Queensland Health

Clinical Task Instruction

Skill Shared Task

S-CP01: Screen for cognitive impairment using a standardised tool and provide basic/bridging intervention

VERSION CONTROL

Version:	1.0		
Reviewed: (Profession)	Statewide Directors of Occupational Therapy, Statewide Directors of Psychology and Statewide Directors of Social Work	Date:	4/10/2019
Approved:	Allied Health Professions' Office of Queensland	Date:	18/01/2021
Document custodian:	Chief Allied Health Officer, Allied Health Professions' Office of Qld.	Review date:	18/01/2024
Acknowledgements:	West Moreton Hospital and Health Service		

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.

Scope and objectives of clinical task

This CTI will enable the health professional to:

- determine if screening for cognitive impairment is suitable for the client.
- select an appropriate screening tool for use, and safely and effectively administer, record and interpret the results.
- develop and implement a plan to address any cognitive problems including supporting the team's decision-making with regard to safety, providing standard education on memory or attention strategies and referring to other health professionals for comprehensive assessment/review if required.

Note 1: This CTI provides learning resources for the screening of mild cognitive impairment by the Montreal Cognitive Assessment (MoCA), Rowland Universal Dementia Scale Assessment (RUDAS) and Standardised Mini-Mental State Examination (SMMSE). Health services may substitute or use additional tools to complement the task procedure for a specific client group or service model such as the Kimberley Indigenous Cognitive Assessment (KICA).

The local health service will determine which standardised tools are included in the scope for the skill shared task. Professionals with expertise in this clinical area and relevant service managers will guide the decision-making on tools included in the scope of the skill shared task implementation. If additional or alternative tool/s are integrated, the training and competency assessment plan for these tools should be recorded on the Performance Criteria Checklist.

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 occupational violence prevention training.
- Montreal Cognitive Assessment training and certification, if relevant. Available at: https://www.mocatest.org/

Clinical knowledge

- To deliver this clinical task a health professional is required to possess the following theoretical knowledge:
  - basic understanding of normal cognitive changes across the adult lifespan and risk factors for developing cognitive problems.
  - understand and identify from medical records and client observation, the common clinical features that may indicate cognitive impairment.
  - the rationale, purpose, benefits and limitations of the MoCA, RUDAS and SMMSE and any additional tools considered in scope for the local service.

  - testing protocol and procedure for each cognitive screening tool planned for use in the local service including indications for use, testing protocol, scoring, normal values and interpretation of scores.
  - common strategies used to manage mild cognitive problems including the rationale, limitations and risks associated with each intervention.
  - evaluation processes to determine the effectiveness of memory and attention strategies.
- The knowledge requirements will be met by the following activities:
  - complete the training program.
  - review of the Learning Resource.
  - receive instruction from the lead health professional in the training phase.
  - read and discuss the following references/resources with the lead health professional at the commencement of the training phase:
    - local occupational violence prevention processes.
    - local referral pathways for services to support comprehensive cognitive assessment and cognitive retraining e.g. memory clinic.

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:
    - nil.
  - **relevant but not mandatory** for a health professional to possess in order to deliver this task:
    - nil.

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 they will deliver 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 (or carer/staff) has identified problems with cognition. This may be disclosed through subjective history or direct observation. Problems that may place the client at a potential risk of harm include:
  - poor decision-making in relation to safety including physical, emotional, social or financial behaviours.
  - confusion about time, place, person or recent events.
  - memory, attention and/or initiation problems that negatively impact on everyday tasks. For example, a significant change or gradual ongoing decline in the way the client would normally

care for themselves or their home, including personal hygiene, appearance, nutrition or housing maintenance.
  - a dramatic loss of language and social skills, such as, word finding difficulties, unclear or confused speech, not understanding others or having wandering thought patterns when communicating.
  - difficulty expressing emotions appropriately, such as inappropriate anger, sexual expression, humour or crying.
  - declining reading or writing skills.
  - difficulty judging distance or direction, such as when crossing the road or driving a car (NSW Government and Attorney General's Department, 2017).

OR

- The client requires a repeat cognitive screen for monitoring purposes to support the decision-making of the multi-disciplinary team.

