Queensland Health

Queensland Community Pharmacy Scope of Practice Pilot

Management for Overweight and Obesity - Clinical Practice Guideline

Guideline Overview

Pilot and professional obligations

- Initial patient eligibility and suitability for management within the scope of the pilot
- Patient informed consent
  - Pilot participation
  - Financial
  - Pharmacist communication with other health practitioners
- Professional standards
- Privacy
- Documentation and record keeping
- Interprofessional communication

Gather information and assess patient's needs

- Patient history
  - Patient characteristics
  - Medical history
  - Lifestyle/ social history and factors impacting upon successful weight management
- Examination and screening for common comorbidities:
  - Sleep apnoea
  - BMI and waist circumference
  - Mental health/ psychological distress
  - Type 2 diabetes risk
- Investigations/ test results
  - Hba1c
  - Serum cholesterol
  - Blood pressure

Management and treatment plan

- Initial weight loss strategies
  - Lifestyle modification
  - Reduced energy diets and low energy diets
- Secondary weight loss strategies
  - Very low energy diets
  - Pharmacotherapy:
    - Orlistat

Confirm management is appropriate

- Contraindications and precautions
- Drug interactions

Communicate agreed treatment plan

- Written weight management plan
- Setting appropriate weight management goals
- How to use
- Patient resources/ information
- Adverse effects
- Communication with other health practitioners

Refer when

Refer to a medical practitioner if:

- The patient is aged less than 18 years
- The patient is pregnant or lactating
- The patient has a BMI > 40 kg/m2
- The patient has a comorbidity that requires specialist medical management for weight loss, including (but not limited to):
  - Chronic kidney disease
  - Hepatic impairment or liver disease
  - Thyroid and endocrine disorders, including diabetes when being treated with insulin or sulfonylureas
  - Anaemia
  - Polycystic ovarian syndrome (PCOS)
  - Gastrointestinal disorders including coeliac disease, crohn's disease, gastroparesis, peptic ulcer
  - Epilepsy or history of seizures
  - Idiopathic intracranial hypertension
  - Patients taking a medicine associated with weight gain
  - Patients taking warfarin.
- The patient has previously undergone bariatric surgery

Manage in collaboration with a medical practitioner

- Patients with diagnosed (or suspected) psychiatric disorders, including psychosis, schizophrenia, bipolar disorder, major depression, anxiety or eating disorder (binge eating, anorexia nervosa, bulimia), or a history of eating disorders
- Patients with clinically significant nutritional (vitamin or mineral) deficiencies
- Patients under active medical treatment and supervision for weight reduction
- Patients with CVD, asthma or COPD*

Patients who do not adequately respond to management plan B (with less than a 5% decrease in weight after 12 weeks) should be referred to a medical practitioner

- *Patients with hypertension, dyslipidaemia, mild COPD and mild to moderate asthma may be able to be managed as part of the chronic disease programs in the pilot – refer to the respective clinical protocols for information and eligibility criteria

Clinical review

- Response to strategies (weight, waist measurements and BMI)
  - Continue, modify or stop treatment
- BP monitoring
- Brief advice and reinforcement of lifestyle modification
- Adverse effects
- Communication with other health practitioners

