include:
 - lack of scanning or recognition of hazards within the environment e.g. walks into obstacles including tree branches, through wet/slippery areas (puddles), into other people/traffic, etc.,
 - inadequate or incorrect response to identified hazards e.g. excessive and unsafe avoidance of objects posing no threat such as a rubbish bin, lamp post, etc.,
 - lack of adjustment or adaptation of walking speed and/or stepping pattern/step length/height to accommodate for environmental hazards such as trips, traffic and pedestrians, resulting in either increased number of 'stops' or risk taking behaviour,
 - if walking aids are in scope, unsafe use of the usual walking aid in the outdoor environment e.g. placement on uneven surfaces, incorrect gait pattern for walking aid when negotiating gutters/slopes, etc.
- Provide assistance as required for safety during the task. This may include supervision, hands on support/assistance, verbal cueing or cessation of the task.
- Monitor for adverse reactions and implement appropriate mitigation strategies as outlined in "Safety and quality" section above. This may include ceasing the task.

6. Progression

- Task progression strategies include:
 - A comprehensive outdoor mobility assessment may need to occur over several sessions or partly in a simulated environment if this is required to meet safety and client's physical capacity requirements or to fully meet the client's goals.
 - The client may require further assessment if outdoor walking goals change (e.g. discharge planning changes) or factors impacting mobility improve or decline (e.g. acute exacerbation COPD resolves, change in weight bearing status, a new fall, acute injury to the lower limbs, hospital admission, illness or surgery).

7. Document

- Document the outcomes of the task as part of the skill share-trained health professional's entry in the relevant clinical record, consistent with documentation standards and local procedures, commenting on the client's ability to:
 - safely mobilise in the outdoor environment including appropriate use of walking aid/s and commenting on walking pattern, assistance required (cueing, supervision, physical),
 - appropriateness of self-management strategies such as scanning, planning strategies to avoid hazards, use of rest breaks, seeking assistance, and
 - response to timing constraints, multiple stimuli and multi-tasking.

Note: as the client's response may alter with different locations and/or features of the task, details should be clearly defined in the documentation. For example observation of the client walking on a grassed sloped area, crossing the road, or in the shopping centre may differ and will therefore require separate comments for each location/environment.

- If the client is not independent and safe a further assessment and management plan including assessment by a health professional with expertise in the area should be recommended and documented.
- The skill shared task should be identified in the documentation as “delivered by skill shared-trained (insert profession) implementing CTI S-MT06: Outdoor walking assessment” (or similar wording)

References and supporting documents

- Queensland Health. (2012). Guide to Informed Decision Making in Healthcare.
<http://www.health.qld.gov.au/consent/default.asp>
- Local service procedures, protocols or processes for outdoor mobility assessment and/or client community visits/rehabilitation
- Queensland Health. (2012). Guide to Informed Decision Making in Healthcare.
<http://www.health.qld.gov.au/consent/default.asp>

Assessment: Performance Criteria Checklist

CTI S-MT06: Outdoor walking assessment

Name:

Position:

Work Unit:

Performance Criteria	Knowledge acquired	Supervised task practice	Competency assessment
	Date and initials of Lead HP	Date and initials of Lead HP	Date and initials of Lead HP
Demonstrates knowledge of fundamental concepts required to undertake the task through observed performance and the clinical reasoning record.			
Identifies indications and safety considerations for task and makes appropriate decision to implement task, including any risk mitigation strategies, in accordance with the clinical reasoning record.			
Completes preparation for task including equipment safety check and confirming with client pre-morbid/usual gait +/- aid(s), a plan for outdoor mobility including environment(s), route, weather, and ensuring client is wearing suitable clothing and footwear.			
Describes task and seeks informed consent.			
Prepares environment and positions self and client appropriately to ensure safety and effectiveness of task, including reflecting on risks and improvements in clinical reasoning record where relevant.			
<p>Delivers task effectively and safely as per CTI procedure, in accordance with the learning resource.</p> <p>a) Clearly explains and demonstrates task, checking client's understanding.</p> <p>b) Gains balance history from medical record and subjectively from the client/carer.</p> <p>c) Confirms client's capacity to participate (physical, cognitive etc.), including performance of required assessments (clinical observations, strength, general movement, balance, ability to follow instructions etc.) and their outdoor walking goals.</p> <p>d) Selects the environment and parameters to undertake the task.</p> <p>e) Reviews the client's walking in their usual environment.</p> <p>f) Assesses the client's walking outdoors.</p> <p>g) Describes gait abnormalities and performance limitations in outdoor walking.</p> <p>During task, maintains a safe clinical environment and manages risks appropriately</p>			
Monitors for performance errors and provides appropriate correction, feedback and / or adapts task to improve effectiveness, in accordance with the clinical reasoning record.			

