

Clinical Task Instruction

SKILL SHARED TASK

S-AD01: Prescribe, train and review use of bathroom grab rails

Scope and objectives of clinical task

This CTI will enable the health professional to:

- determine the suitability of a bathroom wall grab rail (positioned horizontal, vertical or angled) to address a client's identified problems and safety risks when performing standing transfers in a bathroom environment

VERSION CONTROL

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

This CTI should be used under a skill sharing framework implemented at the work unit level. The framework is available at: <https://www.health.qld.gov.au/ahwac/html/calderdale-framework.asp>

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

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

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- examine the client's bathroom environment for suitability for a grab rail
- accurately measure, record and advise on grab rail placement for fitting
- train the client (and carer if relevant) in the use of the fitted grab rail.

Note 1: in this CTI "bathroom" refers to the toilet and shower/bath area.

Note 2: Some funding schemes for grab rails may only accept prescriptions from specific professions. This should be considered prior to implementing skill sharing of this task in the service model. Implementation may require negotiation to broaden the professions able to prescribe or the use of a collaborative assessment and scripting process.

Requisite training, knowledge, skills and experience

Training

- Mandatory training requirements relevant to Queensland Health/HHS clinical roles are assumed knowledge for this CTI.
- If not part of mandatory training requirements, complete patient manual handling techniques, including competence in the use of walk belts and assisting clients into standing from sitting.
- Complete the following CTIs or demonstrate equivalent professional competence in:
 - CTI S-MT01: Functional walking assessment
 - CTI S-MT05: Standing balance assessment
 - CTI S-MT07: Standing transfer assessment
 - CTI S-MT08: Assessment of falls risk and risk reduction strategies for older persons in community settings using the FROP-Com.

And if the client's use of walking aids is within the scope of the local implementation:

- CTI S-MT02: Prescribe, train and review of walking aids.

Clinical knowledge

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

- the types, rationale, benefits, features, risks and limitations of grab rails and their use
- client and environmental considerations including building features/requirements that indicate and allow grab rail prescription and use in the toilet, shower/bath area
- process to prescribe a grab rail including placement on the wall, securing requirements e.g. studs, wall surface, circulation space, room layout
- methods to accurately record grab rail prescription to meet building standards, local provision and installation processes and local protocol/funding scheme requirements for grab rails e.g. the Department of Veteran Affairs, local public housing, insurance provider.

The knowledge requirements will be met by the following activities:

- complete the training programs listed above
- review of the Learning Resource
- receive instruction from the lead health professional in training phase
- read and discuss the following references/resources with the lead health professional at the commencement of the training phase:

- local prescription forms and requirements
- local procedures for provision and installation of grab rails
- local policies, procedures and processes for undertaking work in a community setting.

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:
 - experience or ability to acquire skills in undertaking a basic maintenance/safety check according to the manufacturer's guidelines for toileting and showering equipment. This may include: equipment stability, rubber stoppers present with tread, handle grips in working order and recognition of the equipment being suitable for purpose e.g. not a garden chair, suitable height for hip precautions, safe working load, circulation space requirements.
 - if required for the local service, experience or ability to acquire skills in using a stud finder.
- **relevant but not mandatory** for a health professional to possess in order to deliver this task:
 - experience working with clients in their home environments
 - competence in prescribing, training and reviewing the use of hand rails, toileting and showering equipment.

Indications and limitations for use of skill shared task

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

Indications

- The client is medically stable and there is no medical prohibition to using a grab rail e.g. the medical record indicates that the client has no restrictions that prohibit gripping and weight bearing through at least one upper limb or standing, and vital signs are within expected limits, or the client is living in the community and is not acutely unwell.
- The client is experiencing difficulty with bathroom standing transfer tasks, such as transferring on/off the toilet, in/out of the shower/bath or standing whilst dressing, and would benefit from using a grab rail to reduce the risk of falls. This may be assessed via verbal report from the client or carer or through observation e.g. unsteadiness is observed whilst the client is performing the task and/or the client is observed reaching for hand support such as the bathroom sink, door jam or towel rail.
- The owner of the house is agreeable to having the grab rail fitted, including the fitting requirements and change to the aesthetics i.e. permanent fixtures added and holes drilled into walls/tiles. To meet the local service procedures and/or funding scheme rules, the home owner's written permission may be required.

Limitations

- If the skill share-trained health professional was required to complete training in CTI S-MT01, CTI S-MT05, CTI S-MT07, CTI S-MT08 or CTI S-MT02, limitations from these CTIs apply.
- If the skill share-trained health professional was **not** required to complete the CTIs as walking assessment, standing transfer assessment, falls assessment, walking aid prescription, training and review, are within existing expertise and scope of practice then:
 - review the limitations in the CTIs listed above as part of the training process
 - consider existing skills, knowledge and experience in the tasks
 - in collaboration with the lead health professional, determine and document bespoke limitations to this task relevant to the individual's scope of practice.

For example, teams may determine that physiotherapists with task expertise in mobility and transfer assessments may include client groups in the scope of this CTI that would be otherwise excluded e.g. clients with amputations or clients that are non-weight bearing.

