Queensland Health

Clinical Task Instruction

Skill Shared Task

S-MT01: Assess functional walking

Scope and objectives of clinical task

This CTI will enable the health professional to:

- assess a client's ability to safely and effectively walk.
- develop and implement an appropriate plan to address any identified walking deficits.

VERSION CONTROL

Version:	2.0		
Reviewed (Profession):	Statewide Directors of Physiotherapy	Date:	13/12/2020
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Document custodian:	Chief Allied Health Officer, Allied Health Professions' Office of Queensland	Review date:	28/01/2024

The CTI reflects best practice and agreed process for conduct of the task at the time of approval and should not be altered. Feedback, including proposed amendments to this published document, should be directed to AHPOQ at: allied_health_advisory@health.qld.gov.au.

This CTI must 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

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

Requisite training, knowledge, skills and experience

Training

- Mandatory training requirements relevant to Queensland Health/Hospital and Health Service (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, assisting a client from lying to sitting and sit to stand transfers.
- CTI S-MT05: Assess standing balance.
- CTI S-MT02: Prescribe, train and review of walking aids. S-MT02 provides competence in examining walking with aids and should be completed concurrently with S-MT01 if the skill share-trained allied health professional (AHP) will implement S-MT01 with clients that use a walking aid. The health professional can implement S-MT01 with the walking aids they have demonstrated competence in S-MT02.
- This CTI uses history taking and observation as the primary methods to assess functional walking. Health services may use other tools to complement this task e.g. S-MT03: Timed Up and Go (TUG) Test. Where this is the case, the test should be integrated into the training and competency assessment plan for the skill share-trained health professional and recorded on the Performance Criteria Checklist.

Clinical knowledge

- To deliver this clinical task a health professional is required to possess the following theoretical knowledge:
  - the interpretation of the normal clinical observations that may impact functional walking including heart rate, respiratory rate, blood pressure, oxygen saturation, pain scales and exertion scales.
  - an understanding and ability to identify, from medical records and client observation potential walking problems.
  - the basic elements of a normal walking pattern and common deviations such as uneven step length, shuffling, hip hitching, foot drop, freezing, ataxia, etc.
  - the potential causes for deviations from a normal walking pattern including pain, weight bearing restrictions, muscle weakness/tightness, neurological conditions, alcohol abuse, prosthesis, poor vision.
  - of the local falls risk screening and mitigation strategies, programs and/or processes.
  - local protocols, guidelines and care pathways relevant to the context that supports care of client's with walking problems e.g. total knee replacement clinical pathway, total hip replacement protocol, or referral pathway for vestibular or musculoskeletal assessment.
- The knowledge requirements will be met by the following activities:
  - completing training program (as above).
  - reviewing the Learning Resource.
  - receiving instruction from the lead allied 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 requirement is relevant to the healthcare setting and client group. This may include blood pressure, heart rate, pulse oximetry, pain or exertion scales.
    - competence in the use of mobile oxygen where this is relevant to the healthcare setting.

Indications and limitations for use of a skill shared task

The skill share-trained health professional shall use their independent clinical judgement to determine the situations in which this clinical task can be delivered. 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 identified as having walking problems. This may be via referral, subjective history (documented history or client reports recent fall, balance problems, lower limb injury, illness that reduces cardiovascular fitness) or direct observation (looks unsteady/unsafe, incorrectly using/poorly maintained walking aid).
- The client is medically stable and there is no medical prohibition to walking e.g. the medical record indicates that the client can be walked and vital signs are within expected limits, the client has met all care pathway requirements to walk (e.g. haemoglobin level or x-ray review and clearance) or the client is living in the community and is not acutely unwell.

Limitations

- Limitations for this CTI include those listed in S-MT05: Assess standing balance (review list for details) with the exception of:
  - a weight bearing restriction of weight bear as tolerated
    - where the local health service has determined other weight bearing restrictions to be in the scope for the health professional and they have been trained and assessed as competent as part of this CTI. For example, non-weight bearing or partial weight bear, the health professional will adhere to the local health service decision throughout the task and this will be documented as part of the Performance Criteria Checklist.
  - the use of a walking stick or crutches to mobilise
    - where the local health service has determined walking aids to be in scope for the health professional and they have been trained and assessed as competent as part of this CTI. For example, hopper frame, 4 wheeled walker, the health professional will adhere to the local health service decision throughout the task performance and this will be documented as part of the Performance Criteria Checklist.