Limitations

- The client has a diagnosis of dementia, including related conditions such as Alzheimer's Disease and there are no new indications for testing.
- The client has known or suspected amnesia. This may be due to a head injury, severe illness, high fever, seizures, emotional shock, substance use or following general anaesthetic or brain surgery.
- The client is at risk of or known to be in delirium. Risk factors for developing delirium are client aged 65 years or older, known cognitive impairment or diagnosis of dementia, hip fracture, severe illness or high risk of dying (NICE, 2010). Clients with delirium present with a change in cognitive function. The client's family may report that the client is more confused, disorientated, inattentive, drowsy or agitated than usual. Implement local processes to have the client screened and/or assessed for delirium prior to commencing the task.
- The client is, or has signs of being, acutely unwell - see the Learning resource. If the presentation is recent or worsening, implement acute management processes such as contacting the Queensland Ambulance service, general practitioner or ward staff. In consultation with the relevant health professionals, determine if cognitive screening is indicated at this time.
- If the carer or family requests cognitive assessment and the client does not consent, do not commence the task. The client retains capacity and has the right to refuse care until otherwise determined by a medical officer or authority. If indications for cognitive impairment are present, liaise with a health professional with expertise in the task to develop an action plan for client and/or carer safety e.g. ring the ambulance, perform screening at another time or with another care provider that the client is familiar with, such as their general practitioner or aged care assessment team (ACAT).
- A formal authority has requested that the client has a comprehensive assessment of cognitive function e.g. court, Queensland Civil and Administrative Tribunal (QCAT). Implement local processes and referral pathways for comprehensive cognitive assessment. This may include completing screening processes to support triage.
- The client is known or appears to not have the basic literacy or numeracy skills sufficient to complete the standardised assessment. Liaise with a health professional with expertise in the task for alternative assessment options.
- The client is an adolescent and/or child.

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:
  - the ideal time to test clients is when they are most alert, for example in the morning after showering. For clients who are displaying signs of fatigue, drowsiness or poorly managed pain, consider rescheduling the test at a time when the client is likely to be more alert.
  - the client must, at a minimum, be able to follow single step instructions for safety. If the client has poor attention or is easily distractible, provide reassurance, redirect the client to the task or consider the use of carer support during the task.
  - carers or family members may be present during testing to provide comfort and/or support. Prior to commencing testing, instruct the carer to avoid prompting the client, either verbally or with gestures, as this will invalidate test results.
  - emotional lability or dysregulation can impact on concentration and affect test results. Prior to commencing the task, confirm if the client has had any recent significant changes and consider the timing of the screening. See the Guide to conducting a cognitive history for screening in the Learning resource.
  - clients can become anxious about cognitive testing. This may occur with elderly clients who are concerned about how the results may impact their independence and influence decisions about their healthcare. Provide encouragement and support and further discuss the purpose of testing i.e. the screening tool supports healthcare planning and is not a diagnostic tool. It may also be beneficial to engage the support of a carer to reduce anxiety.
  - at a minimum, the client needs to have adequate vision to view the instruction sheets. If the client is blind or has poor vision that is not correctable with glasses, consider use of the MoCA blind version.
  - to perform the writing/drawing tasks, the client must at a minimum, be able to hold a writing implement. If required, determine if compensatory strategies can be used, such as positioning in side-lying in bed, taping the paper to the desk to prevent movement, providing a pencil grip or thick marker to support 'writing' or having the client use the non-dominant hand. Compensatory strategies used to complete the task must comply with the testing protocol and should be documented. For clients who cannot be supported to complete the writing/drawing tasks, complete the verbal questioning components of the screening tool and liaise with a health professional with expertise in the task to support interpretation of the results and develop a plan.
  - clients must be able to communicate answers that can be understood by the interviewer. Compensatory strategies for communication include pacing, a speech board or providing pen and paper. If compensatory strategies are used during the task, document as part of recording results. If suitable strategies cannot be identified or the outcome of the task is unclear, liaise with a health professional with expertise in the task.
  - non-English speaking clients should complete testing with the use of an interpreter. Confirm the language spoken by the interpreter is one the client is familiar with i.e. same dialect. The interpreter should be instructed to relay the questions and answers in a simple and objective manner which offers no additional assistance to the client. The use of an interpreter should be documented as part of recording test results. Some assessment tools have a protocol for the use of interpreters e.g. RUDAS.