Performance Criteria	Knowledge acquired	Supervised task practice	Competency assessment
Documents in clinical notes including reference to task being delivered by skill share-trained health professional and CTI used.			
If relevant, incorporates outcomes from task into intervention plan e.g. plan for task progression, interprets findings in relation to care planning, in accordance with the clinical reasoning record.			
Demonstrates appropriate clinical reasoning throughout task, in accordance with the learning resource.			

Notes on the service model in which the health professional will be performing this task:

Comments should include details regarding scope on weight bearing status, types of walking aids, stairs, environments etc.

Comments:

Record of assessment of competence

Assessor name:		Assessor position:		Competence achieved:	/ /
----------------	--	--------------------	--	----------------------	-----

Scheduled review

Review date	/ /				
-------------	-----	--	--	--	--

S-MT06: Outdoor walking assessment

Clinical Reasoning Record

The clinical reasoning record can be used:

- as a training resource, to be completed after each application of the skill shared task (or potential use of the task) in the training period and discussed in the supervision meeting,
- after training is completed for the purposes of periodic audit of competence, and
- after training is completed in the event of an adverse or sub-optimal outcome from the delivery of the clinical task, to aid reflection and performance review by the lead practitioner.

The clinical reasoning record should be retained with the clinician's records of training and not be included in the client's clinical documentation.

Date skill shared task delivered: _____

1. Setting and context

- insert concise point/s outlining the setting and situation in which the task was performed, and their impact on the task

2. Client

Presenting condition and history relevant to task

- insert concise point/s on the client's presentation in relation to the task e.g. presenting condition, relevant past history, relevant assessment findings

General care plan

- insert concise point/s on the client's general and profession-specific / allied health care plan e.g. acute inpatient, discharge planned in 2/7

Functional considerations

- insert concise point/s of relevance to the task e.g. current functional status, functional needs in home environment or functional goals. If not relevant to task - omit.

Environmental considerations

- insert concise point/s of relevance to the task e.g. environment set-up/preparation for task, equipment available at home and home environment. If not relevant to task - omit.

Social considerations

- insert concise point/s of relevance to the task e.g. carer considerations, other supports, client's role within family, transport or financial issues impacting care plan. If not relevant to task - omit.

Other considerations

- insert concise point/s of relevance to the task not previously covered. If none, omit.

3. Task indications and precautions considered

- insert concise point/s on the indications present for the task, and any risks or precautions, and the decision taken to implement / not implement the task including risk management strategies.

4. Outcomes of task

- insert concise point/s on the outcomes of the task including difficulties encountered, unanticipated responses

5. Plan

- insert concise point/s on the plan for further use of the task with this client including progression plan (if relevant)

6. Overall reflection

- insert concise point/s on learnings from the use of the task including indications for further learning or discussion with the lead practitioner

Skill share-trained health professional

Lead health professional (trainer)

Name:

Name:

Position:

Position:

Date this case was discussed in supervision: / /

Outcome of supervision discussion e.g. further training, progress to final competency assessment

Outdoor walking assessment: Learning Resource

Accessing outdoor environments provides clients with the opportunity to be active, have contact with the outdoors, and meet social needs (friends, shop etc.)¹. The health professional shall assess the client's ability to safely:

- walk at speed and distance for the environment,
- negotiate different terrains and in varying ambient conditions (light level, weather conditions),
- scan and monitor the environment, including managing attentional demands,
- use appropriate supports including walking aid if required, and
- respond to static and dynamic objects/people in the environment^{2 3}.

