



Peninsula
Health

Building a **Healthy**
Community, in Partnership

Occupational Therapy evidence-based practice guidelines for the prescription of bariatric home modifications

Peninsula Health Care Network (2015)

Index:

Section	Page
1: Introduction	3
2. Occupational performance assessment	4
2: Resources to identify suitable home modifications	7
3: Home modification solutions	8
4: Assistive technology solutions	13
5: Potential funding sources	15
6. Research Project	16
7. References	17

Section 1: Introduction

Obesity is on the rise in Australia and throughout the developed countries of the world (Crook, 2009). With the increased prevalence of bariatric clients across all health care settings, it is important that clinicians are able to provide expert care to these clients. Clients with obesity often have complex barriers that impact on the provision of health care and their ability to participate in meaningful occupations. Occupational therapists can offer these clients a range of solutions to achieve an increased level of well being and independence in their daily lives.

The intention of this resource manual is to assist occupational therapists in the prescription of home modifications for bariatric clients. At present, there is very little research to direct home modifications specifically for bariatric clients. The Australian Standards for accessible housing do not adequately capture this client population, and therefore the occupational therapist will need to incorporate a thorough occupational performance assessment of the client to guide the prescription of home modifications.

This resource manual has been compiled using feedback from various building companies, advisory architectural services, equipment manufacturers/distributors/suppliers and occupational therapists across Australia, as part of a research project into the prescription of bariatric home modifications.

The research question “What clinical practice guidelines or evidence exists for home modifications to increase safety and independence for bariatric clients?” directed the development of this manual. Further information regarding this research is contained at the end of the manual.

Definitions

Assistive technology: a device used to increase, maintain, or improve the functional capabilities of a person.
<http://www.disabilityrightsohio.org/topic-vets-at>

Adaptive equipment: items that make it possible for a person to access and navigate their homes and community <http://www.disabilityrightsohio.org/topic-vets-at>

Bariatric: for the purpose of this document, a client is defined as being bariatric if they have a BMI > 30 (Safework Australia, 2009). It is also important to consider the client’s anthropometric details (body shape), functional reach, and suitability to utilise standardised assistive technology which often have safe working loads (SWL) as low as 110kg.

Safe working loads (SWL): manufacturer’s recommended maximum weight load for a product.

Client goals and priorities

It is crucial to adopt a collaborative approach with your client to determine the focus for home modifications. This is important to understand the individual barriers for your client and to build rapport and trust. Many intrinsic and extrinsic personal factors and conditions impact on a therapist’s clinical reasoning process (Stark, Somerville, Keglovits, Smason & Bigham, 2015). Understanding the personal, environmental and social barriers for activities of daily living may lead to the prescription of assistive technology for a client rather than more costly home modifications – this resource manual will also explore some bariatric assistive technology commonly prescribed in place of home modifications.

Collaboration:

Clear and effective communication will be required with all parties during the process of prescribing home modifications. This will eliminate assumptions being made regarding the client's goals and aid the identification of barriers in advance. Occupational therapists should consult the following parties:

- Client;
- Carers;
- Home occupants;
- Home care package providers;
- Local Council;
- Architect service;
- Public housing field officers and engineers;
- Independent structural engineer company;
- Building company;
- Product manufacturer;
- Product supplier.

At times it may not be possible to adhere to the relevant Australian Standards for home modification prescription. Disclaimer forms are recommended in these circumstances.

Occupational Performance Assessment

As a guide, the following criteria should be assessed in combination with an occupational therapy home assessment tool. For in-patient clients in hospital, it would be optimal to assess personal factors where possible prior to conducting a home assessment (e.g. functional reach). A home assessment without the client may also be necessary to gain a thorough understanding of the environment prior to the development of any discharge plans. Theoretical frameworks such as the Canadian Model of Occupational Performance can also guide the assessment and intervention process (Canadian Association of Occupational Therapists, 1997). Personal factors affecting occupational performance are explored in this section, whilst environmental factors are explored in the home modification solutions section.

Task Analysis:

Assumptions can often be made regarding how a client will complete a particular task – for example reaching towards a grab rail, or transferring out of bed. However it is important to visually assess your client completing a task within the specific home environment, in order to accurately identify access issues. This will assist in identifying their skills and any barriers within their environment and determining the circulation space available for furniture, adaptive equipment, carers, and optimal grab rail placement.