Equipment, aids and appliances

- Any changes to the standard testing protocol for the test will reduce its validity and reliability. The testing procedure and protocol should always be applied including the use of standard question phrasing or time limits. See the Learning resource.
- Clients will need to respond to verbal questioning and visual stimuli. If the client requires glasses or hearing aids, ensure these are in working order and worn.
- Cognitive screening tools are designed to determine overall function. A low score attributed to a single domain may indicate a problem with a particular area and should not be globally interpreted. When interpreting results, information about performance in each domain should be considered in conjunction with the client's diagnosis. For example, poor clock-drawing may indicate visuospatial problems and further assessment of visuospatial abilities should be considered.

Environment

- The task should be conducted in a quiet location that provides privacy. This includes minimising background noise and distractions e.g. close curtain/door, turn off the radio/TV.

Performance of clinical task

1. Preparation

- Local template/s and recording sheet for the planned screening and equipment as follows:
  - MoCA: two pens and stopwatch.
  - RUDAS: pen and paper.
  - SMMSE: pencil, paper with an eraser on the end and wristwatch.

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) including Part 2: Informed decision-making and consent for adults who lack or have impaired capacity to make decisions.

3. Positioning

- The client's position during the task should be:
  - sitting comfortably in a supportive chair with a table in front to match the test protocol.
- The health professional's position during the task should be:
  - sitting opposite or beside the client to match the test protocol.

4. Task procedure

- The task comprises the following steps:

1. Determine the client's suitability to undertake standardised screening for cognition using information from the medical chart, subjective history and observation. See Indications and Limitations section and the Guide to conducting cognitive history for screening in the Learning resource.
2. Choose a suitable cognitive screening test for use. Refer to Table 1 in the Learning resource section.
3. Administer the cognitive screen as per the test protocol.
4. Calculate and interpret the test result.
    i. If the client's score is within the normal range, determine if the client would like information on strategies to support memory and attention. See the Learning resource.
        A. Select appropriate strategies considering the client's goals, impact on cognition problems, independence and safety.
        B. Discuss and develop a plan with the client and carer for the planned strategies.
        C. Implement the plan by providing education, including demonstration (if required) for each intervention.
        D. Observe the client using the prescribed intervention and provide feedback for training effectiveness. Make any adjustments to the plan to improve performance.
        E. Determine if the client requires further review and/or rehabilitation to achieve memory goals and develop a plan.
    ii. If the client's score is outside the normal range, use the local referral processes to determine the action to be taken for safety and ongoing management e.g. monitoring or referral for community assessment with a medical practitioner or psychology service.

5. Monitoring performance and tolerance during the task

- Common errors and compensation strategies to be monitored and corrected during task include:
    - MoCA and RUDAS reliability requires the tester to:
        - use the written instruction in the protocol for each test item. Do not alter phrasing by adding or changing words.
        - record the client's first response to each item.
    - SMMSE reliability requires the tester to:
        - ask each question a maximum of 3 times, and if no response, score the question as zero.
        - ask the question exactly as written i.e. do not explain further or in an alternative way.
        - if the client answers 'what did you say?' do not explain or engage in conversation, merely repeat the same direction a maximum of three times.
        - if the client interrupts, reassure that explanation can be provided when the test is finished and seek to continue with the screening.
    - the client may have new or known visuospatial problems, observe and note visuospatial problems during the task, see the Learning resource. Liaise with a health professional with

expertise in visuospatial and cognitive problems to support interpretation of the results and to develop a suitable plan.

- Monitor for adverse reactions and implement appropriate mitigation strategies as outlined in the Safety and quality section above.

6. Progression

- Task progression strategies include:
  - cognitive screening may be used or repeated as part of monitoring change over time. This can occur in acute settings, such as after stroke or during drug and alcohol abstinence. The effects of practice need to be considered as part of repeat testing, with re-test validity variable between tools. Refer to Table 2 in the Learning resource and local service protocols for time periods, indications and tool for use.