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Key points

- Human behaviour, genetics, environment and lifestyle all play a role in managing body weight [1, 2].
- The social determinants of health influence a patient's risk of being overweight and obese, of which social inequality and disadvantage contribute to unfair and avoidable differences in health outcomes within groups in society [3].
- Excess weight (overweight and obesity), generally defined as a body mass index (BMI) ≥ 25, is a risk factor for metabolic and chronic conditions, including type 2 diabetes, cardiovascular disease (CVD) and some cancers, leading to higher rates of premature morbidity and mortality [4, 5].
- Body mass index (BMI) is an internationally recognised standard for classifying overweight and obesity in adults, particularly in a population health context [4, 6]. BMI does not directly measure body fat and may be insensitive to body composition, particularly in older people and very muscular people/athletes; however, it is strongly correlated to other direct measures of body fat and obesity-related comorbidities (CVD) [6, 7].
- Excess body weight for height is associated with osteoarthritis, poor mental health and conditions affecting the reproductive and gastrointestinal systems [7].
- While many people can achieve short-term weight loss, sustained weight loss/maintenance over the long-term (over 2 years) is required for cardiovascular benefits [7].
- Effective and long-term management of overweight and obesity requires a multidisciplinary team care approach to deliver care tailored to individuals, by those trained in the area, including pharmacists, medical practitioners, dietitians, exercise physiologists and psychologists [4, 8-10].
- Lifestyle modification is the foundation of weight management and for some patients, lifestyle modification alone may be sufficient to achieve weight loss; evidence suggests that interventions that address nutrition, physical activity and psychological approaches to behavioural change are more effective for weight loss than single interventions [2, 7]. Social prescribing to local non-clinical services may support lifestyle modification.
- Additional strategies may include behavioural and psychological therapy, pharmacotherapy and bariatric surgery [11].
- Weight and weight loss are sensitive issues for many people and most individuals with overweight and obesity will have attempted multiple weight loss interventions [12]. it is important to communicate and provide care to patients in a way that is person-centred, culturally sensitive, non-judgmental, and private [13].

When applying the information contained within this clinical practice guideline, pharmacists are advised to exercise professional discretion and judgement. The clinical practice guideline does not override the responsibility of the pharmacist to make decisions appropriate to the circumstances of the individual, in consultation with the patient and/or their carer.

Refer when

- The patient is aged less than 18 years
- The patient is pregnant or lactating
- The patient has a BMI > 40 kg/m^2
- The patient has a comorbidity that requires specialist medical management for weight loss, including (but not limited to):
  - Chronic kidney disease
  - Hepatic impairment or liver disease
  - Thyroid and endocrine disorders, including diabetes when being treated with insulin or sulfonylureas
  - Anaemia
  - Polycystic ovarian syndrome (PCOS)
  - Gastrointestinal disorders including coeliac disease, crohn's disease, gastroparesis, peptic ulcer
  - Epilepsy or history of seizures
  - Idiopathic intracranial hypertension
  - Patients taking a medicine associated with weight gain
  - Patients taking warfarin.
- The patient has previously undergone bariatric surgery.

Commence management (if clinically appropriate) and concurrently refer to a medical practitioner for collaborative management:

- Patients with diagnosed (or suspected) psychiatric disorders, including psychosis, schizophrenia, bipolar disorder, major depression, anxiety or eating disorder (binge eating, anorexia nervosa, bulimia), or a history of eating disorders
- Patients with clinically significant nutritional (vitamin or mineral) deficiencies
- Patients under active medical treatment and supervision for weight reduction
- Patients with CVD, asthma or COPD*.

Patients who do not adequately respond to Management Plan B (with less than a 5% decrease in weight after 12 weeks) should be referred to a medical practitioner.

*Patients with hypertension, dyslipidaemia, mild COPD and mild to moderate asthma may be able to be managed as part of the chronic disease programs in the Pilot – refer to the respective clinical protocols for information and eligibility criteria.

Gather information and assess patient's needs

Each patient's needs regarding weight management and suitability for pharmacist management should be assessed on a case-by-case basis.

Patient history

Sufficient information should be obtained from the patient to assess the safety and appropriateness of any recommendations and medicines.

The patient history should consider:

- age
- pregnancy and lactation status (if applicable)
- weight history including highest and lowest weights (and when)
- previous weight loss and strategies used (including the degree of success and levels of medical/health practitioner support e.g., previous drug therapy, very-low calorie diets (VLCD), exercise)
- recent relevant biochemical markers (see Investigations)
- medical conditions and comorbidities, including weight and non-weight related
- surgical history, including any bariatric surgery
- current medication (including prescribed medicines, over-the-counter medicines, vitamins, herbs, powders (like protein powders), other supplements)
- drug allergies/adverse drug effects
- alcohol and drug history
- smoking status
- diet history (usual intake over the last 6-month period) and fluid intake
- current level of physical activity (structured and incidental activity)
- Other factors impacting upon successful weight management:
    - cooking/shopping skills
    - health and nutritional literacy
    - cooking/shopping responsibilities, including the number of people in the household
    - stage of readiness to change
    - patient support networks.