- The client is on bed rest orders.
- The client has medical or surgical restrictions and the skill share-trained health professional has not been trained and assessed as competent to deliver as part of this CTI. Restrictions will be documented via care pathways, protocols, theatre notes or medical orders. Examples include weight bearing status (non, partial, full); mobilisation with range of movement brace only; limited distances only or adherence to the local protocol for total hip replacement or sternotomy precautions for upper limb weight bearing; or post-surgical x-ray or haemoglobin level checked. The client must be cleared to walk by the medical team or through a protocol/care pathway and any restrictions must be adhered to during the task. If restrictions are unclear, consult with the treating team.
- Requirement for oxygen or observed cardiorespiratory distress. If the client is observed to have difficulty breathing at rest, requires or is currently receiving oxygen, discuss mobilising the client with a relevant health professional from the treating team (nurse, doctor and/or physiotherapist) prior to commencing the task, including any additional clinical observations required for monitoring during the task. Confirm the clinical observation limits for monitoring as normative values may be impacted e.g. O2Sat in chronic obstructive airways disease or emphysema. If the skill share-trained health professional has not been trained and assessed as competent to use mobile oxygen or the equipment to measure for clinical observations, cease the task.
- The client expresses or indicates significant anxiety with regard to standing and walking. This may include “pushing”, unsafe or excessive leaning back/extension observed prior to commencing the task or reported by staff. If more than one light assist is required to perform the task, implement referral pathways for comprehensive walking assessment.

Safety and 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:
  - appropriate footwear should be worn at all times during this task. Shoes should be enclosed, well-fitting and with good traction. If the client does not have shoes, socks/stockings should be removed prior to mobilising. Appropriate safety measures for floor surface texture and temperature should be monitored during the task.

Equipment, aids and appliances

- The client should be assessed using their usual walking aid and any other required devices, such as ankle foot orthoses (AFO) or knee brace. If the client’s usual walking aid and/or required device/s are not available or in good working order, a similar trial/loan aid should be provided. Check Limitations.
- Ensure all equipment is clean and in good working order as per local infection control protocols. Refer to the manufacturer’s guidelines for specific maintenance guidelines. For the client’s walking aid examples include checking rubber stoppers are present and have tread, adjustment screws or pins are engaged correctly, brakes are working (if relevant). If the equipment is unsafe do not proceed with the assessment.

- Confirm that all equipment required for the task is appropriate for the client, this includes the safe working load or height requirements of the chair to rest and/or walking aid.

Environment

- Ensure the planned route is free of trip hazards and obstacles to reduce the risk of falls e.g. pedestrian traffic, equipment and trolleys. It is advisable to position a chair part way along the route or have an assistant following behind with a wheelchair to allow the client to rest if required. Where possible, implement this task in an area with other staff nearby and available in case assistance is required.

Performance of clinical task

1. Preparation

- Use information collected from the medical chart to determine the client's walking history including the use of any aids and/or required assistance - see the Guide to conducting a walking history in the Learning resource.
- Identify that all required pre-walking checks have occurred e.g. in the acute care setting x-rays, haemoglobin (Hb) and clinical observations are satisfactory, and the client is medically cleared to walk through chart entry or meeting care pathway/protocol requirements.
- Ensure the client has their usual walking aid (if relevant), required braces/orthoses and suitable footwear available - see Safety and quality.
- Plan the route for mobilisation.

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 unit record (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 Health Care, 2nd edition (2017).

3. Positioning

- The client will be in a standing position during the functional walking assessment. The client will usually be lying or sitting in bed or in a chair, prior to the task. If the client is unable to achieve a standing position independently, provide assistance to stand as per the local hospital and health services patient manual handling protocol. If the client requires more than one assist (light), cease the task (see Limitations) and document the outcome, including the position attained and the assistance required.
- The health professional's position during the task should be:
  - standing to one side, the affected side if relevant, and slightly behind the client to allow observation of the walking pattern.
  - close enough to provide hands on assistance if required.
- If required, an assistant should stand on the affected side (where relevant) and in a position so as not to obstruct the observation of the client's walking pattern. If a client requires more than one

assist (light), review Limitations for this task and cease. An assistant may also follow behind with a wheelchair or other mobile seating if frequent rest breaks are expected.