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 relevant documentation standards and local procedures. For this task information should include the:
  - indications for undertaking cognitive screening.
  - name of cognitive screening tool used.
  - outcomes/score of the administered screening tool, including details of adjustments made or incorrect responses as part of a sub-task score.
  - the management plan implemented. For scores outside normal values this includes strategies implemented to maintain safety and referral for comprehensive cognitive assessment e.g. implement local procedures and guidelines to create an alert for potential cognitive impairment.
  - some services may require standard statements to be included in the medical record for cognitive screening. For example, "this assessment is a screening tool only and should not be used in isolation to determine cognitive capacity or safety". Refer to local workplace instructions for details.
- The skill shared task should be identified in the documentation as "delivered by skill share-trained allied health professional implementing S-CP01: Screen for cognitive impairment using a standardised tool and provide basic/bridging intervention".

References and supporting documents

- Canadian Partnership for Stroke Recovery (2018). Stroke Engine: Mini-Mental State Examination (MMSE). Available at: https://www.strokengine.ca/en/assess/mmse/
- Coen RF, Robertson DA, Kenny RA, King-Kallimanis BL (2016). Strengths and limitations of the MoCA for assessing cognitive functioning: findings for a large representative sample of Irish older adults. Journal of Geriatric Psychiatry and Neurology. 29(1): 18-24. DOI: 10.1177/0891988715598236
- Dementia Australia (n.d.) Cognitive screening and assessment. Available at: https://www.dementia.org.au/information/for-health-professionals/clinical-resources/cognitive-screening-and-assessment

- NARI (2011). National Ageing Research Institute. The assessment of older people with dementia an depression of Culturally and Linguistically Diverse Backgrounds: A review of current practice and the development of guidelines for Victorian Aged Care Assessment Services Final Report.
- NARI (2011). National Ageing Research Institute. The assessment of older people with dementia an depression of Culturally and Linguistically Diverse Backgrounds: A review of current practice and the development of guidelines for Victorian Aged Care Assessment Services. Tip Sheet 3 – Cognitive assessment and people form Culturally and Linguistically Diverse (CALD) background.
- NICE (2010). National Institute for Health and Clinical Excellence. Delirium: Diagnosis, prevention and management; Clinical Guideline 103. London. Available at: https://www.nice.org.uk/guidance/cg103
- NSW Government and Attorney General's Department (2017). Capacity Toolkit. Tool 3.2: Checklist: triggers that might indicate a need for a capacity assessment. Available at: https://www.justice.nsw.gov.au/diversityservices/Pages/divserv/ds_capacity_tool/ds_capacity_tool.aspx
- Parkinson's disease research, education and clinical centres (2015). Montreal Cognitive Assessment (MoCA). Administration and Scoring Instructions. Available at: https://www.parkinsons.va.gov/consortium/moca.asp
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2nd edition). Available at: https://www.health.qld.gov.au/__data/assets/pdf_file/0019/143074/ic-guide.pdf.
- Shulman KI (n.d.) Interpretation of common cognitive screening tests. Available at: http://www.cba.org/CBA/cle/PDF/ELD13_paper_shulman.pdf
- Stroke Engine (2019). Montreal Cognitive Assessment (MoCA). Available at: https://www.strokengine.ca/en/quick/moca_quick/

Assessment: performance criteria checklist

S-CP01: Screening for cognitive impairment using a standardised tool and provide basic/bridging intervention

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 through observed performance and the clinical reasoning record.			
Identifies indications and safety considerations for the task and makes appropriate decisions to implement the task, including any risk mitigation strategies, in accordance with the clinical reasoning record.			
Completes preparation for the task including collecting correct equipment for the planned test e.g. recording form, pens and/or eraser, stopwatch.			
Describes the task and seeks informed consent.			
Prepares the environment and positions self and client appropriately to ensure safety and effectiveness of the task, including reflecting on risks and improvements in the clinical reasoning record where relevant.			
Delivers the task effectively and safely as per the CTI procedure in accordance with the Learning Resource. a) Clearly explains and demonstrates the task, checking the client's understanding. b) Uses information collected to determine the client's suitability to undertake standardised cognitive screening. c) Selects a suitable cognitive screening tool. d) Administers the cognitive screening tool as per the test protocol. e) Calculates and interprets the test result, including implications of compensatory strategies or clustered results. f) Determines if the client is suitable for education on memory or attention strategies or requires further assessment. g) Discusses and develops the plan with the client and carer, making adjustments, if relevant.			

