Optimizing Patient-Centred Obesity Care

Approach, Engage and Manage

Faculty/Presenter Disclosure

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Relationships with financial sponsors:

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- **Alexandro Zarruk** has received honorarium from the Canadian Collaborative Research Network
- Novo Nordisk Canada has developed products that will be discussed in this program

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The scientific planning committee used the following steps to mitigate potential bias in this program:

- The content of this program was developed by the scientific planning committee and peer reviewed by experts.
- Recommendations involving clinical medicine are based on evidence that is accepted within the profession.
- All scientific research referred to, reported, or used in the program in support or justification of patient care recommendations conforms to the generally accepted standards, clinical practice guidelines, and consensus statements.

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Learning Objectives

01 Determine an effective way to initiate a discussion with a patient with overweight/obesity on strategies to improve overall health

02 Assess the health of a patient with overweight/obesity based on current guideline recommendations

03 Define which patients could benefit from different management options

04 Individualize the management of obesity for a specific patient through a shared-decision process

Module 1

Engage and Assess the Person with Overweight or Obesity

Learning Objectives

01 Determine an effective way to initiate a discussion with a patient with overweight/obesity on strategies to improve overall health

02 Assess the health of a patient with overweight/obesity based on current guideline recommendations

Polling Question

How frequently do you initiate an obesity discussion with a patient with elevated weight?

a) Always

b) Most of the time

c) Sometimes

d) Rarely

e) Never

Polling Question

Which of the following statements are TRUE? (select all that apply)

a) Obesity can be managed easily with lifestyle changes and some willpower

b) Shaming patients about their weight can motivate them to lose weight

c) Obesity requires a lifelong management strategy

d) The primary goal for obesity management is at least a 10% weight reduction

e) Most patients just want to be offered support and options to manage their obesity

obesity canada

"Obesity is a complex chronic disease in which abnormal or excess body fat (adiposity) impairs health, increases the risk of long-term medical complications and reduces lifespan"

Most patients with obesity are **not offered a plan to manage their obesity,** although their obesity-related comorbidities are managed.

There are **biologic processes** underlying eating and hunger that make obesity management difficult, and not solely a willpower or lifestyle issue.

Managing obesity requires a **lifelong process**, but clinicians commonly **struggle with initiating the discussion** with their patients.

Wharton S, Lau DCW, Michael Vallis RPsych, et al. Obesity in adults: a clinical practice guideline. *Canadian Medical Association Journal*. 2020;192(31):17. Obesity Canada. What Causes Obesity? Obesity Canada. https://obesitycanada.ca/understanding-obesity/. Thomas CE, Mauer EA, Shukla AP, Rathi S, Aronne LJ. Low Adoption of Weight Loss Medications: A Comparison of Prescribing Patterns of Antiobesity Pharmacotherapies and SGLT2s. *Obesity (Silver Spring)*. 2016;24(9):1955-1961. doi:10.1002/oby.21533

There are Both Patient and Clinician Barriers to Obesity Management

Patient

- Obesity is not recognized as a chronic and relapsing disease
- Misbelief and misinformation about obesity management
- Environmental factors
- Cost of treatment
- Comorbidities and medications (E.g., mental health, sleep disorders, pain, cardiopulmonary disease)

Clinician

- Lack of time during consultations
- Insufficient training and counselling skills for obesity
- Lack of formal diagnosis of obesity
- Misconception that obesity management is too time-consuming

Kim TN. Barriers to Obesity Management: Patient and Physician Factors. *J Obes Metab Syndr*. 2020;29(4):244-247. doi:10.7570/jomes20124

Many Barriers Can Be Overcome With a Simple Approach

Questions to consider:

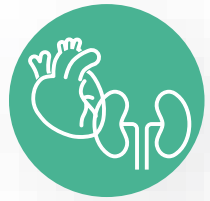
1. Who is a candidate for discussing obesity?
2. How do we effectively approach these patients?
3. What is the guideline-recommended method of assessing people with obesity?
4. What can be implemented in practice tomorrow?

Who is a Candidate for Discussing Obesity?

Mentions
topic of weight

New diagnosis
and elevated BMI

High
weight trajectory



Obesity-related
comorbidities

***Start earlier*: Most discussions regarding obesity occur after the patient has one or multiple comorbidities.**

When Approaching Patients...

Recognize Stigma

Many people with obesity experience **stigma** due to their weight which negatively impacts:

- Physical health
- Mental health
- Relationship with provider

Language Matters

Use person-first language

- "Person with obesity"
- Preferred terms are **"weight"** or **"unhealthy weight"**

Avoid terms such as:

✕ Fat, obese, morbidly obese

Remember: Obesity is a chronic disease
Communicate like you would with any other person with a chronic disease

Kirk SFL, Ramos Salas X, Alberga A, Russell-Mayhew S. Canadian Adult Obesity Clinical Practice Guideline: Reducing Weight Bias in Obesity Management, Practice & Policy. Published online August 4, 2020. Accessed August 4, 2020. http://obesitycanada.ca/wp-content/uploads/2020/08/1-Reducing-Weight-Bias-v5_FINAL.pdf

When Approaching Patients...

Do's

- **Ask permission** to discuss weight
- **Acknowledge** that obesity management is difficult

Don't

- Do not **threaten** or **provoke** guilt
- Do not **make assumptions** about lifestyle or motivation
- Do not **assume** that they will be ready to address their weight

Canadian Obesity Network. 5As Adult. Accessed November 19, 2021. https://obesitycanada.ca/wp-content/uploads/2018/02/Practitioner_Guide_Personal_Use.pdf

Asking Permission is the First Step

01 Would it be ok if we talked about your weight today?

02 "Would it be ok to take your weight at this time?"

03 "On a scale from 0 to 10, how important is it for you to address your weight and its impact on your health at this time?

04 "Do you have any concerns about your weight?"