Required reading

- Corrigan R, McBurney H (2012). Community ambulation: perceptions or rehabilitation physiotherapists in rural and regional communities. *Physiotherapy theory and practice*: 28(1):10-17. DOI: 10.3109/09593985.2011.558985. Available at: <http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=2&sid=5da416f4-4f9c-40f6-b0d9-0a07cfa0dd2f%40sessionmgr104>
- Curl A, Ward Thompson C, Aspinall P, Ormerod M (2015). Developing an audit checklist to assess outdoor falls risk. *Urban design and planning* 169(3): 138-153. Available at: <http://dx.doi.org/10.1680/udap.14.00056>
- McCluskey A, Middleton S (2010). Delivering an evidence-based outdoor journey intervention to people with stroke: barriers and enablers experienced by community rehabilitation teams. *BMC Health Services Research*,10:18. Available at: <http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-10-18>
- Oh DW (2013) Community Ambulation: Clinical Criteria for Therapists' Reasoning and Decision-making in Stroke Rehabilitation. *International Journal of Physical Medicine & Rehabilitation* 1: 126. doi:10.4172/jpmr.1000126. Available at: <https://www.omicsonline.org/community-ambulation-clinical-criteria-for-therapists-a-reasoning-and-decision-making-in-stroke-rehabilitation-jpmr.1000126.pdf>
- Stanko E, Goldie P, Nayler M (2001). Development of a new mobility scale for people living in the community after stroke: Content validity. *Australian Journal of Physiotherapy* 47: 201-208. Available at: http://ac.els-cdn.com/S0004951414602671/1-s2.0-S0004951414602671-main.pdf?_tid=a73b82be-2640-11e7-9ef0-00000aacb35f&acdnat=1492744658_670e0521605cd5dc46c4266c6f457e9a
- Local procedures/processes for undertaking an outdoor mobility assessment and/or community home visit including safety procedures, risk assessment processes, raising alarms, carrying a mobile phone etc.

¹ Sugiyama T, Thompson CW (2005). Environmental support for outdoor activities and older people's quality of life. *Journal of Housing for the Elderly*. 19 (3/4): 167-185. doi:10.1300/J081v19n03_09

² Corrigan R, McBurney H (2012). Community ambulation: perceptions or rehabilitation physiotherapists in rural and regional communities. *Physiotherapy theory and practice*: 28(1):10-17.

³ Shumway-Cook, Patla A, Stewart AL, Ferrucci L, Ciol MA, Guralnik JM (2005). Assessing environmentally determined mobility disability: self-report versus observed community mobility. *Journal of American Geriatrics Society*: 53: 700-704.

Optional reading

- Barclay RE, Stevenson TJ, Poluha W, Ripat J, Nett C, Strikesavan CS (2015). Interventions for improving community ambulation in individuals with stroke (review). Cochrane Library: Cochrane database of systematic review. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010200.pub2/pdf>
- Corrigan R1, McBurney H. (2008). Community ambulation: environmental impacts and assessment inadequacies. *Disability and Rehabilitation* 30(19).
- GyuChang L, SeungHeon A, YunBok L, Dong-Sik P (2016) Clinical measures as valid predictors and discriminators of the level of community ambulation of hemiparetic stroke survivors. *Journal Physical Therapy Science* 28(8): 2184-2189. DOI: 10.1589/jpts.28.2184
- McCluskey A, Ada L, Kelly P, Middleton S, Goodall S, Grimshaw JM, Logan P, Longworth M, Karageorge A (2015). Compliance with Australian stroke guideline recommendations for outdoor mobility and transport training by post-inpatient rehabilitation services: an observational cohort study. *BMC Health Services Research* 15:296. DOI: 10.1186/s12913-015-0952-7
- Storey AST, Myrah AMM, Bauck RA, Brinkman DM, Friess SN, Webber SC (2013). Indoor and outdoor mobility following total knee arthroplasty. *Physiotherapy Canada* 65(3):279-288. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3740994/>

Outdoor walking history

Note: a mobility history will have been undertaken as part of CTI S-MT02. If this information is unavailable, complete a mobility history prior to the outdoor walking history.

1. Does the client use a walking aid for outdoor walking? If no, proceed to Q 2.
If yes, what type of walking aid? Confirm the walking aid is appropriate for the planned environments and in the scope of the health professional performing the outdoor walking assessment. If not, check the limitations section.
2. Does the client require a carer to assist with outdoor walking? If no, proceed to Q 3.
If yes, what type of assistance does the carer provide: physical assistance, cueing, manual guidance, instruction, etc. Check the limitations section of the CTI.
3. Has the client been assessed as independent and safe to mobilise, with or without an aid in their usual (indoor) care or residential environment? If no, implement CTI S-MT01: Functional walking assessment
If yes, proceed to Q 4.
4. Is the client planning on resuming activities outdoors? Outdoors refers to locations and settings away from the client's usual residential or care setting (ward) and may include different surfaces (grass, cement, etc.) and environments (shopping centres, friend's home, etc.) that are likely to increase the complexity of walking.
If no, consider the rationale for the assessment, i.e. is it to encourage outdoor activities, support rehabilitation goal setting, etc. Determine the purpose of the assessment before proceeding.
If yes, proceed to Q 5.
5. What activities is the client considering resuming?

Use Table 1: A guide to determining a client’s outdoor activities, to assist in developing a list of activities that the client will be required/seeks to perform.

6. Does the client have any concerns with performing outdoor walking?

If yes, ask the client to describe the concerns?