4. Task procedure

- The task comprises the following steps:
  1. Explain and demonstrate (where applicable) the task to the client.
  2. Check the client has understood the task and provide the opportunity to ask questions.
  3. Confirm with the client their current physical capability including ability to walk, assistance required, aid/s use and any medical restrictions such as weight bearing status, oxygen requirements.
  4. Perform a brief assessment of the client in sitting or lying before commencing the task. This may include any required clinical observations for the client (blood pressure, respiratory rate), muscle strength (e.g. ability to grip and weight bear through upper limbs, lower limb strength), pain, general movement, balance and ability to follow instructions.
  5. Determine if the client is able to independently sit, sit to stand and stand, including within their weight-bearing restrictions and using their usual walking aid (if relevant). If required, provide assistance as per the local health service manual handling protocol. If the client requires more than one assist (light) or is unable to adhere to weight bearing restrictions, cease the task and document the outcome.
  6. Instruct the client to stand and pause before walking to allow time for potential postural blood pressure drop, dizziness or pain to subside. Ask the client to “take some steps on the spot” (march on the spot), using their walking aid for support if relevant, to ensure they are able to weight shift adequately (consider weight bearing status – this would not be appropriate if the client has non-weight bearing or partial weight bearing orders). Provide assistance as per the manual handling protocol in the service. If the client requires more than one assist (light) or is unable to maintain weight bearing restrictions, cease the task and document the outcome.
  7. Request the client start walking using any required assistance and within any medical restrictions (weight bearing status, distance, oxygen requirements etc.) and walking aids previously prescribed. Observe the client’s walking pattern and any deviations from a normal pattern or expected performance, refer to Table 1: Factors that contribute to walking performance in the Learning resource. The distance walked during the task will depend on the client’s abilities but will need to replicate functional walking requirements adequately to inform a walking status recommendation e.g. to the bathroom in an acute ward, to the dining room or recreation room in a aged care facility, to the letterbox or clothes line in a home setting.
  8. Based on information collected, make a recommendation to the client and team regarding the client’s safe walking status and/or any further management plans required using the clinical reasoning tool in the Learning resource e.g. trial of a walking aid, supervision or assistance requirements when mobilising, environmental considerations.

5. Monitoring performance and tolerance during the task

- Monitor common errors and compensation strategies during the functional walking assessment and provide feedback to ensure safety, refer to Table 1: Factors that contribute to walking performance in the Learning resource. Note any corrections that the client makes in response to verbal prompting or cueing strategies.

- Monitor the client during the task including for any required clinical observations as per any medical team orders, local protocol or risk assessment. Check that the client feels well during the assessment and observe for signs of fatigue (shaking, increase in compensatory patterns of movement), shortness of breath, sweating, pain, dizziness or reports of an increase in physical exertion. If required pause the task and check clinical observations return to 'normal values' for the client e.g. respiratory rate, blood pressure, oxygen saturation. If observations have not been exceeded and symptoms settle, resume the task. Clients may need a prompt to reduce their walking speed or distance or sit down and rest i.e. seat half-way, wheelchair, mobile seating option. If accepted limits for the individual client have been exceeded, or symptoms persist, cease the task and inform the treating team or relevant medical practitioner.
- If during the task the client expresses or demonstrates significant anxiety with regard to standing and mobilising or the need of more than light assistance, cease the task. Sit the client in a chair and document outcomes.
- Monitor for adverse reactions and implement appropriate mitigation strategies as outlined in the Safety and quality section above.

6. Progression

- If no adverse reactions were evident on assessment, and if indicated by the client's functional goals, the task may be progressed to more challenging situations, refer to the guide to conducting a walking history in the Learning resource. This may include:
  - assessment in an actual or simulated functional environment e.g. outside, bathroom, busy corridors, kitchen, around corners, through doorways, different floor surfaces.
  - if there are no contraindications progressing to a less supportive walking aid by reducing the level of support provided. The prescription, training and review of the new walking aid must be provided by a health professional with competence in the task e.g. S-MT02.
  - the client may require further assessment if functional walking goals change or factors impacting walking improve or decline e.g. acute exacerbation of chronic obstructive pulmonary disease (COPD) resolves, change in weight bearing status, a new fall, acute injury to the lower limbs, hospital admission, illness or surgery. This may include a change in the level of assistance required, review of walking aid type and/or requirements.
  - in all instances, if the client is not safe to walk, the health professional will ensure any relevant hospital and health service manual handling and/or falls protocol and management plans are implemented.

