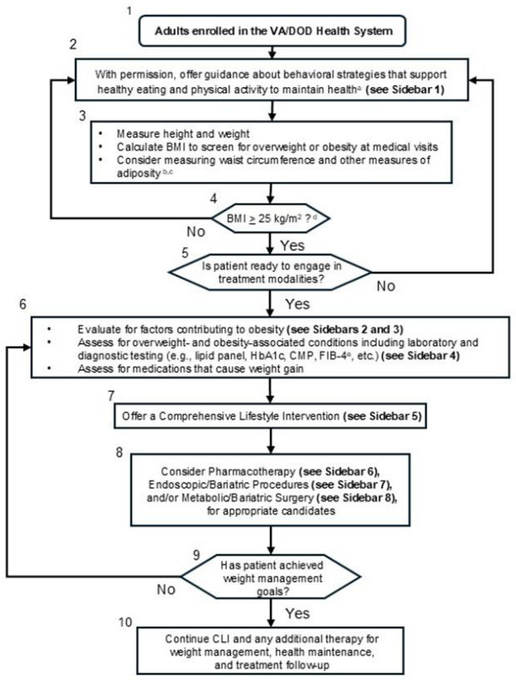
VA/DOD CLINICAL PRACTICE GUIDELINES

Management of Overweight and Obesity in Adults

Algorithm Module: Overweight/Obesity Management in Adults



[a] See, for example, *2020-2025 Dietary Guidelines for Americans, 9th edition*, available at: Dietary Guidelines for Americans and *Physical Activity Guidelines for Americans, 2nd Edition*, available at: Physical Activity Guidelines for Americans | odphp.health.gov

[b] Waist circumference: ≥102 cm (40 in) for men and ≥88 cm (35 in) for women, for those of Asian descent: ≥90 cm (35.4 in) for men and ≥80 cm (31.5 in) for women or waist-to-hip ratio (WHR) >0.90 for men and >0.80 for women. , or waist-to-height ratio (WtHR)(96) ≥ 0.50 for all

[c] The waist circumference measurement should be made with a tape measure placed around the bare abdomen just above the iliac crest. The tape should be snug, but should not compress the skin, and the measurement should be obtained while the patient is standing at the end of normal exhalation(97)

[d] For patients of Asian descent: is BMI ≥23 kg/m²?;(98) for patients >65 years old: consider individualized assessment(99)

[e] The Fibrosis-4 (FIB-4) index(100) is a non-invasive scoring system used to estimate liver fibrosis based on several laboratory tests.

Abbreviations: BMI: body mass index; CLI: comprehensive lifestyle intervention; DOD: Department of Defense; VA: Department of Veterans Affairs; WHR: waist-to-hip ratio; WtHR: waist-to-height ratio

Sidebar 1: Principles and Core Strategies of Motivational Interviewing and Behavioral Counseling

- Respect autonomy and resist directing
- Understand the patient's motivations
- Listen with empathy
- Empower the patient by building confidence
- Ask **O**pen-ended questions to evoke change talk and provide **A**ffirmations, **R**eflections, and **S**ummaries (OARS)
- Use the 5 A's: Ask, Assess, Advise, Agree, Assist

Sidebar 2: Select Medications and their Potential Effects on Weight[a]

Providers will need to individualize recommendations to their patient

Medication Classes	Medications with Potential for Weight GAIN	Medications that are Weight Neutral or have Potential for Weight LOSS
Alpha-blockers	**Terazosin, Doxazosin, Prazosin**	**Alfuzosin, Tamsulosin**
Antipsychotics	**Chlorpromazine, Clozapine, Olanzapine, Paliperidone, Quetiapine, Risperidone, Thioridazine**	NOTE: No antipsychotic medication is associated with weight loss. **Aripiprazole, Fluphenazine, Haloperidol, Loxapine, Lurasidone, Perphenazine, Ziprasidone**
Anti-depressants	**Mirtazapine, some SSRIs, MAOIs, TCAs**	**Bupropion (associated with weight loss), some SSRIs (e.g., fluoxetine), SNRIS, Trazodone, Vortioxetine**
Antiseizure drugs or mood stabilizing agents	**Divalproex, Gabapentin, Lithium, Perampanel, Pregabalin, Valproic acid**	Associated with weight loss: **Topiramate, Zonisamide** Associated with minimal weight loss, conflicting or no evidence for weight gain or loss: **Levetiracetam, Carbamazepine,-Oxcarbazepine, Lacosamide, Lamotrigine, Phenobarbital, Phenytoin, Primidone** NOTE: Prioritize seizure control
Antiretrovirals	• Protease Inhibitors (e.g., **atazanavir, darunavir**) • Integrase Inhibitors (e.g., **bictegravir, dolutegravir, raltegravir**)	Note: Other ARVs are typically weight neutral. Prioritize viremia control.
Antihyper-glycemic agents	• **Insulin[c]** • **Sulfonylureas (e.g., chlorpropamide, glimepiride, glipizide, glyburide)** • **Meglitinides (e.g., nateglinide, repaglinide)** • **Thiazolidinediones (e.g., pioglitazone, rosiglitazone)**	Associated with weight loss: • **GLP-1/GIP tirzepatide** • **GLP-1 containing agonists (e.g., semaglutide, liraglutide, exenatide, dulaglutide, lixisenatide)** • **SGLT2 inhibitors (e.g., empagliflozin, canagliflozin, dapagliflozin, ertugliflozin)** • **Metformin** • **Alpha-glucosidase inhibitors (e.g., acarbose, miglitol)** • **Pramlintide** Weight neutral: • **Dipeptidyl-peptidase-4 inhibitors (e.g., alogliptin, linagliptin, saxagliptin, sitagliptin)**
Beta-blockers	**Metoprolol, Atenolol, Propranolol** Less weight gain than above: **Carvedilol[b], Nebivolol[b]**	Consider calcium channel blockers, angiotensinogen receptor blockers, angiotensin-converting enzyme inhibitors, and thiazide or loop diuretics, as indicated.
Glucocorticoids	Systemic Steroids **(e.g., Prednisone, Dexamethasone, Methylprednisolone, Hydrocortisone)**	Consider weight-neutral steroid-sparing alternatives based on indication. Some examples include: **Biologics/disease-modifying antirheumatic drugs, NSAIDs**
Hormonal agents	Oral or Depot Progestin-only therapy **(e.g., medroxyprogesterone, megestrol acetate)** Less weight gain than above: **Combination contraceptives**	Consider alternative methods based on indication (e.g., contraception, menopause) Some examples include: **Copper intrauterine device, Barrier Method**
Antihistamines	**H1 antihistamines (e.g., hydroxyzine, diphenhydramine, fexofenadine), cetirizine, and desloratadine**	Note: Depending on symptoms, consider ipratropium nasal spray, decongestants, inhalers, and/or nonpharmacologic measures (e.g., nasal irrigation).