Canadian Obesity Network. 5As Adult. Accessed November 19, 2021. https://obesitycanada.ca/wp-content/uploads/2018/02/Practitioner_Guide_Personal_Use.pdf

Individualizing the Approach

Meet Rajinder

How would you approach the topic of obesity?

a) “You have to lose some weight. Your health conditions are caused by your excess weight”

b) “Would it be ok if we discussed your weight and its impact on health?”

c) “Can we talk about how you can change your diet and lifestyle to lose weight?”

d) I would not approach this conversation with Rajinder as his BMI is 28 kg/m^2

Background
- 52 years old
- Hypertension, dyslipidemia X 10 years
- Obstructive sleep apnea X 2 years

Medications
- Candesartan 8 mg daily
- Atorvastatin 20 mg daily
- Indapamide 1.25 mg daily

Assessment
- BMI = 28 kg/m^2
- BP = 132/84 mmHg
- LDL-C = 1.7 mmol/L

Discussion
- Patient is feeling well, in for refills

Meet Peter

How would you approach the topic of obesity?

a) “Peter, do you want to do something about your weight, so you don’t end up like your parents?”

b) “Your weight is getting up there, do you want to do something about it?”

c) “Peter, do you have any concerns regarding your weight?”

d) I would not approach Peter as he has no health conditions that would warrant treatment

Background
- 24 years old
- No medical conditions
- Strong family history of obesity and type 2 diabetes

Medications
- None

Assessment
- BMI = 32 kg/m^2

Discussion
- Feeling well
- No health issues
- Weight has not impacted his abilities

Meet Amanda

How would you approach the topic of obesity?

a) “Amanda, what’s happening? You have gained weight so quickly.”

b) “Amanda, would you like to discuss the change in your weight?”

c) “Do you have any concerns regarding your weight?”

d) I would not approach Amanda as her BMI is too low

Background
- 34 years old
- Asthma x 28 years
- Strong family history of hypertension and type 2 diabetes

Medications
- Fluticasone 125 mcg BID
- Salbutamol 200 mcg QID PRN

Assessment
- BMI = 26 kg/m^2
- Patient has 7% body weight gain in the last 8 months

Discussion
- In to see primary care clinician for refill of inhalers

Practice Tips

"Let's book another appointment to discuss your weight. This is important and I want to make sure we have enough time to discuss it."

Engage

- **Asking** about weight is the first step
- Emphasize weight loss **tools** available

Take Time

- Consider a **separate appointment** for weight management

Be Supportive

- **It's OK** if the patient doesn't want to discuss weight
- Let them know another appointment can be made **if they want help and support**

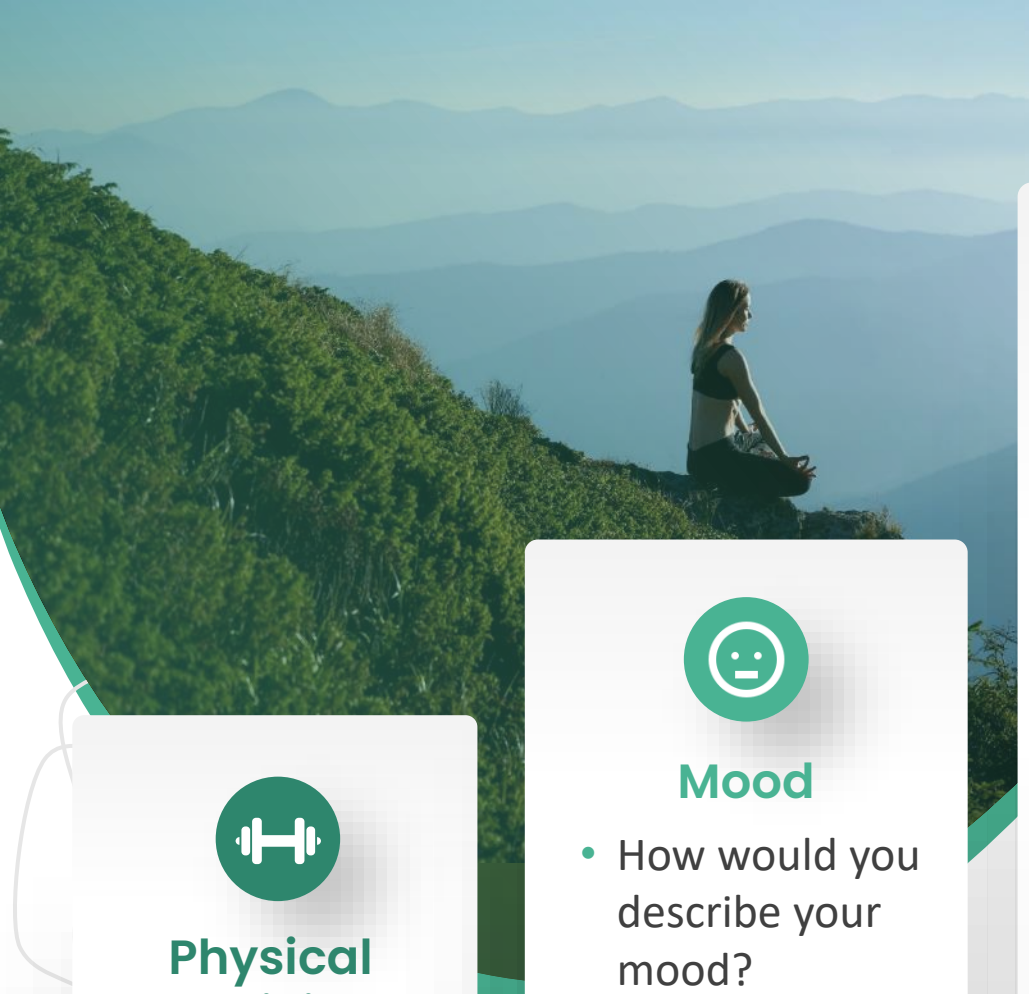
Assessment of Person with Obesity Begins with Their Weight Story

What to consider:

1. Onset of weight gain
2. Highest and lowest weight
3. Previous weight loss attempts, what worked and what didn't
4. Triggers for weight gain
5. Impact of weight on quality of life
6. Thoughts on management, goals and what a successful plan would look like

Show compassion, listen, and help the patient make sense of their story

Wharton S, Lau DCW, Michael Vallis RPsych, et al. Obesity in adults: a clinical practice guideline. *Canadian Medical Association Journal*. 2020;192(31):17.
Rueda-Clausen C, Poddar M, Lear SA, Poirier P, Sharma AM. Canadian Adult Obesity Clinical Practice Guidelines: Assessment of People Living with Obesity. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/assessment



Other Components of Obesity History

Physical Activity

- Are you as active as you would like?

