

Enabling Participation in Activities of Daily Living for People Living with Obesity

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Version 1, August 4, 2020. Adult Obesity Clinical Practice Guidelines are a living document, with only the latest chapters posted at obesitycanada.ca/guidelines.

KEY MESSAGES FOR HEALTHCARE PROVIDERS

- Asking patients about their performance in daily activities including personal care, mobility and interactions with the built and social environment will provide valuable information about facilitators and barriers to engagement in daily activities, including treatment recommendations. This can help healthcare practitioners to tailor interventions for obesity treatment and management.
- Places and spaces where healthcare service delivery occurs can be made physically accessible, equipped and respectful for use by persons living with obesity so that patients can access the full range of primary care services, including assessment and treatment. Consideration of the accessible features surrounding the clinic space, including access to parking, public transit and door widths to accommodate mobility equipment, are also needed.
- Injury prevention, which includes falls risk reduction, is possible via the inclusion of exercises to improve postural control, balance and lower extremity strength. The [Falls Efficacy Scale](#)¹ is a psychometrically sound measure that determines an individual's concern about their risk of falling while performing activities of daily living that involve walking or moving about.
- Patients who report significant challenges with participation in activities of daily living may benefit from a referral for occupational therapy and/or physiotherapy.
- Healthcare providers should look at the integrity of the patients' skin and condition of any wounds in order to identify any areas of concern, such as pressure points, skin breakdown or signs of infection.²

RECOMMENDATIONS

1. We recommend that healthcare providers ask patients living with obesity if they have concerns about managing self-care activities such as bathing, getting dressed, bowel and/or bladder management, skin and/or wound care, foot care (Level 3, Grade C).³
2. We recommend that healthcare providers assess falls risk in people living with obesity as this could interfere with their ability and interest in participating in physical activity (Level 3, Grade C).⁴

KEY MESSAGES FOR PEOPLE LIVING WITH OBESITY

- The restricted range of motion, balance and mobility that some individuals living with obesity experience can impact the ability to complete self-care activities, such as bathing, getting dressed, bowel and/or bladder management, skin and/or wound care and foot care. Issues in this area may require adaptation of self-care activities and/or the use of assistive devices, such as dressing aids, a long-handled reacher, long-handled sponges, bath benches, grab bars and mobility aids.³
- Some individuals living with obesity experience issues with mobility and are at risk for slips, trips and/or falls. This could interfere with the ability and interest in participating in physical activity. Be sure to let your healthcare practitioner know if you have had a fall or are fearful of falling as you go about your day to day activities.⁴

- Obesity is associated with an increased risk of skin issues that can result in redness, blisters, rashes and open wounds that are resistant to healing. Individuals with obesity should routinely monitor the integrity of their skin and condition of any wounds in order to identify any areas of concern, such as pressure points, skin breakdown or signs of infection. Particular attention should be paid to areas in skin folds.²
- Your healthcare practitioners' offices and clinical care spaces should be physically accessible and equipped so that all patients, including those living with obesity, can access the full range of primary care services, including assessment and treatment. Let your healthcare practitioner know if there are barriers that prevent you from fully participating in and accessing care. This includes access to parking or public transit, elevators, stairs, seating, doorways, wash-room accessibility, etc. Advocate to have barriers addressed and spaces modified.

Introduction

Patients in treatment for obesity frequently experience challenges participating in activities of daily living (ADL), which include the types of activities required for successful management and treatment of obesity, such as physical exercise and meal preparation. The ability to be able to take care of oneself (including bathing, dressing and accessing healthcare services) are also necessary to engage in treatment for obesity. This chapter provides an overview of the elements of body functions and structures, personal and environmental factors, using the best evidence available to illustrate how they influence participation in treatment and management of obesity. The purpose of this chapter is to provide primary healthcare teams recommendations that will help them to identify factors that their patients may need to have addressed in order for them to participate in the activities of daily living to promote health and wellbeing as well as to participate in obesity management activities. It is our intention that work in this area will continue and more evidence will be generated that contributes to improving participation in everyday activities that consider addressing the functional consequences of obesity and the environmental and social barriers that contribute to the disability experienced by some individuals in treatment for obesity.