Reminder

Pharmacists can access a range of clinical information in a patient's My Health Record, including details about current and past medication history, allergies and current medical conditions.

Examination and screening

All patients should undergo basic screening and an examination for common weight-related comorbidities. Information to guide screening has been provided in Appendix 1. However, it is also recommended that the patient be comprehensively screened, either as part of the CVD Risk Reduction Program (if eligible) or referred to their usual medical practitioner.

If the patient is enrolled in the CVD Risk Reduction Program, the examination does not need to be repeated (relevant screening that has not previously been undertaken should still occur).

Investigations

Recommended investigations are outlined in Table 2.

If available, recent test results may be used (e.g., provided by a medical practitioner with referral or available on My Health Record) if there have been no changes to the patient's medication or health status and the test was conducted within the past 12 months.

Further information on the relevant laboratory tests is available in the clinical protocol for the CVD Risk Reduction Program.

If the patient is enrolled in the CVD Risk Reduction (CVD-RR) Program, investigations performed in the CVD-RR Program do not need to be duplicated for weight management.

Table 2. Recommended investigations/tests (based on personal and clinical circumstances)

Glycated haemoglobin (HbA1c) or fasting blood glucose (FBG) [14][1]	
Testing requirements	**Referral requirements**

• People **without** a previous diagnosis of diabetes
AND
• no HbA1c or FBG test results from the previous 3 years
AND
• at least one of the following criteria are met
  ○ AUSDRISK score of ≥ 12
  ○ Aboriginal and Torres Strait Islander people aged ≥ 18 years
  ○ Pacific Islander, Indian sub-continent, Southern European or Asian background
  ○ history of gestation diabetes
  ○ polycystic ovary syndrome
  ○ taking antipsychotic medicines
  ○ aged ≥ 40 and overweight or obese
  ○ history of impaired glucose tolerance (IGT) or impaired fasting glucose (IFG)
  ○ has a first degree relative with diabetes
	Concurrent referral to a medical practitioner is required for further investigation of diabetes when:
	• HbA1c of ≥ 6.5% (48 mmol/mol)
	• Fasting blood glucose ≥ 7.0 mmol/L
	Consider eligibility for the CVD-RR Program.
	Immediate/emergency referral: HbA1c > 10% (86mmol/mol) or any blood glucose level ≥ 20.0 mmol/L is considered to be severe hyperglycaemia and is a medical emergency in patients who are unwell (signs of ketosis, dehydration, vomiting, signs or symptoms of underlying infection, confusion and/or delirium/altered level of consciousness) [15].

○ 1 or more classical symptoms of diabetes (weight loss, polyuria, polydipsia, blurred vision).	

Table 2. Recommended investigations/tests (based on personal and clinical circumstances)	
Serum lipids (fasting) (including LDL-C, HDL-C and triglycerides) [16, 17]	
Testing requirements	**Referral requirements**
• If lipid testing has not been performed in the previous 5 years **AND** ○ Aboriginal and Torres Strait Islander people aged ≥ 35 years **OR** ○ non-Aboriginal or Torres Strait Islander people aged ≥ 45 years.	Concurrent referral to a medical practitioner for further investigation of dyslipidaemia if not actioned when: • total cholesterol (TC): ≥ 5.5 mmol/L (or <4.0 mmol/L for people on lipid modifying drug therapy) • LDL-C: ≥ 2.0 mmol/L • HDL-C ≤ 1.0 mmol • Triglycerides: ≥ 2.0 mmol/L. Consider eligibility for the CVD-RR Program.
BP measurement [18]	
Testing requirements	**Referral requirements**
All patients: • BP measurement should be conducted in accordance with the National Heart Foundation of Australia Guidelines for the diagnosis and management of hypertension in adults 2016 [18].	Concurrent referral to a medical practitioner for further investigation of hypertension and CVD: • BP ≥ 140/90 mmHg Consider eligibility for the CVD-RR Program. **Immediate/ emergency referral:** Systolic BP ≥ 180 and/or diastolic BP ≥ 110 mmHg is considered to be severe hypertension and is a medical emergency in patients with signs or symptoms of a hypertensive urgency (headache or dizziness).