Additional limitations include:

- The client will be using a wheelchair in the bathroom environment. The client will require assessment of transfers on/off the wheelchair in the bathroom environment. This must be provided by a health professional with skills in the transfer method. If the client requires bilateral rail use for transfers drop down rail/s may be more suitable. Liaise with a health professional with expertise in grab rail prescription in this situation.
- The client requires home modifications beyond grab rails to continue to live in the residence e.g. wedge ramp, hand rails, removal of a shower hob or installation of a lift. Complete the scripting process for bathroom grab rails and liaise with the client and other health professional/s involved to co-ordinate any proposed home modifications.
- The client has upper limb deficits making the use of a grab rail inappropriate as there is no suitable installation site on the unaffected side or the client has bilateral upper limb deficits. Upper limb deficits may include weakness, pain, arthritis, deformity, amputation or neurological conditions that reduce grip strength such that it is insufficient to assist standing transfers, or the use of a grab rail is likely to exacerbate the condition.
- The client's weight is greater than 110kg indicating it may exceed the recommended 1100 Newton force for use of the grab rail. Liaise with a health professional with expertise in the prescription of bariatric equipment.
- The wall to which the grab rail is to be attached is not structurally sound or appropriate for installation, i.e. not a block/brick wall, does not have studs in suitable places or the client lives in a caravan, boat or shed.

Safety & quality

Client

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

- As this task assesses the client's suitability for a grab rail to assist balance and reduce the risk of falling, close supervision of the client is required at all times.

Equipment, aids and appliances

- The client should be assessed using their usual walking aid and any other required devices e.g. ankle foot orthoses (AFO), knee brace. The equipment should be checked for maintenance and safety compliance using the manufacturer's guidelines. The skill share-trained health professional should confirm that the equipment has been appropriately matched and fitted to the client's requirements. If not, the client should be referred to a health professional with expertise in the prescription, training and use of the aid e.g. for walking aids CTI S-MT02: Prescribe, train and review of walking aids.
- The client should be assessed for grab rails whilst using any relevant assistive devices in the bathroom e.g. transfer bench, raised toilet seat, shower chair or stool. The equipment should be checked for maintenance and safety compliance using the manufacturer's guidelines. The skill share-trained health professional should confirm that the equipment has been appropriately matched and fitted to the client's requirements. If not, the client should be referred to a health professional with expertise in the prescription, training and review of shower or toilet seating e.g. CTI S-AD05: Prescription toilet seating equipment or CTI S-AD07: Prescription of shower seating equipment.
- If the grab rail is planned for the toilet area, the client may request to use the toilet during the task. Ensure gloves are available if assistance is required during toileting.

Environment

- As this task assesses the client's use of grab rails in their home environment it is important to ensure the safety of self and the client. This will include:
 - adherence to local procedures for manual handling and undertaking work in a community setting
 - scanning the environment for any obstacles or hazards that need to be mitigated before undertaking the observational assessment including risk for trips (changes in floor surfaces, clothes on floor, cords), slips (loose floor coverings, mats, wet floors) and obstacles (static and dynamic e.g. pets). If a hazard is present, the client and/or carer should be informed regarding the risk and any required maintenance and local service protocols implemented e.g. falls prevention or public housing notifications.

Performance of Clinical Task

1. Preparation

- Collect the required equipment:
 - tape measure
 - recording form, pencil, ruler and eraser
 - if required by the local service, a stud finder and/or camera.

2. Introduce task and seek consent

- The health professional checks three forms of client identification: full name, date of birth **plus one** of the following: hospital UR number, Medicare number, or address.
- The health professional introduces the task and seeks informed consent according to the Queensland Health Guide to Informed Decision-making in Health Care 2nd edition (2017).

3. Positioning

The client's position during the task should be:

- initially in standing to mobilise into the bathroom, sitting down and standing up as part of the assessment process.

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

- standing to the side or in front of the client, and variable whilst taking measurements.

4. Task procedure

- The task comprises the following steps:

1. Obtain or confirm information from the client (or carer) with regard to:
 - current physical capabilities/issues relevant to bathroom transfers including assistance required, see the *Guide to assessing a client for a grab rail - client suitability* in the Learning Resource
 - standing balance and mobility history including falls history, ability to stand/mobilise, assistance required, aid/s used, medical/surgical restrictions i.e. CTI S-MT07: Standing transfer assessment
 - building and environmental features, see the *Guide to assessing a client for a grab rail- environment and installation* in the Learning Resource.
2. On the basis of the information provided determine if:
 - the client and environment are appropriate for assessment for a grab rail
 - the client is appropriate for assessment of standing transfers and mobility with/without an aid in the bathroom

If not appropriate for proceeding to the assessment, cease the task and develop a plan for ongoing management. This may include referral to a health professional with expertise in standing transfers, walking, walking aids, wheelchair transfers, assessment of toileting, assessment of showering/bathing and/or home modifications.

3. Check any aids/equipment currently required to mobilise to the bathroom or used in the bathroom/toilet for safety and maintenance.

4. **Toilet**

If the client requires assessment for a grab rail in the toilet area ask the client to show you how they enter the toilet area, sit down/stand up and use the toilet. Observe the client mobilising in the bathroom area and performing the transfer. Provide and note any assistance required, compensatory strategies and hazards e.g. pulling/pushing down on taps, toilet roll holder or walking aid and note the location of where the client is pulling/pushing for support.

Note: if the client decides that they wish to use the toilet once they have transferred on to it provide privacy for dignity whilst still maintaining safety.