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:
  - walking aid used during the assessment or record "nil aid".
  - level of assistance required, including the use of a walk belt, rest stops, verbal cueing or directions, physical steadying or guidance, common errors/compensatory strategies and corrections that the client made in response to verbal prompts/cues/manual guidance etc. If the assessment identified that no assistance is required, record 'independent'.

- the use of any pain relief, oxygen, or clinical observations monitored during the assessment, and outcomes observed.
- distance mobilised and the environment i.e. outside, ward, bathroom, around bed.
- recommendation regarding the client's walking ability including any further management plans.
- the skill shared task should be identified in the documentation as "delivered by skill shared-trained (insert profession) implementing CTI S-MT01: Assess functional walking" (or similar wording).

References and supporting documents

- Physiopedia 2020. Gait. Available at: http://www.physio-pedia.com/Gait
- Rochester L, Lord S, Morris M (2013). Chapter 6: The role of physiotherapy in the rehabilitation of people with movement disorders. In Iansek R, Morris ME (Eds), Management in Movement Disorders. Cambridge University Press: New York.
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2nd edition). Available at: https://www.health.qld.gov.au/__data/assets/pdf_file/0019/143074/ic-guide.pdf

Assessment: performance criteria checklist

S-MT01: Assess functional walking

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.			
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 completing equipment safety check and confirming with client pre-morbid/usual gait +/- aid(s), ensuring environment is cleared along path to walk, and ensuring client is wearing suitable footwear.			
Describes task and seeks informed consent.			
Positions self and client appropriately to complete task and ensure safety.			
Delivers task effectively and safely as per CTI procedure, in accordance with the learning resource. a) Clearly explains and demonstrates task, checking client's understanding. b) Gains functional walking history from medical record and subjectively from the client/carer. 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.). d) Requests client stand and pause before commencing walking. e) Assesses client's walking, ensuring adherence to restrictions, and using required assistance and/or walking aid. f) Describes observed gait abnormalities appropriately. g) During task, maintains a safe clinical environment and manages risks appropriately.			

Monitors for performance errors and provides appropriate correction, feedback and/or adapts task to improve effectiveness, in accordance with the learning resource.			
Documents in clinical notes including reference to the task being delivered by the skill share-trained health professional and CTI used.			
If relevant, incorporates outcomes from the task into intervention plans e.g. plan for task progression, interprets findings in relation to care planning, or refers to other members of the healthcare team if required.			
Demonstrates appropriate clinical reasoning throughout task.			
Notes on the local service model			
The health professional has been trained and assessed as competent to deliver this task for the following walking aids: □ Single point walking stick □ Crutches: □ Axillary □ Canadian □ Hopper frame/Pick up frame □ Four wheeled walker (4WW) Other _____ _____			
The health professional has been trained and assessed as competent to deliver the task for the following weight bearing status: □ Full weight bearing (FWBing) □ Weight Bearing as Tolerated (WBAT) □ Partial Weight Bearing (PWBing) □ Non-Weight Bearing (NWBing)			
Notes on the service model in which the health professional will be performing this task:			
The health professional has been trained and assessed as competent to deliver the task in the following contexts e.g. total hip and knee replacement clients living in the community.			

Comments:		
Record of assessment of competence		
Assessor name:	Assessor position:	Competence achieved: / /
Scheduled review		
Review date	/ /	

S-MT01: Assess functional walking

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.
  - 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

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

Assess functional waking: Learning resource

Required reading

- Alghwiri AA, Whitney SL. (2012). Chapter 18 Balance and Falls. In Guccione AA, Wong RA, Avers D (ed.). Geriatric Physical Therapy (3rd Ed). St Louis, Missouri, Elsevier. Available at: https://www.physiospot.com/wp-content/uploads/2014/05/Ch_18_Guccione3E_9780323029483_Elsevier.pdf
- Author unknown. Observational gait analyses: Identifying key events in the gait cycle. Available at: http://www.painfreefeet.ca/site/ywd_painfreefeet/assets/pdf/GAIT_ANALYSIS.pdf
- Evanosky NL (2014). Chapter 68 Gait training. In Kauffman TL (Ed.). A comprehensive guide to geriatric rehabilitation. Elsevier Ltd. Available through CKN for Queensland Health staff.
- Physiopedia (2020). Available at: https://www.physio-pedia.com/home/
  - Gait.
  - SAFEMOB. Safe prescription of mobilising patients in acute care settings.

