# A Comprehensive Review of the Veterans Affairs (VA)-Department of Defense (DoD) Clinical Practice Management Guidelines for Adult Obesity

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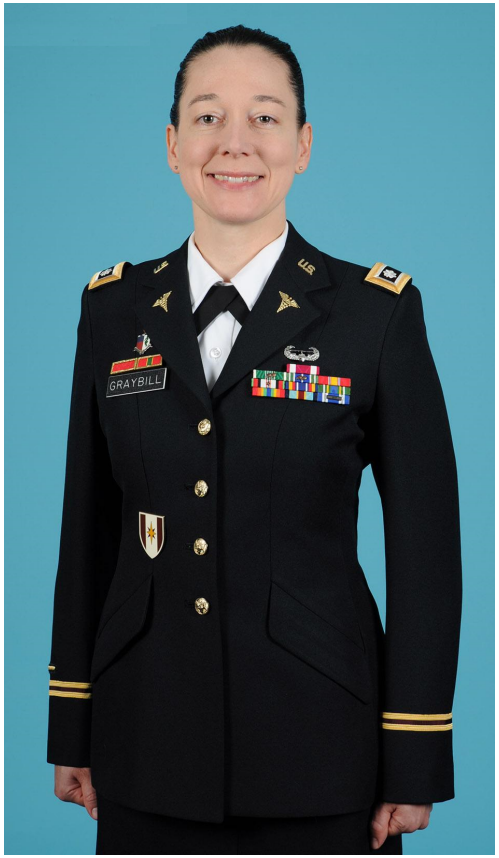


Dr. Graybill attended Temple University School of Medicine to earn an M.D. in 2006. She completed residency in Internal Medicine and Fellowship in Endocrinology in 2012 at Walter Reed National Military Medical Center.

Dr. Graybill is currently the Endocrinology Chief at Brooke Army Medical Center (BAMC) and the Army Endocrine Consultant to the Office of the Surgeon General (OTSG). She is a Champion for the Veterans Affairs (VA)/Department of Defense (DoD) guidelines on obesity management. In her role as an Associate Professor of Medicine at Uniformed Services University (USU) she serves as a clinical, academic and administrative endocrinologist who works with medical technicians, medical students, residents, and fellows. Through all of these roles she promotes readiness and military professional development, as well as educates the next generation of medical professionals, while fostering a spirit of inquiry through research.

# Disclosures

- Dr. Sky Graybill has no relevant financial or non-financial relationships to disclose relating to the content of this activity.
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# Learning Objectives

At the conclusion of this activity, participants will be able to:

1. Outline the three components of comprehensive lifestyle intervention: behavioral, dietary, physical activity.
2. Illustrate pharmacotherapy options for the management of overweight and obesity.
3. Identify patients appropriate for referral or evaluation for bariatric surgery.

# Overweight & Obesity

| | Overweight | Obesity | Total |
|---|---|---|---|
| US Adult Population | 32% | 40% | 72% |
| Active Duty Service Members[2] | 51% | 15% | 66% |
| Veterans in VA Care[3] | 36% | 44% | 80% |

Overweight: Body mass index (BMI) 25 to 29.9 kg/m$^2$
Obesity: BMI 30 kg/m$^2$ or higher

(Hales et al., 2017)
(Meadows et al., 2015)
(VA, n.d.)

# Conditions Associated with Overweight and Obesity

- Hypertension (HTN)
- Type 2 Diabetes and pre-diabetes
- Dyslipidemia
- Metabolic syndrome
- Obstructive sleep apnea
- Osteoarthritis (OA)/degenerative joint disease (DJD)
- Non-alcoholic fatty liver disease
- Gastroesophageal reflux disease (GERD)
- Cancer

# Clinical Practice Guidelines (CPG)

- Evidence-based
- Provide decision support
- Standardize care
- Offer recommendations
- Contain algorithm for care
- Include support tools

# VA/DoD CPG Process

- Develop key questions
- Conduct evidence review
- Working group
  - Evaluates strength of evidence
  - Formulates recommendations
- Review by internal and external stakeholders
- Finalize, publish and disseminate

# 2020 VA/DoD CPG for Overweight & Obesity

- Published in 2006, updated in 2014
- New evidence regarding efficacy of treatments
  - Comprehensive Lifestyle Intervention (CLI)
  - Pharmacotherapy
  - Bariatric surgery and other procedures

# 2020 Obesity CPG Recommendations

| 18 Evidence-Based Recommendations | |
|---|---|
| **Long-Term Management (15)** | **Short-Term Weight Loss (3)** |
| Comprehensive lifestyle intervention | Intragastric balloon |
| Pharmacotherapy | Low carbohydrate diet |
| Dietary supplements/nutraceuticals | |
| Bariatric procedures | |

# Recommendation #1

We recommend offering an in-person group or individual comprehensive lifestyle intervention that always includes behavioral, dietary, and physical activity components for patients with overweight or obesity.