h) Implements the plan and develops a process for review. a) During the task, maintains a safe clinical environment and manages risks appropriately.			
Monitors for performance errors and provides appropriate correction, feedback and/or adapts the task to improve effectiveness, in accordance with the clinical reasoning record.			
Documents in the clinical notes including a reference to the task being delivered by the skill share-trained health professional and the CTI used.			
If relevant, incorporates outcomes from the task into an 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 the task, in accordance with the Learning Resource.			

Notes on the scope of competency for the health professional

The health professional has been trained and assessed as competent to deliver the following cognitive screening tools:

□ MoCA

□ RUDAS

□ SMMSE

A local health service can elect to add or substitute another standardised cognitive screening tool. This decision requires appropriate consideration of the risk and training requirements associated with the alternative tool. Additional cognitive screening tools that the health professional has been trained and assessed as competent to deliver are:

□ _____

□ _____

Comments:

Record of assessment competence:

Assessor name:	Assessor position:	Competence achieved: / /

Scheduled review:

Review date: / /	

S-CP01: Screen for cognitive impairment using a standardised tool and provide basic/bridging intervention

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

Screen for cognitive impairment using a standardised tool and provide basic/bridging intervention: Learning resource

Background

Cognition relates to mental abilities such as knowledge, attention, memory, judgement, reasoning, problem solving, decision making, and comprehension. Some changes in cognition are expected with ageing. Mild cognitive impairment (MCI) is a term used to describe the stage beyond the expected cognitive decline of normal ageing. Clients with MCI may experience minor memory or mental function changes that are not sufficient to significantly interfere with usual day to day activities.

Cognitive screening tests are brief, simple, portable tools that help identify client's suitable for further cognitive assessment.

Required reading

- Australian Commission on Safety and Quality in Health Care (2019). A better way to care: Safe and high-quality care for patients with cognitive impairment or at risk in acute health services: Actions for clinicians. 2nd ed. Sydney; ACSQHC. Available at: https://www.safetyandquality.gov.au/sites/default/files/2019-06/sq19-026_acsqhc_bwtc_d21.sk_june-3_accessible_pdf.pdf.
- Vincent A (n.d.) What is cognition? Cognition. Part one: basic assessment. The Therapy Collective. Available at: http://www.alliedhealthsupport.com.au/wp-content/uploads/2018/03/Cognition-The-Basics.pdf.

MoCA

- Montreal Cognitive Assessment training and certification. Available at: https://www.mocatest.org.

RUDAS

- Dementia Australia (n.d) Rowland Universal Dementia Scale (RUDAS).
  - Administration and scoring guide
  - Published material.

  Available at: https://www.dementia.org.au/resources/rowland-universal-dementia-assessment-scale-rudas.

SMMSE

- Canadian Partnership for Stroke Recovery (2018). Stroke Engine: Mini-Mental State Examination (MMSE). Available at: https://www.strokengine.ca/en/assess/mmse/.
- IHPA (2018). Standardised Mini-Mental State Examination (SMMSE).

- Guide and tool.

  Available at: https://www.ihpa.gov.au/what-we-do/standardised-mini-mental-state-examination-smmse.

Queensland Health employees only

- Cognitive impairment screening toolkit. Includes recording forms and information on documentation of cognitive impairment. Available at: https://qheps.health.qld.gov.au/caru/networks/dementia/cognitive-impairment-screening-toolkit

Required viewing

- UQDementiaCare (2012). MESSAGE communication in dementia: strategies for care staff. Available at: https://www.youtube.com/watch?v=LC8pv2XX5lg
- UQDementiaCare (2012). MESSAGE Communication in Dementia: Teaching examples for care staff. Available at: https://www.youtube.com/watch?v=cdA-yUuz_g8

Optional reading

- Australian Commission on Safety and Quality in Health Care (2014). A better way to care: Safe and high-quality care for patients with cognitive impairment (dementia and delirium) in hospital – Actions for clinicians. Sydney; ACSQHC. Available at: https://www.safetyandquality.gov.au/wp-content/uploads/2014/11/A-better-way-to-care-Actions-for-clinicians.pdf.