Bath

If the client requires assessment for a grab rail in the shower/bath area ask the client to show you how they access the bathroom and get in/out of the shower/bath area. Observe the client mobilising in the bathroom area and performing the transfer. Provide and note any assistance required, compensatory strategies and hazards e.g. pulling on taps/shower screen, using the towel rail or wall for support or reaching for benches. Note the location of where the client is pulling/pushing for support.

5. Determine whether a standard bathroom grab rail is suitable for the client considering the client's requirements, physical capacity, rail features, building and environmental features. If the client is not suitable for a standard grab rail, develop a plan for ongoing management. This may include providing information to the client and/or carer/s regarding access to short term equipment options or referral and/or collaboration with a health professional with expertise in home modifications or shower/toileting equipment.
6. Determine the optimum angle for the rail to be positioned, the rail features and scripting requirements using the learning resources *Table 1: Guide to choosing a grab rail*, *Table 2: Rail prescription features and considerations for installation* and Australian Standards AS 1428.1-2009 (section 17).
7. Educate the client and/or carer/s regarding grab rails including use, fitting requirements, maintenance, risks and costs. Seek informed consent to progress to prescription including supplier, associated costs/co-payments and installation/funding scheme rules including commitment contracts.
8. Measure the room for the grab rail. Record measurements on the local recording template including location of wall studs and/or photos as indicated/required by the local health service. Complete any additional forms including the prescription form for commercial suppliers, local funding scheme, recording templates. Refer to local procedures/workplace instructions.
9. When the prescribed grab rail has been fitted, contact the client via telephone and determine if the client has commenced using the rail. Assess if the client's goals have been met, their satisfaction with the rail and any issues/concerns. See *Outcome of grab rail installation* in the Learning Resource. Include any additional review requirements for the local service/government agency/funders.
10. Determine the need for a home visit review:
 - if indicated, arrange the home visit and review the client's use of the grab rail as per steps 3 to 5
 - if indicated, provide re-training in grab rail usage. If issues/concerns cannot be resolved with training liaise with the lead health professional e.g. grab rail/s are not fitted/installed correctly or a new issue/limitation has become evident.
 - If further training, intervention and/or a home visit is not indicated, discharge the client from the service using the local processes.

5. Monitoring performance and tolerance during the task

- Common errors to be monitored and corrected during the task include:

During measurement

- where accurate measurement points are compromised due to obstruction by a pipe/fixture/skirting board the health professional should determine a new reference point e.g. top of the skirting board, distance from the bathroom fitting or the top of a tile. The reference point should be noted as part of the scripting process.
- all measurement recordings should be taken in millimetres for accuracy. Re-check measurements ensuring measurement units are stated and correct.

Building issues

- grab rail recommendations must comply with Australian Standards AS 1428.1-2009 Design for access and mobility and current electrical codes and building standards. Scripting forms should request that

the installer comply with these requirements and contact the prescriber if alterations are considered necessary for compliance e.g. relocation of the grab rail.

- if studs are difficult to locate, record this on the script as a note to the builder.
- wall surfaces, including any unusual characteristics should be clearly described and recorded on the script to assist the builder when fitting the rail e.g. plastic lined wall, tiled, fibro, gyprock or rendering.
- Monitor for adverse reactions and implement appropriate mitigation strategies as outlined in “Safety and quality” section above.

6. 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.
- The skill shared task should be identified in the documentation as “delivered by skill share-trained (*insert profession*) implementing CTI S-AD01: Prescribe, train and review use of bathroom grab rails” (or similar wording).
- The skill share-trained health professional should also refer to any funding body guidelines to determine the requirement to have another allied health professional, such as an occupational therapist, to collaborate in the assessment and completion of the application.

References and supporting documents

- Local procedures/processes and guidelines regarding:
Grab rail supply and installation protocols/processes/schemes and prescription forms
Funding agency guidelines and application forms. For example Community and home care services <https://www.qld.gov.au/community/getting-support-health-social-issue/home-modifications>
- Local client handouts regarding grab rails. For example Government of South Australia (2013). Disability information: Grab rails. Available at: https://www.sa.gov.au/_data/assets/pdf_file/0013/13711/grab-rails.pdf
- Local recording templates for grab rail prescription. Examples include (viewed March 2018):
Queensland Government (2015). Modification Diagram – Blank (v9.00-11/2015):
<http://qheps.health.qld.gov.au/darlingdowns/pdf/forms/mr16bb.doc>
Queensland Government (2015). Modification Diagram – Shower (v9.00-11/2015):
<http://qheps.health.qld.gov.au/darlingdowns/pdf/forms/mr16bbc.pdf>
Queensland Government (2015). Modification Diagram Toilet: Front view (v9.00-11/2015):
<http://qheps.health.qld.gov.au/darlingdowns/pdf/forms/mr16bbf.doc>
Queensland Government (2015). Modification Diagram Toilet: Side view (v9.00-11/2015):
<http://qheps.health.qld.gov.au/darlingdowns/pdf/forms/mr16bbg.doc>
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2nd edition):
https://www.health.qld.gov.au/_data/assets/pdf_file/0019/143074/ic-guide.pdf

Assessment: Performance Criteria Checklist

CTI S-AD01: Prescribe, train and review use of bathroom grab rails

Name:

Position:

Work Unit:

Performance Criteria	Knowledge acquired	Supervised task practice	Competency assessment
	Date and initials of Lead HP	Date and initials of Lead HP	Date and initials of Lead HP
Demonstrates knowledge of fundamental concepts required to undertake the task through observed performance and the clinical reasoning record.			
Identifies indications and safety considerations for 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 the required equipment.			
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.			
<p>Delivers the task effectively and safely as per the CTI procedure, in accordance with the Learning Resource.</p> <p>a) Clearly explains and demonstrates the task, checking the client's understanding.</p> <p>b) Uses information collected regarding the client's current bathroom standing transfers, mobility, physical assessments and environment to determine suitability for a bathroom grab rail and standing transfer assessment.</p> <p>c) Checks any existing bathroom aids/equipment for safety and maintenance.</p> <p>d) Assesses the client in the bathroom environment.</p> <p>e) Determines if a grab rail is appropriate and selects the appropriate angle for installation. Adheres to Australian Standards, funding requirements and local processes.</p> <p>f) Educates the client and/or carer/s regarding grab rail including installation, maintenance, risks and costs.</p> <p>g) Accurately measures and records on the local recording template the grab rail position for installation.</p> <p>h) Determines the need for a home visit review as per local requirements. If indicated, reviews the client and resolves any concerns.</p> <p>i) During the task, maintains a safe clinical environment and manages risks appropriately.</p>			

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 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 the competency of the health professional			
<p>The health professional has been trained and assessed as competent to deliver the task for the following bathroom grab rails:</p> <p><input type="checkbox"/> Vertical</p> <p><input type="checkbox"/> Horizontal</p> <p><input type="checkbox"/> Angled</p>			
Notes of the service model on which the health professional will be performing this task:			
<i>Comments should also include any restrictions (type of walking aids, weight bearing status, etc.)</i>			
Comments:			
Record of assessment of competence			
Assessor name:	Assessor position:	Competence achieved:	/ /
Scheduled review			
Review date	/	/	

CTI S-AD01: Prescribe, train and review use of bathroom grab rails

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

- 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

Prescribe, train and review of bathroom grab rails: Learning Resource

When considering the prescription of a grab rail, the person, the environment and the occupation (reason for using the grab rail) should be explored. The Occupational Performance Model (Australia) is one such model that assists occupational therapists in examining these aspects.

For further information read:

- Occupational Performance Model (Australia). (2014). Home page. Retrieved 27/9/2017. Available at: <http://www.occupationalperformance.com/> Including subsections:
 - Definitions
<http://www.occupationalperformance.com/definitions/>
 - Constructs and Structure: Construct 4: Occupational Performance Components
<http://www.occupationalperformance.com/constructs-and-structure-construct-4/>

Required reading

- Afifi M, Al-Hussein M, Bouferguene A (2015). Geriatric bathroom design to minimize risk of falling for older adults – a systematic review. *European Geriatric Medicine* 6(6):598-603. Available through CKN.
- Australian Standards AS 1428.1-2009. Design for access and mobility. Part 1: General requirements for access – New building work. Section 17. Discuss with the local Occupational Therapy department how to access the standards either in electronic or hard copy.
- Iwarsson S (2009). Chapter 5: Housing adaptations: current practices and future challenges. In, *International Handbook of Occupational Therapy Interventions*. Solderback I (Ed). Springer Dordrecht. Available through Research Gate. Some Occupational Therapy departments may also own this resource.
- O'Meara DM & Smith RM (2006). The effects of unilateral grab rail assistance on the sit-to-stand performance of older aged adults. *Human Movement Science*, 25, 257-274. Available through Research Gate.

Grab rails

- The State of Queensland (Central Queensland Hospital and Health Service) 2015. Patient information: Grabrail and handrail information guide. Available at: <http://qheps.health.qld.gov.au/cqld/publications/docs/grabrail-handrail-information.pdf>
- Shaw Trust: Disabled Living Foundation. Choosing and fitting grab rails (2014). Accessed 28/8/2017 Available at: <http://www.dlf.org.uk/factsheets/grab-rails>
- Government of South Australia (2013). Disability Information: Grab rails. Available at: https://www.sa.gov.au/_data/assets/word_doc/0015/11814/grab-rails.doc
- Government of South Australia (2013). Equipment program: Grab rails – clinical considerations for prescribers (2013). Available at: <http://des.sa.gov.au/lists/selecting-home-modifications/accordion-pages/clinical-considerations-for-prescribers>
- Somerville E, Smallfield S, Stark S, Seibert C, Arbesman M, Lieberman D (2016). Occupational therapy home modification assessment and intervention. *The American Journal of Occupational Therapy* Vol. 70. Available at: <http://ajot.aota.org/article.aspx?articleid=2541625>

Local grab rail availability

Information on specific locally available grab rails should be provided to the skill share-trained health professional, including specific forms, suppliers, specifications and any fitting requirements/considerations, local service protocols or workplace procedures.

Optional reading

- Keall MD, Pierse N, Howden-Chapman P, Cunningham C, Cunningham M, Guria J, Baker MG (2014). Home modifications to reduce injuries from falls in the Home Injury Prevention Intervention (HIPI) study: a cluster-randomised controlled trial. *The Lancet* 385(9964):231-238. Available at: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)61006-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61006-0/fulltext)
- Stark SL, Keglovits M, Arbesman M, & Lieberman D. (in press). Effectiveness of home modification interventions to improve participation for community-dwelling adults and older adults: A systematic review. *American Journal of Occupational Therapy*. Available at: <http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=2&sid=faa87435-5104-445e-99a6-856b009eae5f%40sessionmgr103>
- Stark SL, Somerville E, Keglovits M, Smason A, Bigham K (2015). Clinical reasoning guideline for home modification interventions. *American Journal of Occupational Therapy*, 69, 6902290030. <http://dx.doi.org/10.5014/ajot.2015.014266>

Prescribing a grab rail

The skill share-trained health professional will be required to assess both the client and the environment to determine the suitability for grab rail prescription in the bathroom.