Mood

- How would you describe your mood?
- Do you feel that your mood can sometimes dictate your food choices?

Nutrition

- Current literacy, physiological hunger, emotional eating
- Do you take in high-sugar beverages?
- Are you generally eating the way you would like to, most of the time?

Family Hx

- Do you have family member(s) who have difficulty with being at a higher weight?

Sleep Hx

- How many hours do you sleep?
- Do you wake up feeling well-rested?

Rueda-Clausen C, Poddar M, Lear SA, Poirier P, Sharma AM. Canadian Adult Obesity Clinical Practice Guidelines: Assessment of People Living with Obesity. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/assessment

Guideline Recommended Examination of Person with Obesity

Vital signs: BP, heart rate (HR)

Anthropometric measurements: Weight, height, body mass index (BMI), waist circumference

Head and Neck: Thyroid exam, signs of Cushing's or polycystic ovary syndrome (PCOS) including acne, hirsutism

Cardiorespiratory: HR and rhythm, signs of heart failure

Gastrointestinal: Umbilical/incisional hernias, screen for chronic liver disease

Musculoskeletal: Gait exam, signs of OA, gout

Skin: Candida, intertrigo, skin tags, psoriasis, acanthosis nigricans, abdominal striae

Lower limbs: Lymphedema, lipedema, venous insufficiency, ulcers, stasis, thrombophlebitis

Rueda-Clausen C, Poddar M, Lear SA, Poirier P, Sharma AM. Canadian Adult Obesity Clinical Practice Guidelines: Assessment of People Living with Obesity. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/assessment

Laboratory Recommendations for Obesity

Consider for **most patients**

- HbA1c
- Electrolytes
- Creatinine, eGFR
- Lipid panel – total, HDL-C, triglycerides
- Alanine aminotransferase (ALT) if indicated
- Age-appropriate cancer screening

Consider, if **clinically indicated**

- Complete blood count (CBC)
- Uric acid
- Assessment of iron (total iron binding capacity (TIBC), % saturation, serum ferritin, serum iron)
- Vitamin D levels
- Urinalysis
- Proteinuria
- Cushing's syndrome (ACTH, dexamethasone suppression test)
- Acromegaly (GH, IGF-1)

Consider in **women with obesity and symptoms of PCOS**

- Luteinizing hormone (LH)
- Follicle stimulating hormone (FSH)
- Total testosterone
- Dehydroepiandrosterone (DHEAS)
- Prolactin
- 17-hydroxyprogesterone levels

Rueda-Clausen C, Poddar M, Lear SA, Poirier P, Sharma AM. Canadian Adult Obesity Clinical Practice Guidelines: Assessment of People Living with Obesity. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/assessment

Medications Associated with Weight Gain and Possible Alternatives

Category	Examples of Drugs Associated with Weight Gain	Possible Alternatives
Neuroleptics	Olanzapine, quetiapine, risperidone, clozapine, haloperidol	Ziprasidone, lurasidone, aripiprazole
Tricyclic antidepressants	Amitriptyline, nortriptyline, doxepin	Will depend on the reason for use
Selective serotonin reuptake inhibitors	Paroxetine, citalopram	Fluoxetine, sertraline, bupropion, duloxetine, venlafaxine
Other antidepressants and mood stabilizers	Mirtazapine, phenelzine, lithium	Another antidepressant class
Anticonvulsants	Valproate, carbamazepine, gabapentin	Topiramate, lamotrigine
Antihyperglycemic medications	Insulin, sulfonylureas, thiazolidinediones (TZD's)	Acarbose, metformin, GLP-1 agonists, SGLT2 inhibitors, DPP4 inhibitors
Antihistamines	First-generation products	Second-generation antihistamines
Beta-blockers	Propranolol	ACE inhibitors, ARB, calcium channel blockers
Steroid hormones	Contraceptives, glucocorticoids	Other contraceptive devices, and will depend on indication for glucocorticoids

Rueda-Clausen C, Poddar M, Lear SA, Poirier P, Sharma AM. Canadian Adult Obesity Clinical Practice Guidelines: Assessment of People Living with Obesity. Published online August 4, 2020. Accessed August 4, 2020 [https://obesitycanada.ca/guidelines/assessment]

Wharton S, Raiber L, Serodio K, Lee J, Christensen RA. Medications that cause weight gain and alternatives in Canada: a narrative review. *DMSO*. 2018;Volume 11:427-438. doi:10.2147/DMSO.S171365

In Practice: Set the ‘Best Weight’ Goal

An **individualized**, non-statistical goal that is easy to set and explain to patients

The weight that is **achievable** while living the healthiest lifestyle the person can enjoy

Long-term weight reduction requires a plan to help individuals enjoy the healthiest lifestyle that can be maintained long-term

North American Association for the Study of Obesity, Heart N, Institute B, (US) NIH, Initiative NOE. *The Practical Guide: Identification, Evaluation, and Treatment of Overweight and Obesity in Adults*. National Institutes of Health, National Heart, Lung, and Blood Institute, NHLBI Obesity Education Initiative, North American Association for the Study of Obesity; 2000.

Value-Based Goals and Focus on Health

What is something that you can't do today that you would like to do if you lost weight?

I would like to travel more and explore the world. I just don't have the energy to do it now.

What a great goal, I think we can work towards this.