Guide to conducting a cognitive history for screening

- As part of conducting a cognitive history, the following information is required from the medical chart, client, carer or other key informant:
  - has the client recently been unwell e.g. temperature outside normal values, signs or symptoms of hypoglycaemia, excessive sweating, pallor, trembling, jaundice, observed or reported decision-making, or behaviour that is acutely out of character? The client's presentation may include severe, acutely increasing or worsening, disorientation, confusion, forgetfulness, an inability to follow directions, impulsivity, physical or verbal aggression, agitation, distress, disinhibition, behaving socially inappropriately, restlessness, wandering or hallucinations (auditory, visual or sensory). This may be due to infection (e.g. urinary tract or respiratory) or a health condition (e.g. trauma, cerebral vascular accident, kidney failure). Check the Limitations section of this CTI.
  - has the client recently commenced new medications or had a dosage change to current medication/s? Has this effected their cognition? Side effects for medications may include tiredness, sedation and feelings of nausea which may impact on cognition. If yes, determine the time period of onset of symptoms and medication change/commencement, and liaise with the prescriber as part of the management plan.
  - does the client have a history of intellectual impairment, mental illness, neurological injury (stroke/cerebrovascular accident, acquired brain injury), communication problems, pain or drug and/or alcohol abuse? If yes, review the Limitations and Safety and quality section of this CTI.
  - has the client previously undertaken screening or assessment for cognition? What was the outcome? Check the Limitations and Safety and quality section of this CTI.

- does the client have a family history of memory problems or difficulty concentrating, including dementia, Alzheimer's Disease, intellectual impairment or mental illness? A family history may indicate a hereditary predisposition for cognitive problems. Review the Limitations section of this CTI.
- is the client experiencing, or has anyone else commented on the client having memory or concentration problems? It can be useful to prompt with examples including remembering to turn off the stove, regularly misplacing keys, forgetting the day or time, or becoming easily disorientated in familiar surroundings.
    - if yes, determine the time period of onset e.g. days, weeks and years. If the presentation is acute check the Limitations section of this CTI.
    - if no, but indications are present, discuss with the client the rationale for screening including obtaining a baseline measure for comparison.
- has the client experienced or noticed a change in appetite or interest in food or a loss or increase in weight? Is the client waking up frequently, having difficulty getting to sleep or sleeping more than usual? Has the client lost interest in their usual activities that bring joy, feel generally disinterested or have a low mood or feel flat? Affirmative responses may indicate a mood disorder such as depression, stress or anxiety. Cognitive screening can still be conducted. The management plan may include further screening and/or assessment for mood including referral to a health professional with expertise in the task.
- is the client from a non-English speaking background? If yes, what is the client's proficiency in English and what is the usual/predominant language spoken at home? Consider using a tool available in the client's language (MoCA) and/or using an interpreter (RUDAS).

Interpreting the cognitive screen

- The standardised cognitive screening tool will reveal a score. The score will need to be interpreted considering:
    - the normal range for the screening tool used.
    - any compensatory strategies used to complete the task. These should be documented but may also influence interpretation e.g. drawing a clock with the non-dominant hand may be poorly executed but still include the essential required elements.
    - the sub-task score areas that were incorrect and if these are in a particular domain. For example, if the client has writing or drawings that appears to be cramped on side of the page, missing elements due to not crossing the page, or letters that are malformed, this may indicate a visuo-spatial problem and should be further investigated by liaising with a health professional with expertise in the task prior to interpreting the results.

Basic/bridging intervention

Basic/bridging interventions may be implemented to maintain client safety until a comprehensive assessment and management plan can occur, or to improve access and timeliness of care. If client safety is a concern, supervision is required until a comprehensive assessment can be arranged. Safety concerns may be related to poor judgement or visuospatial problems. Activities may include road safety and outdoor mobility, kitchen tasks and personal activities of daily living. If a suitable plan for supervision cannot be developed, liaise with the multidisciplinary team.

Clients who report experiencing cognitive problems but score within the normal range on the screening tool may benefit from education on strategies to support attention and memory.