Guide to assessing a client for a grab rail

Client suitability

Information regarding the client's suitability for a grab rail may be obtained from the client's medical record and a subjective examination. The skill share-trained health professional should consider the following:

1. What is the client's current mobility status? If the client is planning to walk to the bathroom, conduct a walking assessment and determine safety walking to/from/in the bathroom. See CTI S-MT01: Functional walking assessment.
If the client uses a mobility aid (e.g. walking aid, wheelchair, scooter) the client will need to be assessed for safety using the mobility aid when walking to/from/in the bathroom. See CTI S-MT02: Prescribe, train and review of walking aids. If the mobility aid is not in the scope of the skill share-trained health professional, cease the task and liaise with a health professional with expertise in the task to develop a management plan.
2. How does the client currently transfer on and off the toilet, into and out of the bath/shower area? The client will need to be assessed performing a standing transfer in the bathroom. See CTI S-MT07: Standing transfer assessment.
3. Does the client experience any other problems with toileting or showering e.g. problems reaching body parts for wiping, hygiene concerns or falls/near falls in the bathroom environment? If yes, the client will require further assessment for toileting and showering. Liaise with a health professional with expertise in toileting and showering assessment as part of the

- task. See CTI S-AD04: Assess toileting and provide basic/bridging intervention and CTI S-AD06: Assess showering and provide basic/bridging intervention.
4. Is the client at risk of falls? Conduct a falls risk assessment. See CTI S-MT08: Assessment of falls risk and risk reduction strategies for older persons in the community.
 5. Does the client have continence issues including urgency? If so, has this contributed to any previous or near falls? Does the client need to get up during the night to go to the toilet? If so, how often? If the client reports getting up 2-3 times per night and/or has a history of falls/near misses and/or urgency issues liaise with a health professional with expertise in continence and/or toileting assessment and equipment regarding the need for a bedside commode, urinal, incontinence products, pelvic floor retraining program, etc. See CTI S-AD04: Assess toileting and provide basic/bridging intervention and CTI S-AD05: Prescribe, train and review of toilet seating equipment.
 6. Does the client have a pre-existing shoulder/elbow problem that would be exacerbated by use of a grab rail? If yes, determine the active range of motion of the upper limb to ensure that the rail is positioned appropriately to not exacerbate the problem. If pain or limitations are noted, liaise with a health professional with expertise in musculoskeletal conditions.
 7. Does the client have a pre-existing wrist problem that would be exacerbated by the use of a grab rail? If yes, determine if the problem is exacerbated by pushing or pulling. If pushing exacerbates the problem, consider a vertical rail to encourage pull or an angled rail to allow use of the forearm to distribute the force. If pulling exacerbates the problem, consider a horizontal rail to encourage push, or an angled rail to allow use of the forearm to distribute the force.
 8. Does the client have adequate grasp strength to hold the grab rail? This can be evaluated by observing the client during the task grasping door handles, the bathroom sink or towel rails. Prior to observation the health professional can undertake a rough examination of grasp strength by asking the client to squeeze their hands and then pulling hands away. If the problem is unilateral, consider if the rail can be placed on the contralateral (stronger) side and liaise with a health professional with expertise in the task.
 9. Does the client usually wear a splint or support on their wrist or hand? If yes, confirm that the splint or support will not impede rail use. If it is likely to impede rail use, consider rail placement on the contralateral side. If this is not appropriate liaise with a health professional with expertise in showering/toileting equipment for alternative options e.g. no wall for placement, upper limb weakness, fixtures present.
 10. Does the client have any medical or surgical restrictions e.g. weight bearing status (non, touch, partial, full weight bearing), total hip replacement precautions, sternotomy precautions for upper limb weight bearing? Restrictions may require the client use additional/different equipment e.g. raised toilet seat, over toilet frame, shower chair or stool. Check the client is adhering to medical and surgical restrictions including using the prescribed bathroom equipment. The health professional should also note that the equipment is in good working order and has been prescribed, reviewed and fitted by a health professional with expertise in the task. Liaise with a health professional with expertise in the prescription of bathroom equipment to discuss the suitability of using a grab rail in conjunction with this equipment. See CTI S-AD04: Assess toileting and provide basic/bridging intervention, CTI S-AD05: Prescribe, train and review of toilet seating equipment, CTI S-AD06: Assess showering and provide basic/bridging intervention and CTI S-AD07: Prescribe, review and train of shower seating equipment.
 11. If the client has restrictions are they permanent or temporary? Grab rails are suitable when the client's restrictions are permanent or the client is likely to have ongoing functional decline. If the client's restrictions are temporary, toileting and showering equipment should be considered

- initially. Liaise with a health professional with expertise in the prescription of showering/toileting equipment prior to grab rail prescription. See CTI S-AD05: Prescribe, train and review of toilet seating equipment and CTI S-AD07: Prescribe, review and train of shower seating equipment.
12. Is the client known or observed to experience fatigue, pain or shortness of breath during bathroom activities? Introduce rest breaks during the assessment and discuss with a health professional with expertise in the prescription of toileting and showering equipment prior to prescribing a grab rail as the client may benefit from additional equipment to improve management of symptoms e.g. bedside commode, mobile shower chair, shower chair. CTI S-AD05: Prescribe, train and review of toilet seating equipment, CTI S-AD07: Prescribe, review and train of shower seating equipment.
 13. Does the client require the grab rail:
 - to stand up/sit down on the toilet, bath board or shower chair?
 - for stability to dress or groom?