Functional Reach:

The distribution of adipose tissue is important to consider for a client with obesity, as it will impact on their ability to reach in multiple directions. For instance, a client with excess adipose tissue in the chest region (android body shape) is likely to be restricted in hip flexion and bending below the waist. Clients may also have restrictions with reaching forwards or sideways from a seated posture to access a grab rail (see photos 1 and 2 on following page). It is recommended that the functional reach of a client is assessed in various postures, such as sitting, standing, and lying (see diagram 3 and photo 4 on following page). Seat height can be low compared to seat width, which may also impact on functional reach.

Body Shapes/Anthropometry

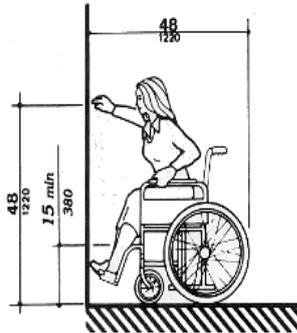
1. Android (apple)



2. Gynoid (pear)



3. Seated functional reach



4. Seat measurements



Anthropometric Considerations:

- Basic client anthropometric measurements (refer to standard Occupational Therapy/Ergonomic text books for further details);
- Seated posture: client width, seat depth required, floor to seat height, arm rest height;
- Lying width: measure both supine and side lying. Clients may vary their sleep posture whilst asleep;
- Individual limb weight: can the client lift their legs independently and/or negotiate steps? Can they access a small lip into a shower base?
- Leg strength: does the client have the ability to sit-to-stand, or shower in standing posture?

Gait aid use:

Determine the type of gait aid to be used by a client in their home environment prior to arranging home modifications. Consult other health professionals for expert advice as required, for example physiotherapists.

Walking frames:

- Consider the width of a bariatric walking frame: will it fit through the door ways of the client’s home?
- Can the client lift a bariatric walking frame in/out of their car?
- Can the client manage with forearm crutches with a SWL of 190kg instead?

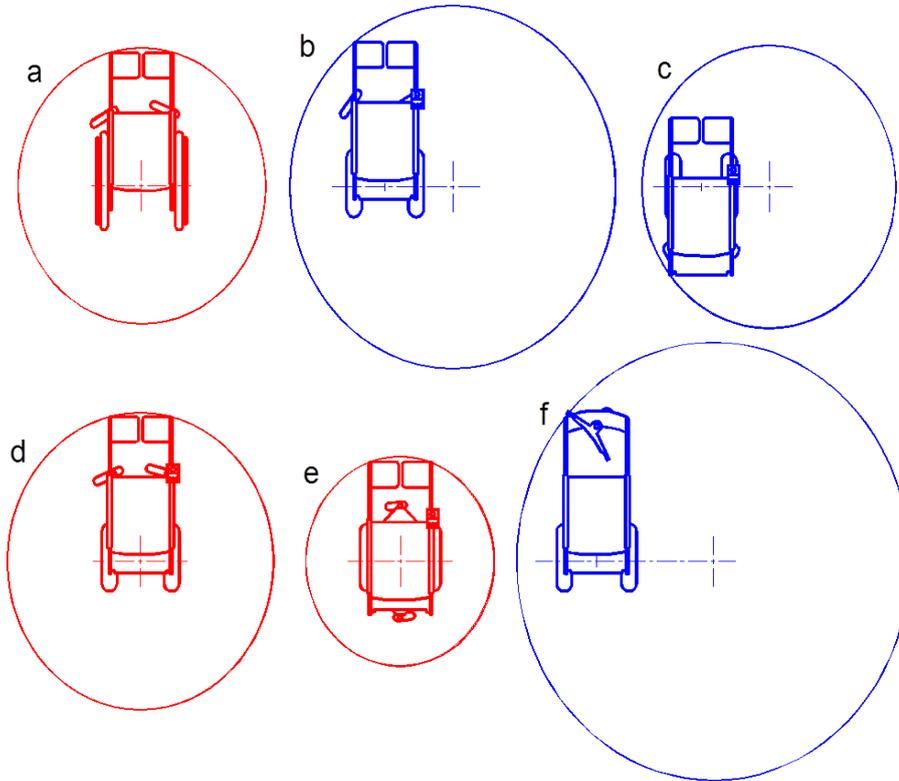
Manual wheelchair and power wheelchair use:

When prescribing wheelchairs for a bariatric client, the following details should be considered:

- How much physical exertion is required to self-propel a manual wheelchair?
- What is the combined weight of the manual wheelchair and a power-assist modification?
- Manual wheelchairs should not be prescribed as a form of exercise for a client with obesity. The level of exertion required to self-propel the wheelchair places additional strain on the musculoskeletal and cardiovascular systems, which are already compromised for this client population;
- Prognosis – is the client likely to progress to a power wheelchair whilst awaiting home modifications?
- Likelihood for further weight gain?
- Potential weight loss if bariatric surgery has been prescribed;
- Door way widths and circulation space within the home environment.

Consider whether your client would benefit from a power wheelchair for indoor or outdoor mobility instead of a manual wheelchair. As the following diagram demonstrates, a mid-wheel power wheelchair (e) has a smaller turning circle footprint than other power wheelchairs and a manual wheelchair.

Wheelchair footprints (Ziegler, 2003)



Key:

- A. manual wheelchair
- B. electrically powered wheelchair with rear wheel drive and direct steering
- C. electrically powered wheelchair with front wheel drive and direct steering
- D. electrically powered wheelchair with rear wheel drive and full differential steering
- E. electrically powered wheelchair with mid wheel drive and full differential steering
- F. scooter design and direct steering

Other personal factors to consider (Stark et al, 2015):

- Co-morbidities and disease progression. E.g. pressure care issues affecting positioning;
- Financial constraints;
- Living arrangements: other home occupants? Home ownership verses rental property;
- Readiness for change;
- Home modification aesthetics and perceived client acceptance;
- Compliance with intervention.

Section 2: Resources

1. ADSSI Home Living Australia (Central Coast, NSW)

<http://www.adssihomeliving.com.au/>

2. Arjohuntleigh Space Requirements

<http://www.arjohuntleigh.com.au/services/architects-planners/space-requirements/>

3. Australasian bariatric innovations group (AUSBIG)

<http://www.ausbig.com.au/>

4. Australian Network for Universal Housing Design

<http://www.anuhd.org/>

5. Australian Standards:

- AS 1428.1 (2009): Design for access and mobility. Part 1: general requirements for access - New building work.
- AS 1428.2 (1992): Design for access and mobility. Part 2: Enhanced and additional requirements – Buildings and facilities.
- AS 4299 (1995): Adaptable housing.

6. Duo (ACT)

<http://www.duo.org.au/programs/handyman-home-and-garden-maintenance-program/>

7. Independent Living Centres Australia

<http://ilcaustralia.org.au/>

7. Lifetec

<http://www.lifetec.org.au/home-modifications>

8. Livable Housing Design - voluntary accessible housing code

<http://www.lha.org.au/>

9. Public Housing

<http://www.dhs.vic.gov.au/for-individuals/housing-and-accommodation>

<http://www.hpw.qld.gov.au/aboutus/reportspublications/factsheets/pages/homeassistsecure.aspx>

10. Resources on universal design

<http://www.universaldesign.com/>

11. Scope Access Home Modifications Scheme

<http://www.scopeaccess.com.au/>

12. State regulatory centre for architectural assessments:

- Victoria: Archicentre: <http://www.archicentre.com.au>
- New South Wales: Home modification and maintenance service: <http://www.nswmms.org.au/>

13. University of New South Wales home modification clearing house

<http://www.homemods.info/>

14. Wesley Home Modifications Service (Sydney)

<http://www.wesleymission.org.au/home/our-services/wesley-help-at-home-services>

15. World Health Organisation

<http://www.who.int/topics/obesity/en/>

16. 2010 ADA (Americans with a Disability Act) Standards for accessible design

<http://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.pdf>

Section 3: Home Modification Solutions

The companies listed in section three and four of this manual represents a small sample of potential companies to source products for a bariatric client. Always check with your local suppliers, registered builders and manufacturers if they can supply specific bariatric products or home modifications. The resources listed on the previous page will also help guide your prescription process.