If no, ask the client to describe how they perform the task, including how they respond to any identified risks. If the client is unable to identify any risks or concerns prompts can be used from Table 2: A guide to developing an observational checklist for outdoor walking assessment to assist in identifying potential hazards.

An outdoor walking assessment considers the client’s walking goals (as per their outdoor walking history) and assesses their walking capability in the required environment.

Table 1 A guide to determining a client’s outdoor activities

Outdoor walking activities – history taking	Considerations
What types of activities is the client required to perform ‘outside’ the clients immediate usual care environment?	Consider activities and access to front/back door, letter box, clothes line, driveway and/or garage, garden/lawn. Include gates/footpaths/stairs/verandas/landings/rails etc.
What activities will the client be accessing to meet health and social care needs?	Shopping centres – including groceries, bill paying Medical services – healthcare centres/clinics
Does the client have occupational needs?	Type of work/volunteering environment and location What are the considerations within the workplace e.g. lifts, work tools, farm machinery, sheds, yards etc.
What social activities will be client be attending?	Family/friend homes e.g. two story, house boat etc. Clubs and events e.g. bingo, bowls, horse racing, TAB, etc.
What are the client’s hobbies/interests/leisure activities?	Gardening, walking group, Men’s shed, church etc.
How will these environments be accessed?	Car, Public transport- Bus/train/ferry Other

For each outdoor walking activity consider the walking requirements including the:

- walking speed and distance;
- types of terrain;
- ambient conditions (light level, weather conditions);
- monitoring and attentional demands;
- static and dynamic objects/people;
- and the hazards that the client needs to mitigate for.

Table 2: A guide to developing an observational checklist for outdoor walking assessment can be used to assist this process.

Table 2 A guide to developing an observational checklist for outdoor walking assessment

Risk / challenge	Features	Hazards
Floor coverings	Pavers, stones, footpaths, lino, carpet, tiles, rugs/mats, etc.	Loose Slippery (including when wet) Worn/loose areas or edges curled Changes in patterns/textures Changes in level
Stairs	Number of steps Height and depth Rail presence – one or both sides Construction e.g. concrete, timber, carpeted, etc. Floor covering – see above	Location e.g. front/back door to enter venues, Tapered/Consistency of steps etc. Lighting – particularly at night Contrast - shadows, colouring, tread edges Maintenance – are stair/rail in good repair?
Footpaths/ Gutters/Kerbs	Concrete, pavers, gravel, bitumen, grassed, cobbled stones, mud, etc.	Loose Slippery (including when wet) Worn/loose areas or edges curled Changes in patterns/textures Changes in level
Ramps/Slopes	Gradient Rail presence – one or both sides Floor covering – see above	Different surfaces e.g. grassed, driveways, floor covering (see above)
Entry ways	Gates Front/back doors	Traffic – other pedestrians, cars Door features – stiff, heavy, automatic,
Negotiating obstacles (static obstructions)	Trees, Lamp posts/ electricity poles, rubbish bins, parked vehicles, furniture, cables/cords/hoses, etc.	Branches, signs or other obstacles at head height Trip hazards
Negotiating obstacles (dynamic)	Will the client be required to negotiate around moving objects e.g. pets, pedestrians/other shoppers, cars, etc.	External cues and timing requirements
Temporary obstructions	Leaves, puddles, rubbish bins, litter, etc.	Ability to identify and adapt
Dual tasking	Is the client required to walk and carry/concentrate on another task e.g. taking out rubbish, hanging laundry, pushing a shopping trolley/ carrying groceries, etc.	Changes to walking pattern due to increased concentration demands
External timing variables	Obstacles that are timed e.g. escalators, elevators, automatic doors, pedestrian crossings at lights, etc.	

Guide to outdoor walking observation

The outdoor walking assessment evaluates the client's response to the changing, generally less familiar and predictable environment outdoor environment.

Importantly the assessment focuses on the ability to:

- scan and prepare for challenges and risks in the environment, and
- respond to changes that occur as part of the environment, both expected and unexpected.

Having observed the client walking in their usual residential or care setting, the health professional will generally observe in the outdoor walking assessment for changes to the client's:

- walking pattern and kinematics e.g. step length, arm swing, posture, walking speed, fluency of movement, etc. Refer to learning resource Table 1 SMT01: Functional walking assessment.
- safety and risks e.g. number of trips/stumbles/loss of balance episodes, level of assistance required/sought, etc. Refer to learning resource Table 2 SMT01: Functional walking assessment.
- compensatory strategies e.g. steadying on posts, fences or benches,
- limitation to performance e.g. the number of rests required and reason such as fatigue, shortness of breath, pain, strength, flexibility, fear, etc.
- level of support required e.g. cues/prompts/manual guidance etc.