This will assist in determining the position and angle of the rail, see *Table 1 Guide to choosing a grab rail*.
 14. Does the client have a preference for pulling forward or pushing up when standing up/sitting down? This may be observed e.g. pulling on the sink to stand up or pushing up from the toilet seat to stand up. Hand marks on the bathroom wall may also indicate a side preference for support. If the client has a strong personal preference does it agree with *Table 1: Guide to choosing a grab rail*? If not, liaise with a health professional with expertise in the task prior to proceeding to grab rail prescription.
 15. Will the installation of the planned grab rail hinder others who use the space?

The addition of a grab rail will reduce the circulation space in the bathroom. The health professional should assess how access to the bathroom will be impacted by the rail i.e. door opening/closing as part of the task. This may be done by placing a rail or similar sized item in a similar location and assessing the client entering the room, closing/opening the door and exiting the room.

Hindrances may also occur if other occupants in the house use equipment e.g. wheelchairs, over toilet frames and/or have support requirements on the opposite side. In this instance goals for all users need to be considered as part of the scripting process and alternative/additional equipment may also be appropriate.

Aesthetic appearance may be of concern to other occupants of the home and requires discussion to determine a suitable equipment option prior to prescription.
 16. Does the client have a visio-spatial impairment? If yes, consider contrasting colours e.g. dark rail on light coloured wall or vice versa.
 17. Does the client have any cognitive deficits that may impact on their capacity to safely use the grab rail? If yes, refer to the limitations section of this CTI, including those in CTI S-MT01, CTI S-MT05, CTI S-MT07, CTI S-MT08, CTI S-MT02 (if relevant), or those agreed by the local service as limitations to this task relevant to the skill share-trained health professional's scope of practice.

Environment

Information regarding the suitability of the client's planned environment for a grab rail may be obtained from the client's medical record and a subjective examination or observation. It involves determining the following:

1. Does the client have grab rails elsewhere in the home? If yes, where are they located? Entry, shower, bath and/or toilet. If no, proceed to question 4.
2. If rails are present elsewhere in the home for each location determine the rail type i.e. vertical, horizontal, diagonal, other?
3. Does the client use the installed rails? If not, why not? This may indicate a problem with the rail position/type, pain, range of motion or grip strength.
4. Does the client find themselves pulling up on building fixtures e.g. the door handle, toilet roll holder, toilet seat, bathroom sink, towel rail?
5. Is the proposed grab rail for installation in the client's own home? If not, complete the prescription and local processes associated with obtaining landlord consent for installation. Liaise with a health professional with expertise in showering/toileting equipment for short term equipment requirements if safety concerns are apparent and/or landlord consent is not provided. See CTI S-AD05: Prescribe, train and review of toilet seating equipment and CTI S-AD07: Prescribe, review and train of shower seating equipment.
6. Has the client had a previous home visit for equipment? If yes, when was this? What equipment or modifications were done? Who provided this service?
If no, are there other areas of concern related to showering, toileting, grooming, dressing, standing up, sitting down or standing balance? Ask specifically about each room of the home i.e. in the bathroom, the bedroom, the kitchen, the lounge room and liaise with an occupational therapist if issues are identified.

Shower

1. What is the shower configuration? Is there a shower recess or bath or both? Is there a shower screen? If yes, is it a pivot door, sliding door, curtain?
2. Is the shower located over a bath/shower hob that is too wide or high for the client to safely reach across and use the grab rail? For example the client has limited shoulder range of motion or requires an extended arm reach to use the rail or the client has poor balance and would be required to reach outside of their base of support. Determine if the bathroom configuration allows the installation of two grab rails, thereby reducing the "far reach". If not, liaise with a health professional with expertise in showering equipment options. See CTI S-AD07: Prescribe, review and train of shower seating equipment.
3. Does the client currently use any showering equipment e.g. hand held shower hose, tub transfer bench, commode, bath board, long handled sponge, toe wiper.

Toilet

1. Where is the toilet? Is it separate or combined with the bathroom, indoors or outdoors, upstairs or downstairs, next to a wall?
If the midline of the toilet pan is located >450mm from the wall, this may impact the client's ability to reach the rail once installed. The client should be assessed for arm reach to the wall during the task. The shoulder should be in mid-range, elbow slightly flexed and force generation adequate for the task. Liaise with a health professional with expertise in the task regarding alternative rail and/or equipment options if reach is problematic e.g. drop down rails or an over toilet frame.
2. Is there more than one toilet or bathroom in the house? If yes, which bathroom will the client use more often and/or is located closer to the bedroom?
3. Does the client currently use any toileting equipment e.g. raised toilet seat, over toilet frame, bidet, long handled wiper, bedside commode, urinal or incontinence products.