Internal floor surfaces:

- Obtain manufacturer details on product durability and warranty to determine which floor surfaces will be appropriate for your client's home.
- Consult a registered builder or architect for expert advice.
- Linoleum/vinyl may be prone to punctures if assistive technology (e.g. shower stool) imprint on the same area for a long period of time. This can have a detrimental effect on the waterproofing of the floor.
- Continuous turning and repositioning of power wheelchairs and wheeled shower commodes may also make linoleum/vinyl surfaces prone to tears/breakdown.
- Bathroom floor surfaces need to meet the minimum R10 anti-slip resistant rating (Standards Australia, 1999).
- Various new tiles have a slip-resistant treatment; old tiles can be coated with a slip-resistant treatment.
- Carpet: gait aids and wheelchairs can sink into thick pile carpet, making it difficult for clients to manoeuvre their gait aid (Institute of Access Training Australia, 2015).

Item	Manufacturer	Cost:
Non-slip tile treatment or tiles.	R10 rated products. Check with builders.	Contact manufacturer.
Vinyl flooring	Altro	Contact manufacturer.
	Armstrong	
	Tarkett	

Ceiling Hoists:

- Portable floor hoists require extra manual handling to push/pull the hoist and client into position, therefore ceiling hoist application should be considered where practical.
- Powered traverse for ceiling hoists is an optimal option, as it can decrease the push/pull forces required to manoeuvre a client whilst suspended in the air.
- Confirm with the hoist supplier the client's weight, and potential for weight gain.
- Always consult the hoist supplier to determine how the ceiling will be reinforced, (if required) and that the installation conforms to manufacturer guidelines.

Supplier/Manufacturer	Product	Manual/power traverse	Fixed or portable	SWL (kg)
Aidacare	Borealis C625	Manual or power	Fixed	283kg
Ceiling hoist solutions	Waverley Glen C800	Manual or power	Fixed	364kg
Aidacare	Transactive 800	Manual or power	Fixed	367kg
Human Care	Singe 5100 Satellite		Fixed	300kg
Human Care	Singe 5100 Herkules		Portable	300kg
Arjohuntleigh	Maxi sky	Power	Fixed or portable	455kg
Ceiling hoist solutions	Waverley Glen C1000	Manual or power	Fixed	454kg

Grab rails and banister rails:

- Can structurally reinforced assistive technology be utilised instead of rails?
- Always know the SWL of rails being prescribed. Confirm with the manufacturer if unsure.
- Most rail manufacturers will be able to discuss their rail test data results (on request) to make sure it is suitable for a bariatric client. See table below for sample data as at October 2014.
- Will your client gain weight in future? Will the rails be able to accommodate higher loads?
- Discuss the rail fixing method with the installer, to ensure they have carefully considered all options. Builders should refer to the rail manufacturer guidelines for rail installation.
- Walls may be structurally reinforced using a wall brace, additional noggins or a spreader plate. As a minimum, rails must be inserted into studs. The type of screws for fixing into the wall may also vary.
- When there is a need to reinforce walls, it may be necessary for the builder/installer to consult a structural engineer to compute the reinforcement required.
- Consider floor-mounted banister rails (with or without outrigger support). Obtain advice to determine structural suitability of the floor.
- Mobile homes and caravans: rails can be fixed into external mounted wall braces/spreader plates from inside the home. This may however impact on the external waterproofing of the home. Metal plates may be used on mud brick wall homes; consult a builder to determine if these are structurally suitable for grab rail installation to support bariatric clients.
- If the home structure is unsuitable, do not install a grab rail.

The same prescription principles should be followed for banister rails/floor mounted rails. In addition, if your client is likely to apply lateral force on a banister rail, outriggers may be required to stabilise the rail from excessive lateral movement. The requirement for outriggers should be discussed with the installer.