# Comprehensive Lifestyle Intervention: Modalities and Intensity

- Can be delivered in an individual or group setting, in-person, by telephone, or through synchronous video.
- Insufficient evidence to recommend a specific number of sessions
- However, most offer at least 12 intervention sessions in the first 12 months of intervention

# Recommendation #6

We suggest choosing one or more of the following as the physical activity component of a comprehensive lifestyle intervention: aerobic, resistance, and/or lifestyle physical activity.

# Recommendation #7

We recommend offering patients a dietary approach that contributes to a negative energy balance to achieve weight loss as the dietary component of a comprehensive lifestyle intervention.

# Recommendation #7

- Dietary component is a core element of comprehensive lifestyle intervention
- Variety of evidence-based dietary approaches
- Based on patient preferences and medical conditions
- Negative energy balance is key

# Recommendation #9

We suggest offering prescribed pharmacotherapy (specifically liraglutide, naltrexone/bupropion, orlistat, or phentermine/topiramate) for long-term weight loss in patients with a BMI ≥30 kg/m$^2$ and for those with a BMI ≥27 kg/m$^2$ who also have obesity-associated conditions, in conjunction with a comprehensive lifestyle intervention.

# Recommendation #9

- BMI: ≥ 30 or ≥ 27 + obesity-associated condition
- Medications:
  - ❑ liraglutide (Saxenda)
  - ❑ naltrexone/bupropion (Contrave)
  - ❑ orlistat (Xenical, Alli)
  - ❑ phentermine/topiramate (Qsymia)
- Use in conjunction with comprehensive lifestyle intervention
- Reassess response
- Anticipate weight regain from discontinuation

# Recommendation #9

**Weight Loss and Adverse Event Outcomes with Medications for Long-term Weight Loss**

| Medication | Mean weight loss vs placebo | ≥ 5% weight loss | Discontinuation due to an adverse event |
|---|---|---|---|
| phentermine/ topiramate | -8.80 kg | 75% | 10% |
| liraglutide | -5.24 kg | 63% | 12% |
| naltrexone/ bupropion | -4.95 kg | 55% | 13% |
| orlistat | -2.63 kg | 44% | 8% |

Note: lorcaserin is not included in this table as it was requested to be removed from the U.S. market in February, 2020.

(Khera, Murad, & Chandar, 2016)

# Weight loss Medications

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**Table 3: Prescribing Information for Chronic Weight Management Medications***

**Phentermine/Topiramate ER (Qsymia®) C-IV [3.75 mg/23 mg; 7.5 mg/46 mg; 11.25 mg/69 mg; 15 mg/92 mg capsules]**

**Dosing:** 3.75 mg/23 mg daily for 14 days; increase to 7.5 mg/46 mg for 12 weeks

**Goal:** 3% weight loss within 12 weeks. If unsuccessful, increase to 11.25 mg/69 mg for 14 days; increase to 15mg/92 mg daily for 12 weeks. If 5% baseline weight loss is not achieved, discontinue by slow taper.

Renal/Hepatic Impairment (CrCl <50 mL/min or Child-Pugh 7-9): Max dose: 7.5 mg/46 mg daily

**Contraindications:** Pregnancy; REMS; Glaucoma; MAOI use during or within 14 days; Hyperthyroidism

**Warnings:** ↑ heart rate, mood & sleep disorders, suicidal behavior/ideation, ↑ creatinine, metabolic acidosis, cognitive impairment, nephrolithiasis, drug abuse, hypokalemia.

- Taper slowly to discontinue (1 dose every other day for ≥1 week) to prevent seizure. Discontinue if glaucoma or myopia develop

**Naltrexone/Bupropion ER (Contrave®) [8 mg/90 mg tablet]**

- **Dosing: Week 1:** 1 AM tablet; **Week 2:** 1 AM tablet, 1 PM tablet; **Week 3:** 2 AM tablets, 1 PM tablet; **Weeks 4-12:** 2 AM tablets, 2 PM tablets
- **Goal:** 5% weight loss within 12 weeks. Discontinue if unsuccessful.