Required resources:

- Local Hospital and Health service:
  - falls program/ processes
  - care pathway/protocols relevant to the planned context.

Required viewing

- Physiotutors (2015). Gait cycle & gait analysis. Available at: https://www.youtube.com/watch?v=1u6d1CX7o9c&list=PLO_peL93VBmlMyIVoq19cRHTzrc2JnanC
- Prohealthsys (2013). Assessment – Gait demonstration
  - Ataxic. Available at: https://www.youtube.com/watch?v=JSyLnt3rLxs
  - Choreiform. Available at: https://www.youtube.com/watch?v=PsFJkL3x10o&list=TLPQMTAwODIwMjAudxo3XCKhIQ&index=2
  - Hemiplegic. Available at: https://www.youtube.com/watch?v=7w-fhfdifNc
  - Neuropathic. Available at: https://www.youtube.com/watch?v=1bvj9AELorc
  - Myopathic. Available at: https://www.youtube.com/watch?v=b5rIEx9SsCo
  - Parkinsonian. Available at: https://www.youtube.com/watch?v=7SyTpEdhBLw

Optional resources

- Australian Commission on Safety and Quality in Health Care. Safety and Quality. Improvement Guide Standard 10: Preventing Falls and Harm from Falls (October 2012). Sydney. Available at: https://www.safetyandquality.gov.au/sites/default/files/migrated/Standard10_Oct_2012_WEB.pdf
- Queensland Government (2012). Falls prevention in action – Stay on Your Feet ®. Available at: https://www.health.qld.gov.au/stayonyourfeet/toolkits/fallpreventinaction

Guide to conducting a walking history

- Information regarding the client's walking history may be obtained from the client's medical record and a face to face subjective examination. If during information gathering the client uses a walking aid, requires more than light assistance or has a weight bearing restriction that the skill share-trained health professional has not been trained and assessed as competent to deliver, information gathering should be completed with a referral for observation of walking to be undertaken by a health professional with expertise in the task.
- Conducting a walking history involves determining the following:
  - the client's usual mobility - does the client normally mobilise with a walking aid? If yes, how long have they used a walking aid? How may walking aids does the client use? For example, does the client use the same walking aid indoors and outdoors? In the bathroom? On the stairs? Check Indications and Limitations.
  - does the client require assistance of another person to walk? Carer? Staff? If so, what type of assistance is provided? Manual guidance, verbal cueing, physical assistance. Check Indications and Limitations.
  - the client's weight bearing restrictions and expected duration of restrictions. If restrictions are planned to change, a review will need to be booked as part of the management plan.
  - the distance the client can walk comfortably before requiring a rest, including any limitations that prevent the client from walking further e.g. knee pain, shortness of breath, medical restriction. The distance planned to observe walking should not exceed these parameters.
  - continence issues that may affect the assessment – does the client need to go to the toilet prior to walking? Does the client experience urgency issues, and if so, has this contributed to any previous falls or 'near' falls?
  - cognitive issues that may affect the assessment e.g. wandering, aggression, difficulty following instructions. Refer to Limitations section, including S-MT05.
  - functional tasks that the client is required to perform whilst walking e.g. carrying items, crossing roads, using escalators. Determine if these will be included as part of the assessment or if further assessment and/or a functional re-training program are required as part of the management plan.
  - has the client experienced any falls in the previous 12 months? Including the number and cause of these falls e.g. slip, trip, hypotension, dizziness, visual disturbances, medications etc. Were any injuries sustained? Determine if the client meets local protocols for a falls assessment, musculoskeletal and/or vestibular assessment and implement as indicated.
  - activities/hobbies/employment the client participates in and the walking requirements for these activities. The client may benefit from a functional re-training program as part of the management plan.
  - client's home environment and any other environment they frequently visit e.g. stairs/carpet/space around house. Does the client use a walking aid or require support in any of these environments?
  - if the client is required to use stairs currently or in the discharge location. The health professional may collect this information but can only assess the client on stairs if it has been deemed to be in scope for the health professional by the local health service and they have been trained and assessed as competent to deliver S-MT04: Assess stair mobility.