Item	Manufacturer/Supplier	SWL (kg)
	*** Must call companies to discuss testing results and confirm SWL	
Fold Down Grab rail	Handrail industries	Model 550: 175kg
	Con-serv	Tilt-lock model: 250kg.
	RBA	RBA4007 series: 300kg (vertical force)
	Axess Trading	EGT46 - EISEGRIP® Bariatric Toilet Support Arm 300kg
Wall-mounted grab rail	Canterbury Concepts:	300mm grab rail: 250kg. 900mm grab rail: 130kg with wall bracket into studs.
	Con-serv	Rails up to 800mm: 250kg.
	Lenlock/Lencare	Contact Manufacturer
	Personal Independence Providers	Contact Manufacturer
	SureCare	400kg any rail length
	Handrail industries	Contact Manufacturer
Banister rails, floor mounted rails.	Handrail industries, Lenlok, Con-serv, Lencare, Endeavour Lifecare. All customise rails.	Contact manufacturer

Ramps:

- Consider the combined weight of your client, carer(s), and equipment (e.g. power wheelchair). For example: 160kg client + XXXkg power wheelchair + XXXkg ambulant carer = XXXkg total weight.
- Discuss these weights with the architect/builder designing the ramp. This will assist to determine the minimum SWL required for ramp construction and ensure adequate circulation space is incorporated into the design. The builder/architect will also determine what ramp reinforcement options are available (e.g. extra stumps, bearers).
- Bariatric wheelchairs have a larger footprint and may require larger landings (for turning circle space) than those specified in the Australian Standards. Measure the turning circle space of the wheelchair prior to ramp construction to determine minimum landing dimensions required.
- Concrete and metal ramps may be more favourable to reinforced timber ramps for ramp longevity and minimal maintenance is required.
- Ramp surface should be non-slip. Materials may include rubber matting or paint treatment with R11-R12 slip resistant rating. These anti-slip ratings are detailed in AS. 4586 for ramp surfaces (Australian Building Code Board, 2014).
- Advice from architects and builders suggests that merbau decking should be laid reed side down, to minimise moisture and debris becoming entrapped in the grooves, which can cause a slip hazard.
- The same principles will apply if platform steps are prescribed for a client.
- Alternative options to ramps include landscaping (see photos 4-6 below), or an exterior lift.

4. BEFORE:



5. AFTER:



6. Integrated ramp in landscape design



Item	Manufacturer/supplier	SWL
Ramps	Australian Ramp Systems	Specify advice from builders/survey to achieve required weight capacity.
	Endeavour Lifecare	
	Enviorubber: wedge ramp only.	
	EBH Construction	
	GMS	
	Henry care	
	John Kennedy Plumbing Services	
	Melbourne Asset Maintenance	
	Personal Independence Providers	
Wesley home modifications		
Non- slip surface	Envirowalk	Contact manufacturer.
	Grip guard	Contact manufacturer.

Platform lifts:

- Consider the combined weight of your client, carer(s), and equipment.
- A lift may be cheaper than a long ramp, and be more compatible in confined spaces than a ramp.

Supplier	Product	Maximum lifting height (mm)	Minimum lifting height (mm)	Internal length (mm)	Internal width (mm)	SWL (kg)
Aussie Lifts	Nova	1000		1300	900	250
PR KING	Terry Lifts TSL 1000	1000	75	1450	800	250
Master Lifts	Model Wheelchair lift – Staircruiser	1000-3000		1100	880	250
Aussie Lifts	Mobilift (manual- requires 5kg of force to work)	1520		1420	860	275
Easy Living Home Elevators	Platinum silver commercial	1000	50 (can also be recessed into floor)	1400	1100	300
HLS	LP5/LP5+	500/875	150	1602	900	300
Pandect	LIBERO-340	1500	60	1400	1100	340
Platform Lift Company	1m Independence	1000	80 (can also be recessed into floor)	1400	1100 or 900	340
HLS	LP50H (combined vertical and horizontal movement)	500	0 (recessed into floor)			450
PR KING	Terry Lifts Melody2	2000		1400	1100	500
Pandect	MOBILUS-500	1000	60	1400	1100	500

Toileting:

- Standard wall-mounted toilets have a SWL of 150kg, and are prone to becoming detached from the wall.
- Floor-mounted pans have greater longevity for bariatric clients.
- Stainless steel floor mounted designs generally have a weight capacity above 150kg (see next page).
- Wider pans and toilet seats are available for prescription.
- Consider additional circulation space beside the toilet to accommodate excess adipose tissue and wider foot placement during toilet use (see photo 9 on next page).
- Excess adipose tissue can restrict clients from reaching the perineal area to maintain hygiene after toileting. Bidets and hand-held washette products can improve personal hygiene. Raised toilet seats with a front seat opening combine well with bottom wipers for forward reaching to the perineal area.
- Consult a registered builder or plumber to determine plumbing compatibility with toilet prescription.
- Consider bariatric over toilet frames or commodes as alternative solutions (see assistive technology section).