Why consideration of ADL is important

Obesity is a health condition that may be experienced as a disability as a result of restricted participation or activity limitations caused by factors in the built and social environments, personal factors or dysfunction of body functions and structures. Patients living with obesity are experts in knowing what it is like to navigate their day-to-day activities. However, unless the patient is specifically asked about managing ADL, healthcare practitioners are often unaware of the challenges experienced by people living with

obesity; therefore, they are not addressed and may be barriers to obesity management.

Being satisfied with the ability to participate in ADL is associated with health-related quality of life by reducing disability as well as supporting people living with obesity to manage at home and in their communities. Meeting these objectives will contribute to the overall health and wellbeing of individual patients by developing the ability and providing opportunities for participation in physical activity, meaningful productivity and social interactions.

Some challenges experienced by patients living with obesity will require services and supports available through multi-disciplinary teams, rehabilitation professionals and/or disability services, including financial support for assistive devices, home renovations and accessible parking.

What is the impact of obesity on performance of ADL?

Obesity is associated with more time spent in self-care activities, indicating that patients may need more time to complete ADL, including bathing, getting dressed and moving from place to place. It has been reported that people with obesity spend almost triple the amount of time doing daily activities (dressing, bathing, attending medical appointments, meal preparation) than typically reported in the same age groups in persons without obesity, leaving less time for work, rest and leisure activities.³ Class II and Class III obesity is associated with increased odds of impairment in ADL (i.e., getting in/out of bed, dressing, bathing, eating).^{3,5} Some people with obesity experience limitations in being able to reach areas of their body to perform activities related to personal hygiene.⁶

Mobility impairment

Body mass index (BMI) is not always an independent predictor of mobility impairment. Muscle strength, assessed using bilateral hand grip strength measures taken with a dynamometer, has been found to be the best predictor of mobility disability.⁷ While not ideal, an alternative to measuring lower extremity and grip strength by dynamometer in primary care, is to ask a patient if they have difficulty climbing one flight of stairs or walking 400 metres on a flat surface in 15 minutes without sitting to rest.⁷⁻⁹

Although it may seem logical to assume that body shape or fat distribution (central vs. lower body) would have an impact on mobility, one study to date reports no association to lower extremity function or disability.¹⁰

Risk for falls

The risk for slips, trips and falls increases in all classes of obesity, with an increased risk for injurious falls in adults who have Class II or Class III obesity.¹¹⁻¹⁴

Healthcare professionals should assess for falls risk. The [Falls Efficacy Scale \(FES\)](#) is a psychometrically sound measure that determines an individual's concern about their risk of falling while performing ADL.¹ While the FES has primarily been used in populations of older adults, it can serve as a useful guide to ask practical questions and conduct a gross assessment of a patient's self-efficacy with regard to falls and fall prevention. For patients with Class III obesity who are in treatment for obesity and are losing weight, include balance training to enhance the improvement in trunk sway and balance maintenance.¹⁵

Class III obesity is associated with decreased balance in adults as measured by time of balance maintenance and postural sway at the trunk during one leg stance on a movable platform.¹⁵ Specific balance training incorporated into a three-week multi-disciplinary body weight reduction program significantly improved balance and reduced trunk sway more than body weight reduction alone.¹⁵

Falls risk may be improved with obesity management. Significant weight loss has been shown to improve postural stability in a small sample size of adult men and the improvement was directly related to the amount of weight lost (average weight lost 12.3 kg after a diet intervention and 71.3kg post-surgical intervention).¹⁶