Management of Overweight and Obesity in Adults

Sidebar 3: Assessment of Factors Associated with Obesity

- Assess for presence of obesogenic medications (see **Sidebar 2** on pharmacotherapy)
- Assess for factors associated with overweight or obesity if physical exam and personal family history warrant, including but not limited to: depression, eating disorders or disordered eating, food insecurity and nutritional insufficiency, menopause, endocrine disorders (e.g., hypothyroidism, acromegaly, hypogonadism, hypercortisolism), neurologic conditions (e.g., hypothalamic obesity, traumatic brain injury, brain tumor, cranial irradiation, spinal cord injury), sleep apnea

Sidebar 4: Common Overweight- & Obesity-Associated Conditions By System

- Endocrine conditions (e.g., Prediabetes and Diabetes Mellitus, Metabolic Syndrome[b])
- Cardiovascular conditions (e.g., ASCVD, HTN, Dyslipidemia, Atrial Fibrillation, CHF, Stroke)
- Gastrointestinal conditions (e.g., MASLD, GERD)
- Musculoskeletal (e.g., OA/degenerative joint disease)
- Mental health conditions (e.g., depression, PTSD, anxiety, disordered eating)
- Respiratory conditions (e.g., OSA, asthma, hypoventilation syndrome)
- Genitourinary conditions (e.g., PCOS, female infertility, male hypogonadism, stress incontinence)
- Renal (e.g., microalbuminuria, CKD)
- Cancer(1-3)
- Neurological (e.g., IIH)

Sidebar 5: Comprehensive Lifestyle Intervention

- Defined as an intervention that combines behavioral, nutritional, and physical activity components together (see **Recommendation 2, Recommendation 6, Recommendation 8, Recommendation 9, and Appendix O**)
- The intervention can be delivered in an individual or group setting, in person, by telephone, or through synchronous video (see **Recommendation 2, Recommendation 4, Recommendation 5, and Appendix O**)
- Though there is insufficient evidence to recommend a specific number of sessions of comprehensive lifestyle intervention, most CLIs offer at least 12 intervention sessions in the first 12 months of intervention (see **Recommendation 2**)

Sidebar 6: Assessment for Pharmacotherapy

The thresholds listed below are for the initiation of therapy. These medications may be continued for maintenance of BMI target goals.

Consider for long-term pharmacotherapy (see **Appendix J**):

- Patients with a BMI ≥30 kg/m2
- Patients with a BMI ≥27 kg/m2 and an obesity-related comorbidity (see **Table J-1**)
- Individualized choice of medication to patient-specific comorbidities, dosing, administration, and potential for side effects

NOTE: Patients with BMI≥25-27 kg/m2 with additional adiposity measures require special considerations. See Recommendations for further information.

Sidebar 7: Assessment for Endoscopic and/or Bariatric Therapies

Consider for endoscopic and/or bariatric therapies (see **Recommendation 11, Recommendation 13,** and **Appendix K**):

- For intragastric balloons, patients with a BMI of 30-40 kg/m2
- For endoscopic sleeve gastrectomy, patients with a BMI of 30-50 kg/m2

Sidebar 8: Assessment for Metabolic and/or Bariatric Surgery

Consider for metabolic/bariatric surgery (see **Recommendation 12** and **Appendix K**):

- Patients with a BMI ≥30 kg/m2 and T2DM
- Patients with a BMI ≥35 kg/m2

Recommendations can be accessed in the full guideline: https://www.healthquality.va.gov/.

Edmonton Obesity Staging System (EOSS)

	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4
	No Sign of Obesity-Related Complications	Mild Obesity-Related Disease	Obesity-Related Chronic Disease	Severe End-Organ Damage	Severe/ Disabling & Dysfunctional Chronic Disease
Physical/ Medical	None	Pre-clinical/Mild • PreHTN • PreDM • Dyspnea on exertion	Established/ Moderate • HTN • T2DM • Mild-moderate OSA • MASLD • GERD	Severe organ damage • CAD/CVA • MASH • HF • T2DM, severe OSA, and HTN with complica-tions	End-stage • CVA with disability • End-stage heart, liver, lung, and renal disease • Obesity-related cancer • T2DM with severe complications
Mental Health	None	Mild impairment • Occasional symptom fluctuations	Moderate impairment • Symptoms impacting quality of life	Severe impairment • Symptoms significantly impacting quality of life	Psychologically Disabling Symptoms
Functional	None	Mildly restrictive • Occasional joint pain	Moderately restrictive • OA impacting quality of life	Severely limited • Severe OA with significant mobility limitations	• Immobile • Ability to work