Strategies to improve attention and memory

- Common attention training strategies include:
  - reducing distractions when completing tasks e.g. minimise noise whilst writing your to-do list.
  - avoiding multi-tasking by trying to focus on one task at a time.
  - performing priority or complex tasks at the most alert times e.g. first thing in the morning.
  - using self-talk to maintain focus on a task e.g. talking out loud whilst you are doing the task.
- Common memory aid training includes the use of:
  - establishing a daily routine e.g. taking medication with breakfast.
  - writing in notebooks or on posting notes on the refrigerator e.g. making a grocery list or things to do.
  - calendars, diary or picture reminders.
  - using alarms or reminders on your smart phone, google home or other electronic device.
  - phone call prompts from family.
  - appointment reminder texts or phone calls.
  - paraphrasing instructions in your own words to remember what was said or read.
  - creating 'automatic places' where you always place important items e.g. mobile phone, keys, diaries.
- Refer to local resources for example client education resources.
- Retraining activities include having clients memorise and recall items at different intervals e.g. grocery lists, things to do, singer and name of songs on the radio, recipe details or map drawing.
- Memory and cognitive function can also be improved by:
  - including physical activity into the daily routine.
  - regular socialisation.
  - staying organised/running by a schedule or routine.
  - good sleep habits.
  - eating a healthy diet.
  - enjoying hobbies.
  - stress reduction.
- Liaise with a health professional with expertise in the task if the client requires support to explore these domains beyond general information.

Example client education resources

Client resources chosen for required reading will be determined by the local service and may be general or related to specific client groups. The following list is provided for learning purposes. A range of resources are included and grouped by diagnosis.

Multiple sclerosis

- Larocca N.G, King M (2016). Managing cognitive problems in MS. National MS Society. Available at: https://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/Brochure-Managing-Cognitive-Problems_1.pdf.
- Larocca N.G, King M (2011). Solving cognitive problems managing specific issues. National MS Society. Available at:

https://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/Cognitive.pdf.

- Das Nair R, Martin K.J, Lincoln N.B (2016). Memory rehabilitation for people with multiple sclerosis. Cochrane Database of Systematic Reviews. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008754.pub3/full?highlightAbstract=cognitiv%7Cretraining%7Ccognit%7Cretrain%7Ccognitive.

Stroke

- Das Nair R, Cogger H, Worthington E, Lincoln N.B (2016). Cognitive rehabilitation for memory deficits after stroke. Cochrane Database of Systematic Reviews. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002293.pub3/full?highlightAbstract=cognitiv%7Cretraining%7Ccognit%7Cretrain%7Ccognitive
- Stroke Engine (n.d.) Cognitive Rehabilitation: information for patients and families. Available at: https://www.strokengine.ca/wp-content/uploads/2015/02/Cognitive-Rehab-Patient-Family-Information.pdf.

Queensland Health employees only – local client information sheet

Locally approved client information sheets should be accessed. These QH versions are provide as examples for learning purposes only.

- Queensland Government (2018). Darling Downs Health: fact sheet: Memory. Available at: https://qheps.health.qld.gov.au/__data/assets/pdf_file/0035/416897/fact-661.pdf.
- Queensland Government (2019). Metro South Health. Princess Alexandra Hospital. Occupational therapy. Improving your memory. Available at: http://paweb.sth.health.qld.gov.au/sqrm/qiu/brochures-posters/documents/PIB0569.pdf
- Queensland Government (2018). QEII Jubilee Hospital. A quick guide to memory strategies. Available at: https://qheps.health.qld.gov.au/__data/assets/pdf_file/0029/575363/QEH1667.pdf

Outcome of cognitive screening

- The outcome of the cognitive screen needs to be collated to formulate a management plan.
- The cognitive screening tool will reveal a score that will be within or outside the normal range for the tool used. If the screening result is unclear, liaise with a health professional with expertise in the task.
- Clients who score in the normal range, but report memory and attention problems may benefit from education. This includes supporting the client to identify suitable strategies and a period of follow-up review and potentially re-testing.
- If the cognitive screen score indicates potential cognitive impairment, assessment by a health professional with expertise in comprehensive cognitive assessment is required. Advise the client that the test has indicated that there are some potential problems which will require further assessment. If the client is interested, describe the specific problem areas e.g. memory, visuospatial, planning. Guided by the local service models and referral pathways develop a plan for further comprehensive cognitive assessment e.g. general practitioner, geriatrician, psychologist, occupational therapist.
- If at any stage it is apparent that the client is at risk of harm due to cognitive impairment and a suitable plan cannot be developed, liaise with a health professional with expertise in cognitive impairment to develop a management approach for the situation e.g. present to the emergency department.