What You Can do in Practice Tomorrow

Engage patients in a discussion regarding obesity

- Address early, before significant comorbidities develop
- Many patients can benefit from obesity management
- Assess these patients like you would with other chronic diseases

Ask permission to discuss weight, and consider booking a separate appointment

Watch the language used, be respectful, non-judgmental and don't belittle or shame the patient

Each patient requires a customized approach based on the current situation

Focus on impact of weight on health and the benefits of evidence-based management

Module 2

Managing Obesity in Your Practice

Learning Objectives

01 Define which patients could benefit from different management options

02 Individualize the management of obesity for a specific patient through a shared-decision process

Obesity Clinical Practice Guidelines

01 Sections updated in **October 2022**

- Medical Nutrition Therapy
- Pharmacotherapy

02 Many **different management options**

- Psychological interventions
- Pharmacotherapy
- Bariatric surgery

03 Behavioural changes **(diet and exercise)**

- Recommended for everyone
- Can lead to improvement in cardiometabolic parameters
- Weight loss typically achieved is between 3% to 5%
- Biologic compensatory mechanisms that limit weight reduction through these changes

Wharton S, Lau DCW, Michael Vallis RPsych, et al. Obesity in adults: a clinical practice guideline. *Canadian Medical Association Journal*. 2020;192(31):17.

Behaviour changes are recommended for **all patients**, but in most cases **will not** lead to significant **weight reduction** due to physiologic adaptation and adherence difficulties.

Meet Richard

Which of the following options would you consider?

a) Low carb or ketogenic diet

b) 150 minutes of walking per week

c) Psychological interventions

d) Orlistat

e) Naltrexone/bupropion

f) Liraglutide

g) Semaglutide

h) Nothing at this point

Background
- 48 years old
- BMI = 28 kg/m^2

Medications
- Candesartan 8 mg daily
- Atorvastatin 20 mg daily

Discussion
- Tried to lose weight in the past
- History of weight cycling due to diet and exercise changes
- Frustrated with current weight and wants to know if there are other options

Polling Question

What key factor do you consider most when selecting obesity treatment for a patient?

a) Efficacy in weight reduction

b) Efficacy in improving health outcomes

c) Safety

d) Adherence

e) Patient preference

f) Cost

Polling Question

What do you feel is the most significant barrier to obesity management in your practice?

a) Lack of patient interest in treatment

b) Patients wanting to focus mainly on diet and exercise

c) Cost of treatment

d) Lack of clinician training about obesity and its treatments

e) Lack of time for obesity consultations

f) Weight regain with treatments

g) Adverse effects of treatments

What if?

What if Richard was only 28 years old, with a BMI of 33 kg/m2 and no comorbidities? What treatment would you consider?
(select all that apply)

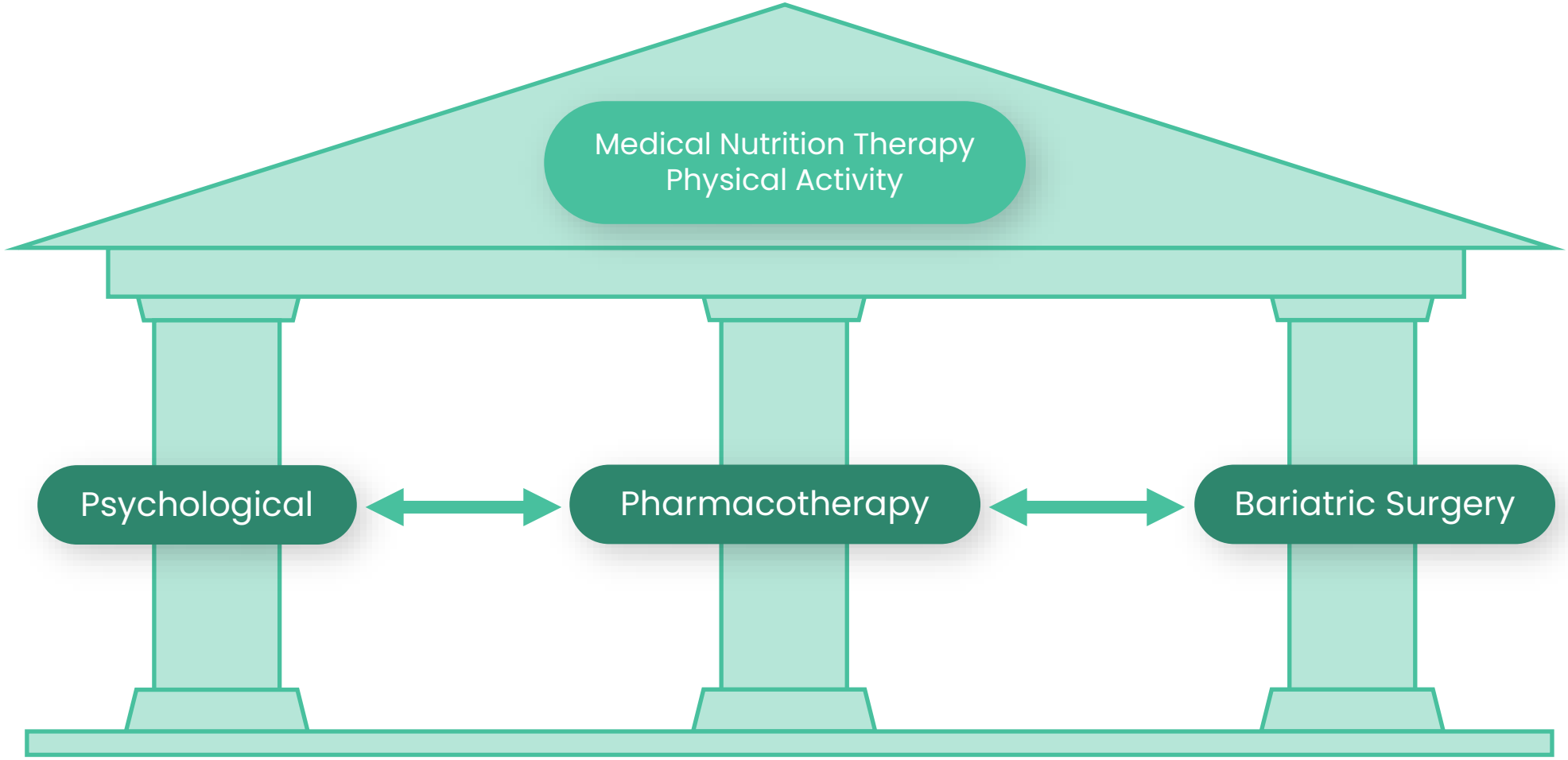
a) Low carb or ketogenic diet
b) 150 minutes of walking per week
c) Psychological interventions
d) Orlistat
e) Naltrexone/bupropion
f) Liraglutide
g) Semaglutide
h) Nothing at this point