As part of planning an outdoor walking observation it is useful to develop an observation checklist considering the activities required, the environmental features and demands using Tables 1 and 2. An example template is provided below as a guide. The assessment process may include the use of the client's actual outdoor environment or a simulation of this setting. For example if a client can mobilise down a busy hospital corridor this can demonstrate the ability to negotiate people traffic; walking through an automatic door can assess the ability to respond to external timing; walking across a sloped lawn, over a gutter and along the footpath can demonstrate the ability to negotiate different terrains, etc. Evidence also indicates that for certain client populations standardised testing are moderately correlated with outdoor walking performance e.g. Storey et al 2013 (see optional reading resources).

Table 3 Example template: Outdoor walking assessment plan

Activity	Environmental features and demands	Observations
State the purpose, parameters and location	Describe the features and demands required for observation. Refer to Table 2.	Describe the client's performance during the task or similar activity. Refer to Guide to outdoor walking observation.
Examples		
Walking to local community centre.	500m to community centre. Planned route concrete footpath, some uneven surfaces/cracked areas due to tree roots. Crosses one quiet street. Ramp at community centre.	Client observed walking independently - on concrete footpath outside hospital grounds. Small trip from tree branch, client independently regained balance. States saw the root but misjudged. - up/down gutter and ramp. Nil issues. - crossing road outside hospital. Waited for one car and timed appropriate. Recommendation: client requires supervision for outdoor walking. Functional retraining for scanning activities with walking including stepping activities that adjust step/swing height for hazards.
Feed the chooks and collect eggs.	Walk to chook shed using walking stick, flat grassed area. Feeder is refilled by son. Client wishes to feed scraps and check for eggs. Chook house is elevated and has door at back, waist height to check for eggs.	Client observed walking with walking stick from back of house to chook pen carrying scrap bucket. Bucket awkward as handle broken, client required 2 pauses to re-adjust hold. Able to open gate with good standing balance, walking stick on wrist band. Nil issues with standing balance whilst holding bucket and throwing scraps. Walked to back of chook pen to collect eggs. Client required to perform full reach into chook house to reach eggs. Mild unsteadiness

Activity	Environmental features and demands	Observations
		observed when returning to standing, nil loss of balance. Recommendation: discussed with client replacement of bucket/handle for ease of carrying. Functional retraining for reaching in standing.
Hanging out washing on outdoor clothes line in the client's home.	Mobilise to clothes line from laundry. Small hob to exit doorway from laundry. Grassed sloped area (small gradient). Push washing basket in washing trolley. Reach clothes line to hang/collect clothes. Walk along static clothes line.	Client able to step over 10cm block on floor. Client observed walking up/down a sloped grass area in hospital grounds whilst pushing a box in a trolley. Nil issues noted. Client observed reaching up/down placing cones along a shelf in the gym area. Recommendation: client to be reviewed in home environment as part of home visit for home modifications.
Walking in the shopping centre to buy groceries.	Able to negotiate other people. Multiple stimuli noise, lights, signs. Concentration demands to locate correct items whilst walking along shelves.	Client observed at local supermarket. Walked with 4WW into supermarket. Required one stop to avoid another shopper (appropriate), nil further issues. Located and collected 10 items from shopping list at various shelf heights, required hand support on shelf for balance with items below the knee. Placed items into 4WW basket, distributing weight evenly. At all times used brakes appropriately when walking not in use. Nil loss of balance noted. Recommendation: client safe to walk in supermarket using 4WW.

Outcomes of an outdoor walking assessment

The observation of a client's outdoor walking assessment needs to be collated to form a recommendation. Documentation of the assessment should include observations of the client's response to the location and features of the environment.

The recommendation will be one of the following:

1. Safe to walk outdoors independently for example, no changes/proposed intervention. This should include a list of environments that the client was assessed in and a statement that the client be re-referred should issues/concerns arise.
2. Safe to walk outdoors with identified restrictions. This may include:
 - within limited environments or times (on flat terrain, during the day etc.),
 - with support (supervision, assistance).
 - o A therapy or rehabilitation goal may include progressing outdoor walking beyond these restrictions and may require further assessment and/or intervention by a health professional with expertise in the task or implementation of a skill share task.
 - o Where support is required assessment of the planned carer providing the support will be required by a health professional with expertise in the task.
3. Not safe to walk outdoors. A plan will be required to assess the identified deficits/issues if there is an outdoor walking goal. The rehabilitation plan will need to include relevant interventions if the client maintains an outdoor walking goal.