NB1: Pharmacists should consider the limitations of HbA1c tests and factors that may cause hyperglycaemia and misleading test results, as per the Therapeutic Guidelines: Tests to diagnose diabetes, and the RACGP: Management of type 2 diabetes [14, 15].

Management and treatment plan

The management of overweight and obesity, in accordance with the Australian Obesity Management Algorithm is centred around lifestyle interventions (initial weight-loss strategies) that are tailored to relevant factors for the individual.

Management may include more intensive interventions (secondary weight-loss strategies) if initial weight loss strategies have not been effective (if clinically indicated and appropriate) [19].

Pharmacists should also consider referral to, and collaboration with, other members of the multidisciplinary health team; depending on the patient's needs, location and financial means. The multidisciplinary weight management support team may include the patient's usual medical practitioner, dietician, psychologist, exercise physiologist and/or physiotherapist. Social prescribing to local non-clinical services may support lifestyle modification.

Pharmacist management of overweight and obesity may involve:

Management Plan A (Initial weight loss strategies)

Lifestyle modification (for relevant factors):

- Counselling and education for lifestyle modification[1] as per the 5As framework detailed in the RACGP Smoking, nutrition, alcohol and physical activity (SNAP) guide [20] the Handbook of Non-Drug Interventions (HANDI) [21] and the Australian Obesity Management Algorithm [19].

Reduced energy diets (RED) and low energy diets (LED):

- In accordance with the Australian Obesity Management Algorithm [19].
- It is recommended that consenting patients are referred to a dietitian for specialised and individualised advice and a tailored eating plan.

Management Plan B (Secondary weight loss strategies)

- Management Plan B can be considered for individuals who have not adequately responded to initial weight loss strategies as described in Management Plan A, including where these may have been attempted outside of the Pilot as part of another structured weight loss program [19].

Very low energy diets (VLEDs)[2]:

- For individuals who have not adequately responded to a RED or LED, in accordance with individual product instructions and indications, and the Australian Obesity Management Algorithm [19].
- It is recommended that consenting patients are referred to a dietitian for specialised and individualised advice and a tailored eating plan.

Pharmacotherapy:

- For patients following Management Plan A showing less than a 5% decrease in weight after 3 months **AND** with a BMI >27 (if other cardiovascular risk factors are present) or BMI >30 (no other CVD risk factors or comorbidities):
    - prescribe Orlistat[3], in accordance with the Australian Medicines Handbook: Orlistat [22, 23]. Liver function should be monitored.

If unsuitable for Orlistat, refer to a medical practitioner for pharmacological management, including for:

- Liraglutide, or
- Naltrexone with bupropion [24].

NB1: For smoking cessation, refer to the Smoking Cessation Clinical Practice Guideline for pharmacological and non-pharmacological management. For recommendations of alcohol consumption, refer to the Australian guidelines to reduce health risk from drinking alcohol [25]. For advice regarding physical activity focusing on increasing energy expenditure, refer to the Physical activity and exercise guidelines for all Australians [26]. For general diet/nutrition advice focusing on reducing energy intake and optimising diet quality as per the Australian Dietary Guidelines [27].

NB2: VLEDs are recommended to be used in collaboration with a dietitian and a medical practitioner for periodic monitoring of biochemistry (electrolytes, creatinine, liver function tests, fasting glucose, lipids, uric acid) and haematology (full blood count, iron studies).

NB3: Orlistat is a Schedule 3 medicine that may be considered as part of standard pharmacist care. Refer to the Pharmaceutical Society of Australia's Guidance for provision of a Pharmacist Only medicine (Orlistat) [28].

Referral to a medical practitioner is required for patients that do not adequately respond to Management Plan B (with less than a 5% decrease in weight after 12 weeks).