- social circumstances and relevance to walking requirements e.g. lives with family or alone, support available from carer for walking, functional tasks undertaken in the home or at work, method of accessing the community drive, taxi or bus?

Cueing

- Cueing is a strategy used to support movement disorders. External cueing and attention is provided external to the client, this may be via the environment, another person or piece of equipment. Internal cueing occurs when attention and self-instruction are internally generated. Both external and internal cueing can assist clients to improve gait performance (stride length, initiation, freezing, turning).
- Modes of delivery for cueing include spatial cues (visual e.g. lines on the ground), rhythmical cueing (auditory e.g. metronome beats, somatosensory, visual), sensory stimulation (e.g. touch, vibration); attention/cognitive strategies (e.g. internal focus on movement) and verbal instructional cues (therapist or self-generated). Clients may use a combination of both internal and external cueing at any one time, for example self-talk to focus on lines on the ground.
- Health professionals performing a walking assessment need to be aware of any cueing used (external or internal) during the assessment process, noting the impact on client performance, including the reliance/requirement for cueing on safety.

Functional waking assessment observations and interpretations

There are many elements to a functional walking assessment. Some aspects of the assessment may occur over a number of sessions. For example, an inpatient may initially be assessed for safety to walk to the bathroom but prior to discharge, further assessment in more functionally relevant environments is likely to be required. Table 1 outlines some of the functional walking indicators evident in an assessment and provides examples of the clinical observations and factors that may contribute to the performance problems.

Table 1: Factors that contribute to walking performance

Indicator	Observation	Potential contributing factors to observed performance problems
General		
Walking Aid	Client demonstrates incorrect use of the aid e.g. poor placement of aid, clipping aid with foot, not using brakes appropriately	Aid is in poor working order/ maintenance or incorrectly measured and fitted. Client has not been trained to use the aid including its safety features. Client has a new or worsening cognitive impairment.
Assistance required	Client requests or requires assistance to walk. This may include verbal cueing/ prompting, manual assistance with equipment (oxygen cylinder), standby-assistance for safety to support walking or guidance to avoid obstacles.	Vision impairment, cognitive impairment, movement disorder (unsteady, ataxic), shortness of breath (needs frequent rests), requires oxygen equipment, lacks confidence or has a fear of falling.

Indicator	Observation	Potential contributing factors to observed performance problems
Client needs to steady self in standing before commencing walking	Client stands and pauses (for an increased length of time). Client may hold onto chair arm rest, walking aid, furniture, closes eyes, squeeze thigh muscles or take a deep breath before walking.	The client may have anxiety about moving (pain, fear), hypotension, balance/vestibular symptoms. The client may require or expect a cue/ prompt to proceed.
Limitations to walking not related to gait pattern	Heavy breathing/shortness of breath, increased respiratory rate, puffing, coughing, wheezing, freezing episodes.	Cardiopulmonary conditions (COPD, emphysema, bronchiectasis, lung cancer), obesity, Parkinson's disease, anxiety.
Gait Observations – using the phases of the gait cycle		
Lower limb - stance	Poor foot placement/foot strike. Lower limb does not achieve mid-stance posture/position or prepare for swing. Reduced time in stance/uneven weight bearing e.g. 'limping'.	Muscle weakness/contracture in lower limb (hip/knee/ankle), ataxia, tremor, deformity, pain, leg length discrepancy, poor proprioception, foot drop, arthritic changes, stroke, Parkinson's Disease, alcohol related neurological conditions.
Lower limb - swing	Poor push-off to initiate swing, lacks foot clearance during swing e.g. catching toes/ scuffing feet.	Muscle weakness/contracture in lower limb, deformity, pain.
Upper limb - arm swing	Lack of co-ordination with trunk/lower limb movement, excessive or no reciprocal arm swing.	Muscle weakness/contracture in upper limb, deformity, pain, anxiety/tension.
Trunk and head movements	Excessive lateral movement (swaying or excessive side bending) – particularly during stance. Flexed trunk throughout (stooped posture) and/or downward gaze (watching feet).	Muscle weakness/contracture, leg length discrepancy, deformity e.g. hyper kyphosis (hunched), poor vision, inappropriate height of walking aid, fear of falling, poor balance.
Base of Support	Feet are placed wide apart (including clipping walking aid during swing phase). Feet are close together, swing leg routinely clips stance leg or foot placement crosses the midpoint (scissoring gait).	Poor balance, ataxia (movement control problems of central nervous system causing problems with limb and trunk control), lower limb deformity.
Movement control and fluency	Gait pattern is not consistent (e.g. foot placement variation in width and length). Movement control and fluency (smoothness) impacted by freezing or problems initiating a step, shaking, tremors, floppy or stiff looking limbs (hypotonic/hypertonic).	Fatigue, anxiety, increased/reduced muscle tone, neurological disorders e.g. Parkinson's Disease, cerebral palsy, alcohol abuse.