Skin integrity

People with obesity can be at higher risk for issues associated with skin integrity due to skin problems, moisture and friction in skin folds and difficulty with reaching to their skin. Specific skin issues include dryness, itchiness, broken skin, redness and rashes.² The most commonly reported body sites for skin problems are under the breasts, limbs, groin, abdomen and thighs, all of which are areas where there may be a greater chance of skin

folds or skin-to-skin contact.¹ The most commonly reported risk factors for skin problems are:

- Hyperhidrosis (excessive sweating) and excess moisture in skin folds, which can contribute to intertrigo and heat rash.²
- Limited range of motion and the weight of skin folds, which can make it hard to clean all areas of the body and can contribute to the development of pressure injuries.⁶
- Malnutrition, which can impact skin healing.⁶
- Reaching areas of the body can be difficult for people with obesity.⁶

Strategies for managing skin integrity in people with obesity

- Keep skin clean and dry. This may require washing the skin and changing clothes multiple times per day to decrease moisture.⁶
- Use a soft cloth (cotton) for absorbing excess moisture, including in the skin folds, to help minimize skin irritation.⁶
- Dry skin with a fan or a blow dryer on the coolest setting.⁶

Healthcare practitioners should address skin care as part of routine care with patients with obesity. As with many clinical inquiries, this will need to be approached with care as patients with obesity may feel uncomfortable discussing skin problems because of fear or embarrassment.² Refer patient to skin and wound care experts if a skin issue is not improving or a wound is not healing.

Interventions for promoting independence with ADL

Ask patients what time of day is best for them to attend appointments and work with patients to integrate activities related to obesity treatment into their daily routine, allowing adequate time. Encourage use of energy conservation strategies.

Energy management and balancing activities, including the use of assistive devices for self-care activities, pacing, planning, prioritizing, positioning for self-care, meal preparation and household tasks can help people to manage their daily activities through the day and week.³ Examples include sitting for meal prep, using a bath seat or dressing aids, planning meals, re-organizing the meal preparation area to promote accessibility of cooking utensils and food and meal planning to manage energy needed for daily cooking. Using energy management strategies for some daily self-care activities can help to reserve energy for people to be able to do other daily activities, such as exercise, grocery shopping, attending medical appointments or social and leisure activities. Energy conservation strategies can also help patients manage their energy for behaviour changes to support obesity management, such as meal preparation and physical activity. Therefore, it is suggested that healthcare professionals consider energy conservation strategies

when prescribing physical activity or therapeutic exercises as part of a treatment plan for obesity.

The use of assistive devices, such as a long-handled reacher, dressing sticks, shoe horns, sock aids, bath sponges and bath seats, address challenges with self-care associated with decreased range of motion and strength, and can reduce injuries associated with falls, strains and sprains.

Strategies to improve access and engagement in primary healthcare

There are a number of recommendations and opinions available that suggest ways in which to make a healthcare environment, such as a primary care setting, accessible, comfortable and respectful for patients with body sizes and shapes associated with obesity. Suggestions to modify the built and social environments, along with making sure all medical supplies and equipment meet the needs of patients with obesity, are based on knowledge about how humans interact with places, spaces and objects in conjunction with patients' opinions about what would make clinical visits more effective and comfortable. Empirical research is not necessary to identify such strategies. Research into the effect of such interventions has not yet been published.

To this end, the following recommendations are made to promote access to places and spaces where primary care takes place. The checklist (Table 1) is intended to guide the assessment of a healthcare setting, such as a clinic space. To use this checklist, walk through your clinical space while considering the interactions your patient may have with the environment throughout their visit.

Gaps in our knowledge: Questions for future research

There are significant gaps in knowledge about what it is like to live with obesity in the context of participating in day-to-day activities, including self-care, leisure and life roles. Even less is known about the effectiveness of interventions that target known barriers in the built and social environments, including weight bias among healthcare providers, employers and educators, and adaptations to spaces and places where people live, work and play. Much of the existing research involves small convenience samples and individual case studies. The development and evaluation of interventions that address key elements that contribute to participation in everyday life roles is needed; these should focus on body functions and structures, ADL, personal factors (including gender, age and sex) and environmental factors, including the built and social environments. A better understanding of the factors that influence function, performance and satisfaction in everyday living will enhance the ability of primary healthcare teams to personalize interventions using multi-dimensional and interprofessional perspectives.