Confirm management is appropriate

Pharmacists must consult the Australian Medicines Handbook, Australian Obesity Management Algorithm and other relevant references to confirm the treatment recommendation is appropriate, including for:

- contraindications and precautions
- drug interactions.

Communicate agreed management plan

Comprehensive advice and counselling (including supporting written information if required), should be provided to the patient regarding the weight management plan. Relevant information may include:

- instructions for individual product and medicine use e.g., dosage regimen and administration (if applicable)
- how to manage adverse effects, including serious adverse effects requiring medical care
- when to return to the pharmacist for follow up.

A Weight Management Plan template has been provided in Appendix 2 for guidance.

It is the pharmacist's responsibility to ensure the suitability and accuracy of any resources and information provided to patients (and parents/caregivers if applicable), and compliance with all copyright conditions.

The agreed management plan should be shared with members of the patient's multidisciplinary healthcare team, with the patient's consent.

Patient resources

- Queensland Government:
  - Staying healthy website
  - Healthier. Happier. website
- Queensland Health Nutrition Education Materials Online website
- Baker Heart and Diabetes Institute Health Hub factsheets
- Australian Government Eat for health calculators

Setting appropriate weight management goals

Weight loss goals should be set in collaboration with the patient and reviewed regularly.

Targets and goals should be patient-centred and individualised, and encourage sustainable, weight loss that can be maintained over the long-term [7, 12].

A weight loss of between 5% and 10% is achievable for most overweight adults and will provide cardiovascular and other health benefits.

Clinical review

Arranging a follow up and clinical review with the patient is an important component of overweight and obesity management. Clinical review with the pharmacist should occur in line with recommendations in the Australian Obesity Management Algorithm and other relevant guidelines.

Clinical review on a monthly basis is recommended to monitor progress towards the weight loss target, efficacy of lifestyle modification, and to monitor for adverse effects.

Clinical review appointments should include:

- weight and waist circumference measurements, and BMI calculation
- blood pressure monitoring
- brief advice and reinforcement of lifestyle modification
- review of adverse effects.

Pharmacists may also consider repeating laboratory testing (where indicated).

Pharmacists should generally only prescribe a sufficient quantity of medicine (including repeats) for the period until the patient's next review.

Pharmacist resources

- Therapeutic Guidelines:
  - Cardiovascular
  - Diabetes
  - Respiratory
- Australian Medicines Handbook:
  - Orlistat
  - Liraglutide
  - Naltrexone with bupropion
- The Australian Obesity Management Algorithm: A simple tool to guide the management of obesity in primary care
- Royal Australian College of General Practitioners:
  - Smoking, nutrition, alcohol, physical activity (SNAP): A population health guide to behavioural risk factors in general practice
  - Guidelines for preventive activities in general practice
  - Handbook of non-drug interventions (HANDI)
- National Health and Medical Research Council:
  - Australian Dietary Guidelines
  - Australian Guidelines to reduce health risks from drinking alcohol
- Australian Government Department of Health and Aged Care: Physical activity and exercise guidelines for all Australians
- Australian CVD risk calculator: CVDCheck
- StatPearls: Obesity and Comorbid Conditions
- Australian Journal for General Practitioners:
  - Pharmacotherapy for obesity
  - Obesity and weight management at menopause (includes detailed information on VLEDs)
- Medications that cause weight gain and alternatives in Canada: A narrative review – Diabetes, Metabolic syndrome and Obesity.

Appendix 1 – Screening for weight related co-morbidities

Co-morbidity screening (based on personal and clinical circumstances)

Obstructive Sleep Apnoea [19, 29, 30]

Screening using the STOP-BANG questionnaire

STOP	YES (=1)	NO (=0)
*Do you **SNORE** loudly (louder than talking or loud enough to be heard through closed doors)?*		
*Do you often feel **TIRED**, fatigued, or sleepy during daytime?*		
*Has anyone **OBSERVED** you stop breathing during your sleep?*		
*Do you have or are you being treated for high blood **PRESSURE?***		
BANG		
***BMI** more than 35kg/m2?*		
***AGE** over 50 years old?*		
***NECK** circumference > 16 inches (40cm)?*		
***GENDER**: Male?*		
Total Score		

Referral requirements

Concurrent referral to a medical practitioner for further investigation is recommended for all patients suspected of having sleep apnoea or another weight-related respiratory condition, for example:

- Patients with at least one risk factor or comorbidity + multiple symptoms of sleep apnoea
- A score of ≥ 3 on the STOP-Bang Questionnaire.