Installation

Determine the specific rail type, size, placement and additional installation requirements using *Table 2: Rail prescription features and considerations for installation*.

1. Will the installation be using standard processes/builders for the local service?

If yes, provide education to the client regarding the installation process and expectations, contacts, payment requirements and process.

If the client has stated they will organise their own installation, advise the client that home modifications should be arranged through a licensed builder and adhere to the Australian Standards AS 1428.1-2009, current electrical code and building standards. Highlight safety considerations including fixing grab rail to studs, use of screws from the manufacturer/supplier, purchase of rails that are fit for purpose and safe working loads.

A health professional with expertise in the prescription of rails, showering/toileting equipment and/or home modification can assist in determining the suitability for a grab rail if indications are unclear or the needs are complex. Solutions may include the removal of a shower screen/hob, re-hinging the door to swing outwards or replacing with a sliding door, installation of a floor to ceiling rail or drop down rails, the introduction of additional equipment including raised toilet seat or a shower stool, transfer bench or the prescription of showering/toileting equipment including an over toilet frame, bath seat or mobile shower chair.

Goal setting - considerations

- Identify the client's functional requirements in the bathroom environment including mobility, transfers and functional tasks.
- Consider how the client would like to achieve their goals, i.e. independently, with assistance, with equipment etc.?
- What level of assistance is available to the client?
- What are the requirements that the carer/service need the client to meet to be safe at home/in the community?
- How will the grab rail installation change/support this?
- Write a clear goal for the installation of the grab rail which can be used as part of the post installation evaluation. For example:
 - to assist with standing up from the toilet
 - to assist with getting in/out of the shower
 - to assist with standing balance whilst dressing/grooming.

Rail features and considerations

Table 1 Guide to choosing a grab rail

Grab rail indicator	Vertical rail	Horizontal rail	Angled rail
Assist with standing balance	e.g. male standing at the toilet	e.g. during dressing/grooming/washing hair	
Assist with sitting down		"push" down on i.e. due to lower limb weakness/pain	moves centre of gravity forward
Assist with standing up	"pull" up on		Sore wrists/arms assist with distribution of weight when "pulling up"

Table 2 Rail prescription features and considerations for installation

Prescription Feature	Consideration
What length should the rail be?	<p>300mm – vertical or horizontal placement, will be determined by stud location</p> <p>450mm – horizontal placement if the client needs to pull into standing to allow both hands to be placed approximately shoulder width apart or for angled positioning</p> <p>600mm – horizontal placement on a larger wall e.g. shower or bathroom where the client may be required to take a sideways step or two or for angled placement to suit studs</p>
What diameter should the rail be?	<p>Circular rails are normally between 30mm and 40mm</p> <p>Grab rail dimensions are designated by AS 1428.1-2009:</p> <p>a) not less than 30mm and not more than 40mm outside diameter</p> <p>b) exposed edges and corners of grab rails shall have a radius of not less than 5mm</p>
At what height should the rail be installed at?	<p>Measuring points for a rail are from the floor level to the middle of the grab rail point. Measure the height from floor to top of rail diameter. Height of rail should be comfortable for the client to grasp while maintaining stability. The clients elbow should be flexed at 20-30°. Rail height will vary depending on the client's height, distribution of body mass, movement restrictions and environmental limitations.</p> <p>Vertical rails should be placed ~1000mm from the floor to the bottom end of the rail. 300mm rail for entry/shower or 450mm depending on location of studs.</p>
Measuring points	<p>Two measure points are required to ensure correct placement of the rail on the wall, these include distance from the corner of the room to the end of the rail and the floor height to the end of the rail.</p> <p>Where there is an obstruction pipe/fixture/skirting board this can result in a measurement error. The health professional should determine a reference point e.g. top of the skirting board, distance from a bathroom fitting or top of a tile. Note the reference point as part of the scripting process.</p> <p>Location of studs will dictate the points of attachment for the rail. A stud finder can assist. Stud locations can be marked with removable coloured dots which enhance photographs.</p>
Unilateral or bilateral rail installation	<p>Unilateral rail placement is recommended for unilateral mechanical musculoskeletal problems e.g. strength, pain or range of motion. For ankle or hip problems the rail is installed on the same (ipsilateral) side. For knee problems the rail is installed on the opposite (contralateral) side i.e. for left sided weakness/sore knee the rail is installed on the right side¹.</p> <p>If the client has balance issues, rail placement can be on either side and based on environmental constraints and client preference.</p> <p>If there are building limitations or the client has upper limb weakness on the planned installation side, then consider alternative equipment options, bilateral rail placement or rail placement on the opposite side. Discuss with a health professional with expertise in the task.</p> <p>If the client has trunk or generalised weakness/pain or bilateral mechanical musculoskeletal problems consider alternative equipment prior to bilateral rail installation.</p>
Is the rail to be used for sit to stand transfers?	<p>Assess the client in both the seated and standing positions.</p>

¹ O'Meara DM & Smith RM (2006). The effects of unilateral grab rail assistance on the sit-to-stand performance of older aged adults. Human Movement Science, 25, 257-274.