Tips on when to refer a patient for occupational therapy

Occupational therapists promote health and wellbeing for people with obesity by facilitating engagement in the occupations of everyday life. Consider referring your patient to an occupational therapist through a specialty clinic, home care, primary care, outpatient services or private practice (you can find an occupational therapist in Canada at <https://www.caot.ca/site/findot>).

Referrals for occupational therapy may be indicated for a person living with obesity who presents with any of the challenges listed in Table 2. The skills an occupational therapist will use are listed in each category. Use this guide to determine when you may consider referring a person with obesity to an occupational therapist.

Tips on when to refer a patient for physiotherapy

Physiotherapists can help people living with obesity to manage functional challenges. Use this guide to determine when to consider referring your patient for physiotherapy. Physiotherapy may be accessed in a specialty clinic, home care, primary care, outpatient services and in private practice (you can find a physiotherapist at <https://physiocanhelp.ca/find-a-physiotherapist>). Physiotherapy referral may be indicated for an individual with obesity presenting with any of the challenges listed in Table 3. Skills that a physiotherapist may employ are listed in each category.

Table 1: Assessment of Clinical Space Checklist

Type of space	Considerations
Waiting Areas Reading material, health promotion posters and artwork Seating (chairs, stools and sofas)	✓ Avoid images and content that could stigmatize, exclude and/or discriminate against individuals with obesity ✓ Adequate weight capacity (minimum 136 kg/300 lb) ✓ Chairs with and without armrests ✓ 15–20 cm spacing between chairs ✓ Chair width greater than 51 cm ✓ Chair seat depth greater than 46 cm ✓ Firm cushions ✓ Seat height minimum 41 cm ✓ Mix of chairs so that there is not a perceived section for people with obesity that is separate from other seating
Washroom Toilet Specimen container	✓ Minimum weight capacity of 136 kg ✓ Floor mounted ✓ Ensure enough room surrounding toilet to allow for sitting or straddling of toilet ✓ Professionally installed, wall-mounted grab bars nearby to support getting on and off the toilet ✓ Split (U-shaped) toilet seat ✓ Consider placement of toilet paper roll within reach (i.e., not behind toilet) ✓ Urine specimen container with handle
Examination rooms Weigh scale Exam table Step stool	✓ Minimum weight capacity of 227 kg (500 lbs) ✓ Wide standing surface ✓ Supportive handlebars on scale or professionally installed wall-mounted grab bars close by ✓ Built-in ramp for wheelchair or individuals with mobility difficulties ✓ Seating and long-handled shoehorn nearby ✓ Located in an area that provides privacy ✓ Minimum weight capacity 227 kg ✓ Firm cushioned surface ✓ Wide enough to support various body shapes ✓ Positioned close to structures such as wall-mounted grab bars ✓ Step stool (see below) ✓ Minimum weight capacity 227 kg ✓ Wide surface ✓ Equipped with supportive handlebar(s)
Clinic equipment Gowns Blood pressure cuffs Tape measure Needles Speculum Phlebotomy	✓ Have a range of large sizes available ✓ Large and extra-large cuffs readily available ✓ Appropriate length for waist and hip circumference measurement ✓ Available up to 304 cm long ✓ 5 cm safety needles available for intra-muscular injection ✓ Large or extra-large speculum ✓ Available with 17.8 cm blade ✓ Longer tourniquet up to 81 cm long

Adapted from *Equipment and Environment Checklist for Offices and Clinical Settings: Creating an inclusive environment for people with overweight and obesity* developed by the Alberta Health Services Provincial Bariatric Resource Team.