BMI and waist circumference [2, 4, 7, 31]

Requirements	Referral requirements
All patients: • Measurement of BMI and waist circumference at commencement and regular reviews (recommended monthly) is required to inform the management plan and assist with patient education regarding risk factors for obesity comorbidities. • A larger waist circumference indicates visceral fat deposits and central obesity. ○ Males with a waist circumference ≥ 94 cm are at increased risk of CVD and other comorbidities (≥ 102 cm = a greatly increased risk, especially if BMI >25)	Referral to a medical practitioner or specialist weight loss service is recommended for people with: • BMI > 40 kg/m^2

○ Females with a waist circumference ≥ 80 cm are at increased risk (≥ 88 cm = a greatly increased risk, especially if BMI >25).	
Mental health/psychological distress (19, 32, 33)	
Screening requirements	**Referral requirements**
All patients: • Pharmacists may use a validated screening tool such as the Kessler Psychological Distress Scale (K10) (19).	Concurrent referral to a medical practitioner is recommended for patients suspected of having a mental health disorder or in psychological distress, for example: • Patients who score ≥ 20 on the K10.
Diabetes (19, 32, 33)	
Screening requirements	**Referral requirements**
Patients aged ≥ 40 years: • Risk of developing type 2 diabetes should be estimated every 3 years using the validated Australian type 2 Diabetes Risk Assessment Tool (AUSDRISK). All patients: • Clinical signs and symptoms of insulin resistance including acanthosis nigricans, skin tags, central obesity, hirsutism.	Not required for screening, proceed with recommended investigations/tests in Table 2
Dyslipidaemia (7, 34, 35)	
Screening requirements	**Referral requirements**
All patients: • Family history of familial hypercholesterolaemia • Clinical signs and symptoms including tendon xanthomata, arcus cornealis before 45 years of age and xanthelasma	Concurrent referral to a medical practitioner is recommended for patients with a history of familial hypercholesterolemia.

Appendix 2 – Weight Management Plan

Page 1

Weight Management Plan

Plan date:

Name:		**Date of birth:**	
Date of commencement			

Program pharmacy details

Pharmacist name		**Phone number**	
Pharmacy name and address		**Opening hours**	

Baseline weight and measurements

Weight:	kg	**BMI:**		**Waist circumference:**	cm

Weight loss goal tracker:

Week beginning	Goal weight	Actual weight	BMI	Waist circumference
Insert rows as required				

My lifestyle prescription

Diet and nutrition	• Referral to a dietitian for an individualised eating plan and education
	• Summary of nutritional advice for a balanced diet from the *Australian Dietary Guidelines*
	  ○ more of/ increase…
	  ○ less of/ limit…
	• Specific advice and food recommendations and strategies tailored for each individual's barriers and risks
	• Education and advice on interpreting nutritional labels and referral to resources to support cooking and shopping skills

Exercise and physical activity	• Enter recommendations for physical activity for patient's age and capability based on the *Physical activity and exercise guidelines for all Australians*:
	  ○ Informal exercise e.g. building exercise into everyday activities
	  ○ Formal exercise e.g., walking (moderate intensity) for 30 minutes 5 days of the week strength building 2 days per week
	  ○ individualised guidance for building up to recommendations
	If required: Referral to a GP, exercise physiologist, physiotherapist or other supports for safe exercise

Other lifestyle modification strategies	• If required: Smoking cessation ○ Refer to Pilot smoking cessation program and/or other supports e.g. Quitline or GP • If required: Referral to a GP, psychologist or other clinician for mental health support • Specific advice for sleep and if required referral to a GP for management of obstructive sleep apnoea • If required: summary of advice regarding alcohol consumption based on the *Australian guidelines to reduce health risks from drinking alcohol*

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