Background
- 28 years old
- BMI = 33 kg/m^2

Medications
- None

Discussion
- Tried to lose weight in the past
- History of weight cycling due to diet and exercise changes
- Frustrated with current weight and wants to know if there are other options

The 3 Pillars of Obesity Treatment



Wharton, Sean, David C W Lau, Michael Vallis RPsych, Arya M Sharma, Laurent Biertho, Denise Campbell-Scherer, Kristi Adamo, et al. “Obesity in Adults: A Clinical Practice Guideline.” *Canadian Medical Association Journal* 192, no. 31 (2020): 17.

Pillar 1: Psychological Therapy

- Incorporate multi-component psychological interventions:
  - Behaviour modification
  - Cognitive therapy
  - Values-based strategies
- Promote sustainable changes that increase positive self-esteem and confidence, and improve health, function and quality of life
- Focus on achievable results, not on idealized hopes

Vallis M, Macklin D, Russell-Mayhew S. Canadian Adult Obesity Clinical Practice Guidelines: Effective Psychological and Behavioural Interventions in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/behavioural.

Psychological Therapy: What does this mean?

Behavioural therapy:

- Behavioural substitution → *'instead of going to the pantry, I will….'*
- Self monitoring → journaling
- Stimulus control → E.g. the break room at work
- Goal setting → *'I would like to be able to…..'*

Cognitive therapy:

- Problem solving → E.g. navigating the road home from work past fast food
- Cognitive restructuring → recognize and change negative thinking; E.g. self-bias
- Rather than focusing on having what you want → *want what you have*

Vallis M, Macklin D, Russell-Mayhew S. Canadian Adult Obesity Clinical Practice Guidelines: Effective Psychological and Behavioural Interventions in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/behavioural.

Pillar 2: Obesity Pharmacotherapy

- Pharmacotherapy is indicated for chronic weight management in Canada for **individuals with a BMI ≥30 kg/m², or ≥27 kg/m² with comorbidities associated** with excess body fat (e.g. Type 2 diabetes, hypertension, dyslipidemia)

- Four medications are recommended for chronic obesity management in Canada, in addition to healthy behaviour changes:
  - Liraglutide (Saxenda®) 3.0 mg
  - Naltrexone/bupropion (Contrave®)
  - Orlistat (Xenical®)
  - Semaglutide (Wegovy®) 2.4 mg*

** Semaglutide 2.4mg once-weekly is Health Canada approved, but not yet commercially available

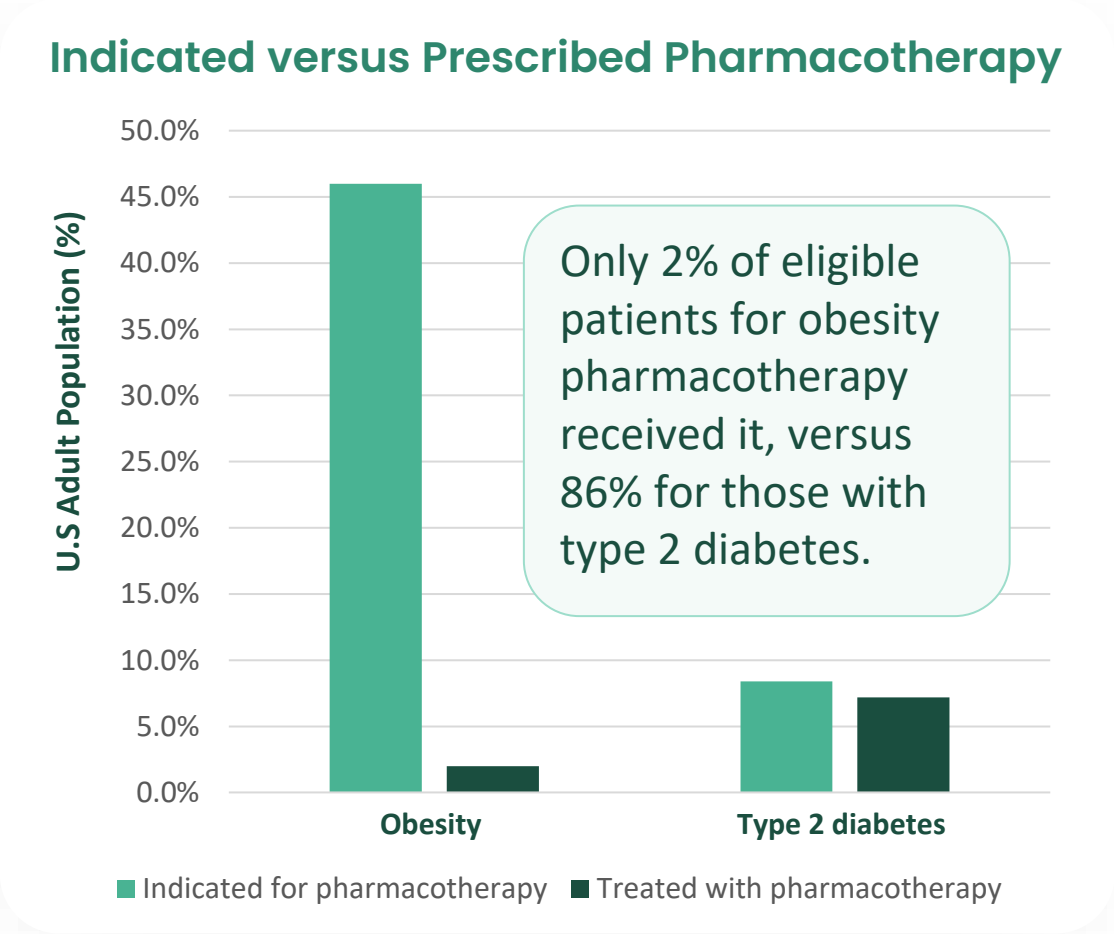
Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/pharmacotherapy