Table 1: Features and limitations of MoCA, RUDAS and SMMSE for screening of mild cognition

Cognitive Test	Features	Limitations
MoCA	• 10-15 minutes to administer • Validated for ages 55 to 85 years • Scored out of 30, score of 26 or > considered normal • Assesses different cognitive domains: attention and concentration, executive functions, memory, language, visuo-constructional skills, conceptual thinking, calculations and orientation • Tests for executive function • Available in 35 languages and for those who are visually impaired • Validated for stroke, Parkinson's disease, substance use • Suitable for clients who experience memory difficulties but score within the normal range on SMMSE • Alternative versions available to aid re-test. (Parkinson's disease research, education and clinical centres, 2015; Stroke Engine, 2019)	• Lacks specificity, subsumes subcomponents under domains therefore should not be substituted for comprehensive neuropsychological assessment (Coen, Robertson, Kelly, King-Kallimanis, 2016). • Longer than the SMMSE to deliver • When administered repeatedly, has possible learning effects. Alternative versions are available if required to decrease possible learning effects including 7.1, 7.2, 7.3. This allows for three time periods of testing within a three-month period.
SMMSE	• Most widely used • 10-15 minutes to administer, 11 questions • Scored out of 30, with a score below 24 suggesting dementia • Assesses global cognitive status • Recommended for use in acute, primary, community and rehabilitation care • Can be used in conjunction with clock draw test to test frontal abilities • Can be used as a measure of progress over time e.g. on acute admission to track recovery • Suitable for clients with cognitive issues and functional impairment. (Canadian Partnership for Stroke Recovery, 2018; Dementia Australia, n.d.)	• Does not test executive functions or frontal lobe functions e.g. judgement, planning or impulsivity • Not validated for acute stroke • Norms are based on education level and language • No firm cut off for a diagnosis for dementia (Shulman n.d.) • Poor sensitivity in determining mild cognitive impairment • Reduced validity if used with the same client and the time interval between testing is short (Canadian Partnership for Stroke Recovery, 2018) • Needs to be purchased for administration NB: Independent Hospital Pricing Authority (IHPA) has Australian licensing -see Required reading.

Cognitive Test	Features	Limitations
RUDAS	• Short cognitive screening tool for mild cognitive impairment, includes executive/frontal tests • 10 minutes to administer • 6 items, score out of 30 with a score of 24 or less an indication for developing dementia • Freely available • Assesses body orientation, praxis, drawing, judgement, memory and language • Includes a protocol for the use of interpreters • Recommended for use with those from culturally and linguistically diverse backgrounds • Validated in multicultural samples in Australia, did not appear influenced by education, CALD status/preferred language or gender (NARI, 2011).	• It is suggested that judgement – traffic lights and busy streets may reflect a degree of acculturation to dominant Western and urban based cultures (Sansoni et al, 2007 cited in NARI Tip sheet 3, 2011).

The decision in choosing a cognitive screening tool is highly influenced by the local service model and expectations. Where more than one tool is available for use, Table 2 can support selection between the MoCA, SMMSE and RUDAS.

Table 2: A comparison table cognitive screening tools – MoCA, SMMSE and RUDAS

Indications for use	MoCA	SMMSE	RUDAS
Includes executive frontal testing (decision making)	√	X	√
Recommended/available for use with cultural or linguistic diverse backgrounds	√	X	√
Client has upper limb impairment - difficult holding a pen (hemiparesis, amputee, pain, arthritis)	X (need to adapt score for motor impairment)	√	X (need to adapt score for motor impairment)
Retest period	Alternative versions available for retest	Refer to local protocol	X
Adapted version for blindness	√	X	X
Freely available	X	X NB: QH has a license	√