Item	Manufacturer	SWL
Toilet pan (ceramic)	www.caroma.com.au Caroma Care range	All pans: 400kg . Toilet seats: most are 120kg .
	Enware www.enware.com.au	IFO S- Trap: 400kg .
Toilet pan (steel)	RBA www.rba.com.au	RBA8851-137: 2000kgs . All other stainless steel toilets: 400kg capacity.
Toilet seat	RBA www.rba.com.au Uses stainless steel attachments.	RBA8186-623: 545kg . Use with RBA8851-137 toilet
	RBA www.rba.com.au	RBA8186-853: 545kg . Use with RBA8851-137 toilet

Showers

- Complete a functional assessment with your client to determine if a larger shower base shower is required, or a level entry shower.
- Allow additional circulation space to accommodate carers or adaptive equipment (e.g. wheeled commodes). See photo 7 below.
- Hand held shower hoses can assist clients with limited functional reach to maintain skin integrity between skin folds.
- Will a pre-fabricated level entry shower accommodate the weight of your client, carer(s) and equipment? If not, a customised level entry bathroom design is required.
- Consult an architect, builder, and structural engineer as indicated to determine if the level entry subfloor needs reinforcement to meet the SWL and circulation space requirements.
- Wall mounted fold-down shower seats should be avoided, as the wall structure may not be capable of sustaining high forces.
- Shower stools without armrests are useful to accommodate excess adipose tissue. Rails may be installed to assist with sit-to-stand transfers from these shower stools. See photo 8 below.

Item	Manufacturer	SWL	Installation considerations
Custom level entry shower bases	Local builder Personal Independence Providers John Kennedy Plumbing Service Melbourne asset maintenance	Obtain advice from builders or structural engineer to achieve required weight capacity.	Sub-floor reinforcement. Extra width for over wide shower stool/chair

7. Shower circulation space 8. Shower stool with grab rails 9. Narrow toilet circulation space



Section 4: Sample list of assistive technology to substitute home modifications

Always check with local suppliers for equivalent stock. The state Independent Living centre (ILC) websites are also an excellent reference for sourcing bariatric assistive technology.

Toileting

- Various seating styles are available with over toilet frames; some can also be used as a commode.
- Front or side cut-out seat designs can assist functional reach for toileting tasks.

Supplier/Manufacturer	Product code	Floor to seat Height (mm)	Seat Width (mm)	Seat Depth (mm)	SWL (kg)
Fixed leg bedside commode					
K-Care	Extra wide Commode KA500ZD50	450-600	500	420	160
K-Care	Extra wide Commode KA500ZD55/60/65	500	550/600/650	490	175/195 /210
Sizewise; Midmed Hire	Bari Drop-Arm Commode	480	900	450	272
Omni Healthcare	XXL Rehab Bedside commode	440-590	610/710 (seat) 540 (b/w arms)	400-520 Split seat pad design	325
Sizewise; Midmed Hire	Bari Drop-Arm Commode: two sizes	1. 480 2. 560	1. 900 2. 620 (seat) (730w arms)	1. 450 2. 450	1. 272 2. 345
Over-toilet Frames					
Patient care products: check manufacturer website	Extra-wide over toilet frame	adjustable	580	550	160 or 220.
Northcoast	Guardian 3-in1 heavy duty commode	460-560	410	530	181
Auscare	Bariatric over toilet commode	420-560	600	400	204
Endeavour Life Care	Bariatric Over toilet frame E212X	510	650		225
Peninsula Home Health Care	Bariatric over toilet Seat	Adjustable (440-600)	670	400	225
Crescent rehab	Bariatric over toilet frame CR1635-56	550	560,600,660	600	250
Aidacare	Over toilet aid Maxi BTT146400	520	550,600,650	420	300
K-Care	Maxi Over Toilet Frame KA410z55/60/55	515	500/600/650	470	300

Showering:

Supplier/Manufacturer	Product code	Floor to seat Height (mm)	Seat Width (mm)	Seat Depth (mm)	SWL (kg)
Shower chair					
Crescent	Extracare shower chair CR1503	520	550,600,650	430	175,195, 210
Endeavour Life Care	Bariatric shower chair E141XW	Fixed 510	650	560	250
K-Care	Maxi Shower Chair with arms KA220ZA55/60/65	515	550/600/650 (seat) 565/615/665 (b/w arms)	470	300
Aidacare	Shower chair Maxi BTS105700	520	550,600,650	430	300
Omni Healthcare	XXL Rehab Shower Bench 0141-061-000	440-590	610/710	400-520	325
Shower stool					
Crescent	Extracare shower stool CR1519	520	550,600,650	430	175,195, 210
Peninsula Home Health Care	Bariatric shower stool	Adjustable (440-600)	670	400	220
K-Care	Maxi Shower Stool with arms KA222ZA55/60/65	655	550/600/650	430	300
Aidacare	Shower stool maxi BTS106000	520	550,600,650	430	300
Endeavour Life Care	Bariatric shower stool E122XW	fixed	650	345	300
Transfer Bench					
Aidacare	Bath transfer bench bariatric BTS 105300	390-520	670	410	227
Endeavour Life Care	Bariatric transfer bench E115B	480-580	750	410	227
Crescent rehab	Bariatric shower bench CR1678/79	430-600	685/1000	410	300
Wheeled shower commode					
K-Care	Maxi Attendant Propelled Wide Seat KA112S50	590	500 (seat) 630 (b/w arms)	430	150
K-Care	Maxi Attendant Propelled Wide Seat KA112S55/60/65	590	550/600/650 (seat) 665/715/765 (b/w arms)	460/470/480	195
Omni Healthcare	XXL Rehab Shower Chair 0150-061-000 (also has self-propel model)	550	610/710	560 Split seat pad design	325

Section 5. Funding sources

Bariatric assistive technology and home modifications can be costly compared with standard assistive technology and home modifications. These items often exceed the funding limit of state organisations.

The Victorian State Wide Equipment Program (SWEP) lists the sub-limit for each product at www.swep.bhs.org.au. There is no additional funding for bariatric clients. Occupational therapists need to be aware of likely gap payments before trialling and prescribing assistive technology, in order to obtain the most cost-effective solution for a client that will also accommodate potential future weight gain.

The list below is intended as a guide to assist funding gap payments for assistive technology. Please search your local and state organisations in addition to this list. Therapists may also consider consulting social workers or case managers for assistance with complex funding applications.

1. Arthur Marsden Whiting Sympathy Fund

<http://www.eqg.com.au/not-for-profit-organisations/grants/trust-list/trustdetail.aspx?ID=30>

2. Disability Donations trust

<http://www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/disability-donations-trust-guidelines>

3. Home renovation loan (Victoria)

<http://www.dhs.vic.gov.au/for-individuals/housing-and-accommodation/home-owner-support/home-modification/home-renovation-loan>

4. Home renovation service (Victoria)

<http://www.dhs.vic.gov.au/for-individuals/housing-and-accommodation/home-owner-support/home-modification>

5. Local service clubs:

- a. RSL: <http://rsl.org.au/>
- b. Rotary Club: <http://www.rotary.org.au>
- c. Lions Club: <http://lionsclubs.org.au>
- d. Also consider local community groups to assist with fundraising (e.g. Scouts, Churches, School groups ect).