Few Patients are Offered Treatment Despite Guideline Recommendations

When compared to Type 2 diabetes:

- Only a small proportion of eligible patients are prescribed obesity pharmacotherapy

Low adoption rate suggests significant patient, physician and systemic barriers, and highlights a huge unmet need



Thomas CE, Mauer EA, Shukla AP, Rathi S, Aronne LJ. Low Adoption of Weight Loss Medications: A Comparison of Prescribing Patterns of Antiobesity Pharmacotherapies and SGLT2s. *Obesity (Silver Spring)*. 2016;24(9):1955-1961. doi:10.1002/oby.21533

Liraglutide 3.0 mg Summary

GLP-1 Receptor Agonist

Subcutaneous Injection

Dosing

Start **0.6 mg** daily

↑ by **0.6 mg** each week until **3 mg** dose daily is reached

Drug Interactions

Slows gastric emptying, which could affect absorption of oral medications

Contraindications

History of:

Medullary thyroid cancer, or

Multiple endocrine neoplasia type 2

Adverse Effects

GI adverse effects

(E.g. nausea, abdominal bloating, constipation, diarrhea, vomiting)

Can be **mitigated by:**

- Slower up-titration
- Diet with less fat and processed foods

Novo Nordisk Canada Inc. *Saxenda Product Monograph*. Mississauga, Ontario: Novo Nordisk Canada Inc, 2015.

Naltrexone/Bupropion Summary

Opioid antagonist and dopamine/norepinephrine reuptake inhibitor

Oral administration

Dosing

8 mg/90 mg ER tablets
Week 1: 1 tablet daily
Week 2: 1 tablet twice daily
Week 3: 2 tablets in AM, 1 in PM
Week 4+: 2 tablets twice daily

Drug Interactions

- Inhibits CYP2D6.
  - Caution with CYP2B6 inhibitors, avoid with CYP2B6 inducers
- Caution with SSRIs, beta blockers, anti-psychotic agents, type 1C antiarrhythmic agents, many tricyclic antidepressants
- Avoid with tamoxifen

Contraindications

Uncontrolled hypertension, seizure disorder, bulimia/anorexia, chronic opioid use, pregnancy, severe hepatic impairment, end-stage renal disease

Adverse Effects

Nausea, constipation, headache, vomiting, dizziness, insomnia, dry mouth

Can be **mitigated by:**

- Slower up-titration
- Appropriate dosing

Valeant Canada. *Contrave Product Monograph*. Laval, Quebec: Valeant Canada, 2018. Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/pharmacotherapy

Orlistat Summary

Lipase Antagonist

Oral administration

Dosing

120 mg three times per day with meals

Drug Interactions

Fat soluble vitamins (A, D, E, K), cyclosporine, warfarin, antiepileptic drugs

Contraindications

Chronic malabsorption syndrome, cholestasis, hepatic failure, pregnancy / breastfeeding

Adverse Effects

Abdominal discomfort, flatulence, oily stools, oily diarrhea

Cheplapharm. *Xenical Product Monograph*. Germany: Cheplapharm, 2017.

Semaglutide 2.4 mg Summary

GLP-1 Receptor Agonist

Subcutaneous Injection

Dosing

0.25 mg SC weekly x 4 weeks
0.5 mg SC weekly x 4 weeks
1 mg SC weekly x 4 weeks
1.7 mg SC weekly x 4 weeks
2.4 mg once weekly

Drug Interactions

Slows gastric emptying, which could affect absorption of oral medications

Contraindications

History of:
Medullary thyroid cancer, or
Multiple endocrine neoplasia type 2

Adverse Effects

GI adverse effects (E.g. nausea, abdominal bloating, constipation, diarrhea, vomiting)

Can be **mitigated by:**

- Slower up-titration
- Diet with less fat and processed foods

Novo Nordisk. *Wegovy Product Monograph*. Canada, 2022.

Effect of Pharmacotherapy on Weight Loss

	Orlistat	Liraglutide 3.0 mg	Naltrexone/ Bupropion	Semaglutide 2.4 mg
Effect on % weight loss at 1 year, placebo subtracted	**-2.9%**	**-5.4%**	**-4.8%**	**-12.5 %**
% of patients achieving ≥5% weight loss at 1 year	**54%** (vs. 33% in placebo)	**63.2%** (vs. 27.1% in placebo)	**48%** (vs. 16% in placebo)	**86.4%** (vs 31.5% with placebo)
% of patients achieving ≥10% weight loss at 1 year	**26%** (vs. 14% in placebo)	**33.1%** (vs. 10.6% in placebo)	**25%** (vs. 7% in placebo)	**69.1%** (vs 12.0% with placebo)
Effect on maintenance of previous weight loss	**2.4 kg less weight regain** (vs. placebo over 3 years)	**-6.0% additional placebo-subtracted weight loss at 1 year**	**Not studied**	**Not studied**

Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/pharmacotherapy. Wilding JPH, Batterham RL, Calanna S, et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity. *N Engl J Med*. 2021;384(11):989-1002. doi:10.1056/NEJMoa2032183