What finish should the rail have?	<p>Polished/chrome finish – attractive and hard wearing but can be slippery to hold especially with wet hands.</p> <p>Epoxy/paint/plastic finish – hard wearing, reduces the effects of condensation, choice of colours allows for contrast with the wall for users with low vision.</p> <p>Slip resistant/knurled/ribbed finish – provides extra grip when wet, may be uncomfortable for those with sensitive hands.</p>
Note the wall surface, e.g. tiles, plaster board	This is to assist the builder with planning any tools required e.g. longer drill bits. For example, if the wall in the room is plastic lined, longer screws are required to ensure adequate securing of the rail to the studs. Additionally, waterproofing may be compromised. If alternative equipment options are not appropriate the rail can be prescribed. However, the script should include reference to the wall lining for the builder, consent from the client/family regarding the potential risk of waterproofing compromise and education regarding monitoring for loosening.
Grab rail attachment - suction versus screw on	Suction grab rails are not recommended for prescription due to the risk of loosening and causing a fall. Clients who request suction grab rails should be educated on the risks and advised to install screw on grab rails or consider alternative equipment options e.g. over toilet frame, shower chair.
Floor surface slipperiness	To reduce slipperiness in wet areas the installer/builder can be requested to apply non-slip strips or paint to the floor or surface.
Hand prints noted on wall/client hand hold placement	<p>Could indicate preference for side of rail placement.</p> <p>Consider relocation of the toilet roll holder or vertical placement of the rail to avoid pulling/pushing on the sink if this is the client's preferred hand hold location.</p>

Outcome of grab rail installation

Generally grab rails cannot be installed at the time of prescription. For this reason a follow up consultation should be arranged after installation to determine if the goals for grab rail prescription and installation have been met. This consultation may be a follow up phone call, a home visit or a combination of both.

Follow up phone call

- Confirm with the client that the grab rail has been installed.
- Review the goal of having the grab rail installed.
- Determine if the client has commenced using the grab rail and any issues that have been encountered. This may include asking the following questions:
 - Are you able to (insert the goal) more easily? “On a scale of 1 to 10 with 1 being very dissatisfied and 10 being very satisfied, how you are (goal e.g. transferring off the toilet seat) now with the completed modification?”
 - Is the modification helpful?
 - How often are you using the grab rail?
 - Do you feel safer? “On a scale of 1 to 10 with 1 being very unsafe and 10 being very safe, how safe you are (goal e.g. transferring in and out of the shower) now with the completed modification?”
 - Do you have any issues or concerns with using the grab rail?

Outcomes

- If the client reports 10/10 for both satisfaction and safety, the client is finding the equipment helpful, reports using the equipment, and does not have any new issues/concerns, a home visit is not required and the client can be discharged using local service processes.

- If the client reports a problem or reports a score <10/10, identify the issues e.g. does not like the appearance of the rail, uncertain if placement is correct or feels discomfort/pain whilst using the rail.
 - If the issue can be resolved through discussion on the phone, resolve the issue and discharge from the service advising the client of their discharge.
 - If the issue requires observation, arrange a home visit to observe the client using the grab rail e.g. equipment feels too low, too high or discomfort with use.

Follow up home visit

- Determine if the equipment has been installed as per the prescription.
- If the client reported a safety concern, inspect and test the grab rail for safety.
- If safe for the client to use, observe the client using the equipment, noting performance.
- If the equipment has not been fitted/installed correctly contact the installer to determine the cause e.g. building limitation or incorrect recording or interpretation of prescription. Determine if the rail is still within appropriate limits for use.
 - If it is not, liaise with a health professional with expertise in the task to determine the options for remedial action.
 - If it is, educate the client on the rationale for the altered placement, train the client in grab rail use and review the client using the equipment. If problems with use are apparent on observation, liaise with a health professional with expertise in the task to determine the options for remedial action.
- If fitted correctly, review the client goals and retrain in use and if issues or concerns remain, liaise with a health professional with expertise in the task.

Guide to Clinical Reasoning

1. Setting and context

- inpatient vs community outpatient.

2. Client

Presenting condition and history relevant to task

- presenting medical condition
- relevant past medical history e.g. falls history
- visual deficits
- cognitive functioning
- laterality for task (functional capacity)
- relevant assessment findings.

General care plan

- inpatient status
- discharge planning
- community services involved.

Functional considerations

- sit-to-stand: independent/uses furniture or room fittings/physical assistance
- standing balance: independent/uses aid/physical assistance
- mobility: independent/uses aid/physical assistance/weakness /dominance i.e. left vs. right
- upper limb function: check grip, arm extension and reach
- cognition: if client is unable to follow/retain instruction, consider safety implications for rail choice and prescription.

Environmental considerations

- location and dimensions of environmental objects (i.e. toilet, shower, basin) in relation to grab rails
- status of the structural components of the residence e.g. can rails be attached to the walls, state of disrepair or deterioration of the building.

Social considerations

- financial capacity to fund installation of grab rails
- ownership of and capacity to make changes to internal living environment
- client/carer/spouse agreeable to having the aesthetics of the interior of the home changed.

3. Task indications and precautions considered

- physical and cognitive co-morbidities that may impact on prescription of grab rails
- client/carer goals: what are the identified requirements and outcomes?
- safety of client use of grab rails within the home.

4. Outcomes of task

- choice of grab rail
- installation of grab rail
- client safely using grab rail as per health professional's recommendations
- reduction of falls risk
- reduction of physical support provided by a carer/support staff.

5. Overall reflection

- indications for further learning
- discussion to be held with lead practitioner
- further assessment or treatment indicated
- referral options/plans.