Table 2: When to Refer to an Occupational Therapist

Challenge category	Types of interventions provided by an occupational therapist
Obesity-related comorbidities that affect ADLs	Educate clients on self-management of associated conditions (e.g., cardiovascular disease, diabetic neuropathy, dysphagia, osteoarthritis, obstructive sleep apnea, skin conditions, lymphedema).
Mental health	- Apply psychosocial interventions to address the functional impact of mental health disorders on emotions, thoughts and behaviours. - Support positive body image. - Facilitate social engagement through enhancing social skills or participating in leisure activities. - Enable clients to optimize time use through developing routines.
Energy management	- Coach clients on how to increase energy expenditure or how to manage limited energy (e.g., self-care, leisure, shopping, work). - Promote energy management for physical activity.
Education and skill building	Collaborate with and coach clients to build skills in the areas of: - Meal planning and food preparation; - Occupational and life balance; - Occupational engagement; - Pain management; - Physical activity; - Skin care management; - Sleep hygiene and positioning; - Stress management; and - Time management
Environment	- Identify and address home accessibility barriers. - Identify and address barriers to accessing community resources. - Adapt the task or environment to facilitate occupational engagement (e.g., positioning, assistive devices, space organization).
Equipment	- Assess for and recommend assistive devices (e.g. self-care aids, mobility aids, abdominal supports) - Provide education on appropriate footwear or need for orthotics.
Consultation and advocacy	- Consult with and coordinate referrals to other healthcare providers or specialists. - Advocate for support funding and purchase of assistive devices, participation in community programs, access to community resources.

Adapted from *Helping Adults with Obesity with Functional Challenges: Tips on Referring to Occupational Therapy* developed by the Alberta Health Services Provincial Bariatric Resource Team.

Table 3: When to Refer to a Physical Therapist

Challenge category	Types of interventions provided by a physiotherapist
Challenges with movement, pain or daily function	- Assess, diagnose and manage musculoskeletal issues (e.g., pain, injury, limitations in range of motion, endurance, strength). - Analyze and manage problems with functional mobility (e.g., walking, moving in bed, getting out of a chair, reaching). - Assess physical ability to participate in physical activity or exercise. - Address functional issues following significant changes in body weight (e.g., loss of muscle mass). - Assess balance and address falls risk. - Prevent further or future health issues (e.g., assess efficiency of movement, mobility to minimize stress on joints).
Obesity-related comorbidities that affect daily function	Manage and educate on associated conditions (e.g., osteoarthritis, diabetic neuropathy, urinary incontinence*, lymphoedema*). *Indicates requires specialized training.
Energy management	- Provide education on maximizing limited energy for activities of daily living. - Promote managing energy for activities of daily living, physical activity or exercise. - Evaluate recent changes in functional capacity or daily abilities related to energy management.
Posture and positioning issues	- Assess posture and provide posture education/correction/exercises. - Evaluate concerns with positioning (e.g., pain, sleep apnea).
Activity counselling needs	- Counsel on functional mobility limitations and activity barriers, beliefs around activity and root cause(s) of inactivity. - Address fear regarding movement and being active (e.g., pain with movement or fear of falling). - Prescribe therapeutic exercise and physical activity. - Provide education on health benefits of activity and risk associated with sedentary behaviour.
Equipment issues	- Provide education about equipment at home and/or correct use of home equipment. - Assess and analyze gait and footwear and educate on appropriate footwear or need for orthotic assessment. - Assess need for and prescribe assistive devices (e.g., mobility aids, abdominal support).
Access to community resources	- Consult with and determine need to refer to other healthcare providers or specialists to address physical and functional concerns. - Identify physical home environment concerns. - Identify physical barriers to accessing community resources (e.g., accessibility of equipment, finding appropriate facility or programming).

Adapted from *Helping Adults with Obesity Who Have Functional Concerns: Tips on Identifying when Physiotherapy Can Help* developed by the Alberta Health Services Provincial Bariatric Resource Team.

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