Obesity-Related Comorbidities and Pharmacotherapy

	Orlistat	Liraglutide 3 mg	Naltrexone/bupropion	Semaglutide 2.4 mg
Effect on prediabetes	37.3% reduction in risk of developing T2DM over 4 years	79% reduction in risk of developing T2DM over 3 years	Not studied	Not studied
Effect on BP at 1 year*	-1.7 mmHg SBP -0.71 mmHg DBP	-2.87 mmHg SBP -0.73 mmHg DBP	Not significantly different	-5.1 mmHg SBP -2.4 mmHg DBP
Effect on Lipids at 1 year*	LDL -0.22 mmol/L HDL +0.03 mmol/L	LDL -0.08 mmol/L	HDL +0.06 mmol/L	TC -0.22 mmol/L LDL -0.1 mmol/L HDL +0.1 mmol/L TC -0.22 mmol/L
Effect on HR at 1 year*	No change	+2.4 BPM	+1.1 BPM	+4.2 BPM

* Placebo subtracted

Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management (2022 Update). Accessed October 29, 2022. https://obesitycanada.ca/guidelines/pharmacotherapy

Obesity-Related Comorbidities and Pharmacotherapy

	Orlistat	Liraglutide 3 mg	Naltrexone/bupropion	Semaglutide 2.4 mg
Effect on A1C in people with diabetes at 1 year*	-0.4%	-1.0%	-0.5%	-1.2%
Effect on MACE	Not studied	CV safety demonstrated	Not studied	Not available
Effect on NASH	No change	Resolution of NASH and improvement in steatosis (39% with liraglutide 3mg vs. 9% with placebo)	Not studied	Resolution of NASH (59% with semaglutide 0.4 mg daily vs. 17% with placebo)
Effect on PCOS	Not studied	Not sufficiently studied	Not studied	Not studied
Effect on OA	Not studied	No benefit	Not studied	Not available
Effect on OSA*	Not studied	↓ AHI by 6/hour	Not studied	Not studied

* Placebo subtracted. MACE, major adverse cardiovascular events; NASH, Nonalcoholic steatohepatitis; PCOS, Polycystic ovary syndrome; OA, osteoarthritis; OSA, obstructive sleep apnea

Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management (2022 Update). Accessed October 29, 2022. https://obesitycanada.ca/guidelines/pharmacotherapy

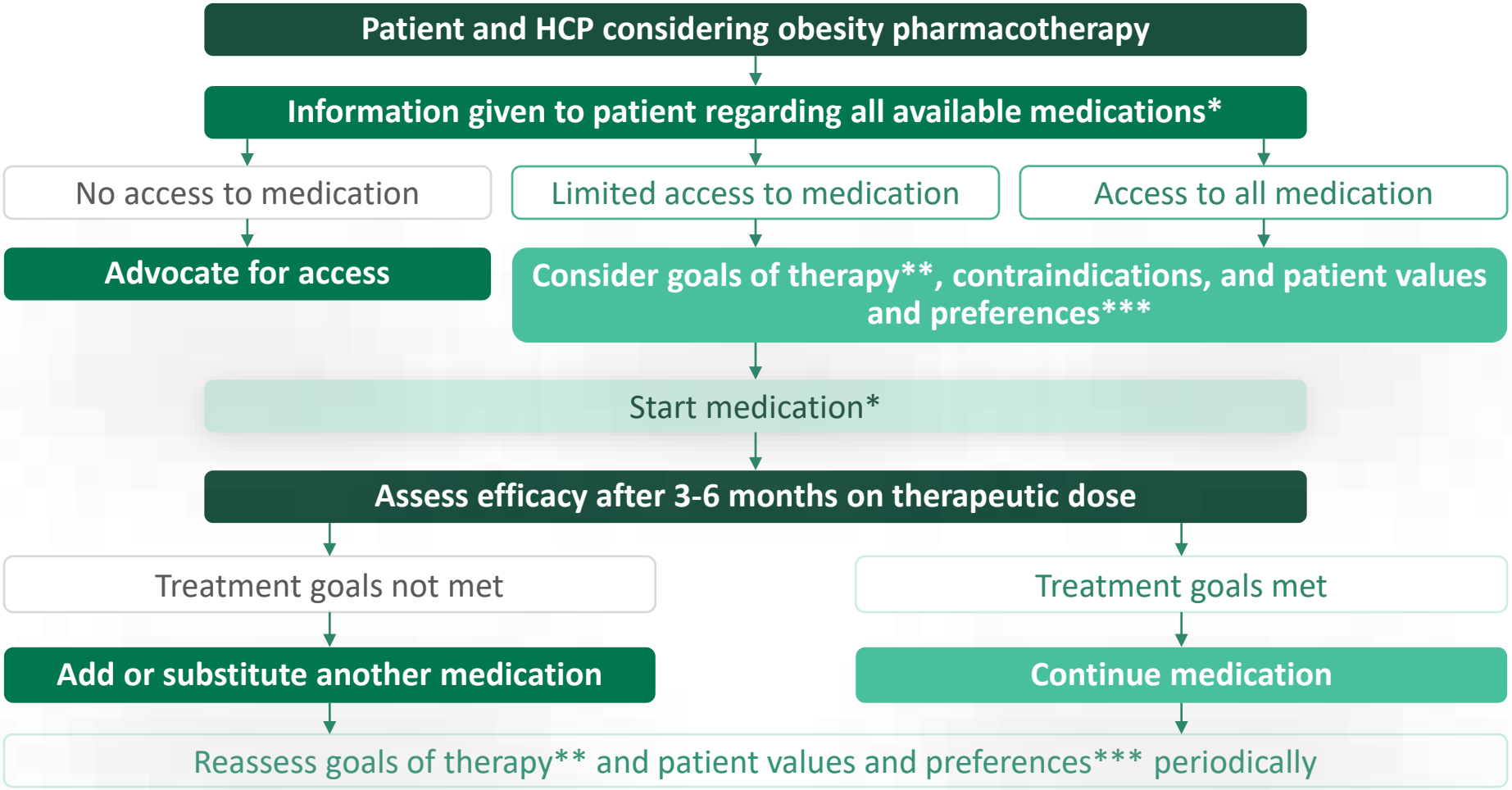
Obesity-Related Comorbidities and Pharmacotherapy