As part of fully assessing the client's walking, it is essential to review the client in more functionally relevant environments and confirm that the task can be performed without a loss of balance or change in the level of assistance required. A functional walking assessment includes observing performance in actual or simulated environments, performed in similar contexts. For example, walking around the house, opening a door whilst carrying a cup of tea, crossing the road to get to the shops.

Table 2 outlines some of the functional walking indicators evident in an assessment and provides examples of the clinical observations and factors that may contribute to the performance problems.

Table 2: Functional walking assessment - able to perform indicator without loss of balance or change in the level of assistance required

Indicator	Observation	Potential contributing factors to observed performance problems
Turn/change direction/ negotiating corners	Clients reaches for support (furniture/ wall), increase in trunk movement outside base of support, feet cross over, client significantly reduces speed of movement.	Dizziness, poor balance, muscle weakness (bilateral or unilateral), poor proprioception, ataxia, fear, vision impairment.
Manoeuvre in tight spaces/around obstacles e.g. furniture, equipment, bathroom	Client reaches for support (sink/rails), client 'falls into' or bumps walls/ furniture with trunk/lower limb.	Poor balance, muscle strength or control, perceptual problems including vision impairment or single-sided neglect.
Walk and talk	Client stops to answer questions, gait pattern worsens +/- level of assistance changes when client speaks.	Poor balance, hearing impairment.
Walk and carry e.g. cup of water)	Item is dropped/spilt during walking. Tremors are observed. Gait pattern worsens +/- level of assistance changes during task.	Poor balance, muscle strength or control.
Open/close a door	Unable to use door handle (turn/manipulate handle, push or pull door open or closed), feet are bumped, loss of balance.	Cognitive impairment, poor balance, muscle strength or control, perceptual problems including vision impairment or single-sided neglect.
Busy environments with other people/ noise/distractions	Clients reaches for assistance (furniture/ wall), increase in loss of balance episodes, significant reduction in walking speed/fluency.	Vision or cognitive impairment, poor balance, muscle strength or control.
Changes in floor surface e.g. carpet, tile, lino	Client reaches for assistance (furniture/wall), increase in loss of balance episodes, significant reduction in walking speed/fluency.	Vision or cognitive impairment, poor balance, muscle strength or control.
Outside – concrete footpaths/gravel/ grassed areas/ slopes	Clients reaches for assistance, increase in loss of balance episodes, significant reduction in walking speed/fluency.	Vision or cognitive impairment, poor balance, muscle strength or control.
Ramps/Slopes/ Stairs (noting rail usage)	Clients reaches for assistance, increase in loss of balance episodes, significant reduction in walking speed/fluency.	Vision or cognitive impairment, poor balance, muscle strength or control.

Outcomes of a functional walking assessment

- The observations of the client during the walking assessment need to be collated to formulate a recommendation.
- Documentation of the assessment should include concise objective statements describing the client's walking including assistance required, aids used, gait pattern, limitations to walking environment and symptoms during the task.