6. Medicare local

<http://www.medicarelocals.gov.au/internet/medicarelocals/publishing.nsf>

7. Philanthropic Trusts: search web site for eligible grants

<http://www.philanthropy.org.au/>

8. State equipment funding programs (e.g. Victoria: SWEP)

<http://swep.bhs.org.au/>

9. State and federal government funded packages of care (e.g. DHHS Victoria)

<http://www.dhs.vic.gov.au/for-individuals/disability>

10. Tobin brothers

<http://tobinbrothers.com.au/funeral-directors/tobin-brothers-foundation.html>

11. The Freemasons Public Charitable Foundation

<http://www.freemasonsvic.net.au/community/benevolence/charitable-foundation/>

12. The Marion and EH Flack Trust

<http://www.flacktrust.org/grants.htm>

13. Lord Mayors Charitable Fund

<http://www.lmcf.org.au>

14. Walter and Eliza Hall trust

<http://www.thesurvivalfund.org.au/TheWalterAndElizaHallTrust/>

15. Young care: Victorian At Home Care Grants

<http://www.youngcare.com.au/>

Section 6. Peninsula Health research project abstract

Title	Evidence-based practice guidelines for prescribing home modifications for bariatric clients
Protocol Number	LRR/13/PH/36
Principal Investigator	Laura de Lange
Associate Investigator(s)	Emma Coyle, Helen Todd and Cylie Williams

Background

Home modifications assist restoration of independence and home safety. No direct literature exists to guide the prescription of bariatric home modifications. With the rise of obesity in Australia, more evidence is needed for occupational therapists as the primary prescribers of home modifications.

Objective(s)

To map the Australian bariatric home modification prescribing practices, and establish if clinical practice guidelines are in use.

Method

This was designed as a cross-sectional cohort survey. Invitations for participation were sent to occupational therapists who prescribed bariatric home modifications within Australia or if they were an industry partner providing bariatric equipment. Data measures included general demographics and prescribing frequency. Data were collected over two months.

Results

There were 347 participants across Australia, and they reported 11 types of bariatric definitions. Common modifications were: grab rails; ramp/steps; and bathroom modifications yet less than 3% of therapists consistently prescribed these for bariatric clients. 58% (n=171) of therapists 'never' or 'rarely' knew the load capacity of prescribed grab rails. There was an association between a therapist's knowledge of rail load capacity and the following factors: years of clinical experience ($p < 0.001$); clinical reasoning using rail manufacturer's advice ($p < 0.001$); and clinical reasoning using specific rail designs ($p = 0.041$). Only 11% of therapists used a clinical practice guideline but many builders relied on therapists to specify client design specifics.

Conclusion

This project mapped national bariatric home modification prescribing practices. The lack of consensus in bariatric definitions, uncertainty of load capacities and minimal use of clinical practice guidelines suggests that additional tools are required for occupational therapists to develop their clinical reasoning and knowledge of bariatric home modifications.

* The ethical aspects of this research project have been approved by the HREC of Peninsula Health. This project has been carried out according to the National Statement on Ethical Conduct in Human Research (2007).

Research contact person: Laura de Lange
Occupational Therapist
Domiciliary Care Service, Community Health
Peninsula Health
Phone: 03 9788 1219, Email: ldelange@phcn.vic.gov.au

References:

- Australian Building Code Board. Slip-resistance for stairways, landings and ramps. Retrieved May 21, 2015 from
http://www.google.com.au/url?url=http://www.abcb.gov.au/~media/Files/Download%2520Documents/Publications/National%2520Advisory%2520Note%2520-%2520Slip%2520Resistance.ashx%3Fla%3Den&rct=j&frm=1&q=&esrc=s&sa=U&ei=hLJBVbGDDqa5mwW9vYDADQ&ved=0CDQQFjAF&usg=AFQjCNEK2mycucGbrjIMBEcL_MBQZ3rFDQ
- Canadian Association of Occupational Therapists (1997). *Enabling Occupation. An Occupational Therapy Perspective*. Ottawa, ON: CAOT Publications ACE.
- Crook, K. (2009). Designing for dignity. *Health Facilities Management*, 22.3, 21-25.
- Institute of access training Australia. (2015). The why's of access handbook. Retrieved May 21, 2015 from
<http://www.accessauditsaustralia.com.au/The-Whys-of-Access.aspx>
- Safework Australia. (2009). The Bariatric journey in Australia: Hospital case study. Retrieved March 3, 2014 from
http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/317/TheBariatricJourneyAustraliaHospitalCaseStudy_2009_PDF.pdf
- Standards Australia. HB 197: 1999. An introductory guide to the slip resistance of pedestrian surface materials.
- Stark, S., Somerville, E., Kelovits, 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>
- Ziegler, J. (2003). Working area of wheelchairs. Retrieved July 23, 2014 from
http://www2.derby.ac.uk/ostrich/international_retail_design/Session2%20Wheelchair%20Access.pdf