	Orlistat	Liraglutide 3 mg	Naltrexone/bupropion	Semaglutide 2.4 mg
Effect on physical function	Not studied	SF-36 – Improvement IWQOL – Improvement	IWQOL – Improvement	SF-36 – Improvement IWQOL – Improvement
Effect on QoL	Not studied	SF-36 – Improvement IWQOL – Improvement	IWQOL – Improvement	SF-36 – Improvement IWQOL – Improvement
Effect on CoEQ (cravings)	Not studied	Not studied	Improvements in craving control, positive mood, craving for sweet and savoury food	Improvements in craving control, positive mood, craving for sweet and savoury food

* Placebo subtracted

Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management (2022 Update). Accessed October 29, 2022. https://obesitycanada.ca/guidelines/pharmacotherapy

Obesity Canada CPG 2022 Pharmacotherapy Algorithm



* Medications approved in Canada as of June 2022: Liraglutide 3 mg daily, Naltrexone/Bupropion 16/180 mg bid, Orlistat 120 mg tid, Semaglutide 2.4 mg weekly
** Treatment of comorbidities, percentage and durability of weight loss
*** Including cost, frequency, route of administration and tolerability

Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management (2022 Update). Accessed October 29, 2022. https://obesitycanada.ca/guidelines/pharmacotherapy

“How Long Do I Stay on Pharmacotherapy?”

Obesity is a chronic disease and many patients will need to stay on medication to maintain weight loss; pharmacotherapy is intended as part of a long-term treatment strategy

If > 5% weight loss not achieved after 3 months on full/max tolerated dose

- Examine previous weight trajectory and factors that could be impeding weight loss efforts
- Consider a different medication if no other evident etiologies are apparent for lack of success

Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020.

“My Weight Loss with Treatment has Stopped”

Weight loss plateau will occur with pharmacotherapy or any other obesity management intervention.

Frame the importance of health goals

- Focus on health instead of numbers on the scale
- Identify if obesity management goals have been reached

Managing Plateauing

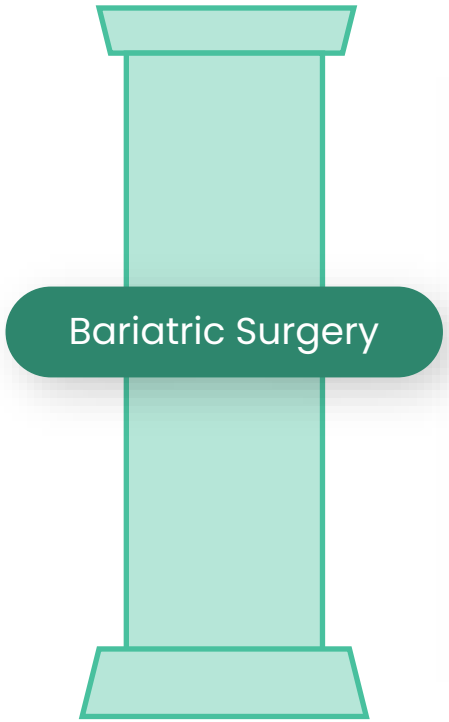
- Educate on the goals of therapy
- Focus on their “Best Weight”
- Consider changing to another pharmacotherapy if goals have not been reached

"This Medication is Causing Side Effects"

Medication	Adverse effect	Strategies
Liraglutide Semaglutide	GI-related – Nausea	• Titrate dosage based on product monograph • Eat slowly, smaller portions, stop eating when full and stay hydrated • Avoid fatty/fried or overly sweet or spicy foods
Naltrexone/ bupropion	Dry mouth Insomnia	• Drink plenty of fluids • Titrate as per product monograph, not taking afternoon dose late in the evening
Orlistat	GI-related – oily stools Micronutrient deficiency	• Avoid eating fatty foods • Take multivitamin at bedtime

Reid TS. Statement of Clarification—Reid TS: Practical Use of Glucagon-Like Peptide-1 Receptor Agonist Therapy in Primary Care. Clinical Diabetes 31:148–157, 2013. DOI: 10.2337/diaclin.31.4.148.
Clin Diabetes. 2014;32(2):58-59. doi:10.2337/diaclin.32.2.58

Pillar 3: Bariatric Surgery



- Bariatric surgery is considered in a patient with a:
  - **BMI ≥ 40 kg/m^2**
  - **BMI ≥ 35 kg/m^2 with an obesity-related comorbidity** (E.g. diabetes, cardiovascular disease, sleep apnea)
- It is the most effective weight reduction intervention and is associated with significant improvement in comorbidities and mortality risk
- Access, referrals, and wait time to this treatment are issues in most parts of Canada

Biertho L, Hong D, Gagner M. Canadian Adult Obesity Clinical Practice Guidelines: Bariatric Surgery: Surgical Options and Outcomes. Published online August 4, 2020:13. Shiau J, Biertho L. Canadian Adult Obesity Clinical Practice Guideline: Bariatric Surgery: Postoperative Management. Published online August 4, 2020:15.

Managing Richard

Clinical considerations:

- Has tried behavioural therapy in the past
- Candidate for obesity pharmacotherapy due to overweight BMI and comorbidities

Course of action

- Discuss obesity pharmacotherapy options
- Jointly consider use of first-line GLP-1 RA (liraglutide, semaglutide)
- Review adverse effects
- Book follow-up

Background

- 48 years old
- BMI = 28 kg/m^2

Medications

- Candesartan 8 mg daily
- Atorvastatin 20 mg daily

Discussion

- Tried to lose weight in the past
- History of weight cycling due to diet and exercise changes
- Frustrated with current weight and wants to know if there are other options

What you should do tomorrow

- Review **evidence-based obesity management options** that can be offered in primary care.
- Recommend **psychological therapy** to help patients adjust their thoughts associated with eating.
- Offer **obesity pharmacotherapy** as an option to help patients manage their weight reduction goal.
- Individualize obesity pharmacotherapy based on the **patient's preference and comorbidities**.
- Consider **bariatric surgery** referral in patients who are candidates.