- The recommendation must then clearly state if the client is:
  - safe to continue to walk as observed i.e. no changes/proposed intervention. This should include a statement that the client be re-referred should issues/concerns arise.
  - safe to walk within restrictions. This will include a list of recommendations, for example:
    - with the use of a new prescribed walking aid that has been assessed as suitable, including name of the walking aid and the observed gait with the prescribed aid.
    - within limited environments and/or times e.g. on ward only, in house, during the day.
    - with support including assistance and type e.g. stand-by, verbal prompts, manual guidance.
    - for a period of time e.g. whilst on weight bearing restrictions.
    - it must also include a plan to address the identified deficits/issues being addressed. This may be a review in an appropriate timeframe e.g. when weight restrictions will change, or referral for management of observed deficits with a health professional with expertise in the area e.g. muscle stretching and strengthening program, balance exercises, see Learning resource.
  - not safe to walk. This must include a plan to address the identified deficits/issues e.g. further assessment and/or intervention with a health professional with expertise in the task e.g. muscle stretching and strengthening program, balance exercises.

Guide to clinical reasoning

1. Setting and context

Inpatient vs. community outpatient

2. Client

- Presenting condition and history relevant to task:
  - presenting medical condition
  - past medical history (e.g. falls history, neurological disorder, orthopaedic history)
  - cognitive status (i.e. able to follow and retain instructions)
  - visual status (i.e. wears glasses, other conditions)
  - relevant assessment findings (sensory deficits, weakness, pain).
- General care plan:
  - inpatient vs. outpatient
  - discharge planning relevant to service
  - community services involved.
- Functional considerations:
  - functional needs in the home environment and current status i.e. independent
  - planned functional goals
  - upper limb function – is client able to grip and reach?
  - cognition – is client able to follow/retain instructions?
  - walking method prior to admission/referral:
    - problems reported

    - walking (independent/uses aid/physical assistance).
  - sit-stand (independent/uses aid/physical assistance)
  - general longitudinal timeline of level of mobility.
- Environmental considerations:
  - consider height, widths, types and any adaptations of equipment at primary place of residence. Detail any concerns:
    - toilet/bathroom – rail and equipment
    - bed
    - stairs
    - kitchen cupboards and benches
    - entrance/steps
    - driveway/pathway
    - space around house.
  - consider constraints or obstructions present
- social considerations
  - others residing in home environment
  - carer able to safely assist and willing
  - carer education received
  - home care services able/available to help.

3. Task indications and precautions considered

- Medical status and stability.
- Subjective history indications.
- Client weight bearing status.
- Surgical precautions/ restrictions adhered to.
- Client considerations – height, weight, pain relief, coordination etc.

4. Outcomes of task

- Aid used (y/n).
- Assistance required (y/n).
- Client needs to steady self before setting off after standing up (y/n).
- Gait pattern used – step-to or step-thru
- Is heel strike present? (y/n) If no, describe.
- Is stance phase normal? (y/n) If no, describe.
- Is toe off normal? (y/n) If no, describe.
- Is swing phase normal? (y/n) If no, describe.
- Are the client's steps even? (y/n) If no, describe.
- Is the client weight bearing evenly (if permitted under weight bearing restrictions)? (y/n) If no, describe.

- Is the client limping, catching their toes or scuffing their feet? (y/n) If yes, describe.
- Does the client walk with their feet close together (i.e. Narrow base of stand (BOS)? (y/n)
- Is client steady in turning/changing direction? (y/n) If no, describe.
- Client able to walk and talk (y/n).
- Client able to walk and carry (y/n).
- Does the client's gait look "abnormal"? (y/n) If yes, describe.
- Client able to ascend/descend steps (if required)? Refer to CTI S-MT04 stairs mobility assessment (y/n).

5. Plan

- Consider subjective assessment and home/social environment to confirm level of mobility is suitable for the home environment.
- Plans for client follow up (e.g. Implement *CTI S-MT02: Assess, prescribe and trial walking aids)*, refer for assessment to address the observed abnormal walking patterns due to conditions that would benefit from rehabilitation (i.e. the client has not previously participated in strengthening, flexibility or balance exercises or has had a deterioration in function since previous participation).

6. Overall reflection

- Was the outcome of the functional walking assessment safely completed?
- Is there a clear plan recommendation regarding the client's current mobility status?
- Further assessment or treatment indicated.
- Referral options/plans.
- Further learning indicated.