Renal Impairment (moderate/severe): Max dose: 1 tablet twice daily

Not recommended for use in patients with ESRD.

Hepatic Impairment: Max dose: 1 tablet in the morning.

**Contraindications:** Opioid use; Pregnancy; Uncontrolled hypertension; Seizure disorder; Bulimia & anorexia nervosa; Abrupt stop of alcohol; acute opioid withdrawal; MAOI's

**Warnings:** Suicidal thinking/ behavior [Boxed Warning]; Seizures, ↑ heart rate & blood pressure; neuropsychiatric symptoms; hepatotoxicity; may precipitate withdrawal if receiving opioids; adjust hypoglycemic medications to avoid hypoglycemia

**Orlistat (Xenical®, Alli®) [120 mg; 60 mg (OTC) capsules]**

**Dosing:**

- Xenical®: 120 mg 3 times daily with a fat containing meal (up to 1 hour after meal); omit dose if meal is occasionally missed or contains no fat
- Alli® OTC labeling: 60 mg 3 times daily with a fat containing meal

Renal/Hepatic Impairment: No adjustments provided by manufacturer

**Contraindications:** Pregnancy; Chronic malabsorption syndrome; Cholestasis

**Warnings:** Hepatotoxicity; cholelithiasis; ↑ urine oxalate and nephrolithiasis; decreased absorption of fat-soluble vitamins, cyclosporine, thyroid hormone, and anticonvulsants; adjust hypoglycemic drugs to avoid hypoglycemia

**Liraglutide (Saxenda®) [6 mg/mL, 3mL injection for subcutaneous use]**

**Dosing:** Initiate 0.6 mg daily for 1 week; increase by 0.6 mg per week to target dose of 3 mg; slow titration may improve tolerability

**Goal:** 4% weight loss within 16 weeks. Discontinue if unsuccessful.

Renal Impairment: Use with caution

**Contraindications:** Pregnancy; Personal or family history of medullary thyroid carcinoma or MEN2 [Boxed Warning]

**Warnings:** Thyroid C-cell Tumors [Boxed Warning]; gallbladder disease; pancreatitis (Discontinue); ↑ heart rate; renal impairment; suicidal behavior/ideation; to reduce the risk for hypoglycemia, decrease concomitant secretagogue (ie. sulfonylureas) dose (e.g., by 50%) or insulin

*In February 2020, the FDA requested the withdrawal of the weight-loss drug lorcaserin (Belviq, Belviq XR) from the US market citing potential risk of cancer outweighs the benefits of use.

(www.healthquality.va.gov/guidelines/CD/obesity, n.d.)

# Recommendation #11

We suggest against using dietary supplements or nutraceuticals for clinically meaningful short-term weight loss or long-term weight management.

# Recommendation #11

- Nutraceutical – a food or dietary supplement that is believed to provide health benefits
- Not studied in conjunction with comprehensive lifestyle intervention
- Low quality of evidence
  - Several limitations and confounders
- Marketing may lead to unrealistic expectations

# Recommendation #12

We suggest offering the option of metabolic/bariatric surgery, in conjunction with a comprehensive lifestyle intervention, to patients with a BMI ≥ 30 kg/m$^2$ and type 2 diabetes mellitus.

# Recommendation #12

- Most durable modality to affect long-term weight loss
- Potential remission of type 2 diabetes without the use of medications

# Recommendation #16

We suggest offering intragastric balloons in conjunction with a comprehensive lifestyle intervention to patients with obesity (BMI ≥30 $kg/m^2$) who prioritize short-term (up to six months) weight loss.

# Recommendation #16

- Intragastric balloons may be effective for short-term weight loss
  - Food and Drug Administration (FDA) approved usage for six months
- Consultation with a bariatric surgeon
  - Placement
  - Management

# Putting CPG Recommendations into Clinical Practice

# CLI Key Behavioral Strategies

- Setting weight loss, diet and physical activity goals
- Addressing barriers to change
- Self-monitoring
- Problem-solving to maintain lifestyle changes

# Motivational Interviewing

- 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)

# CLI Dietary Principles

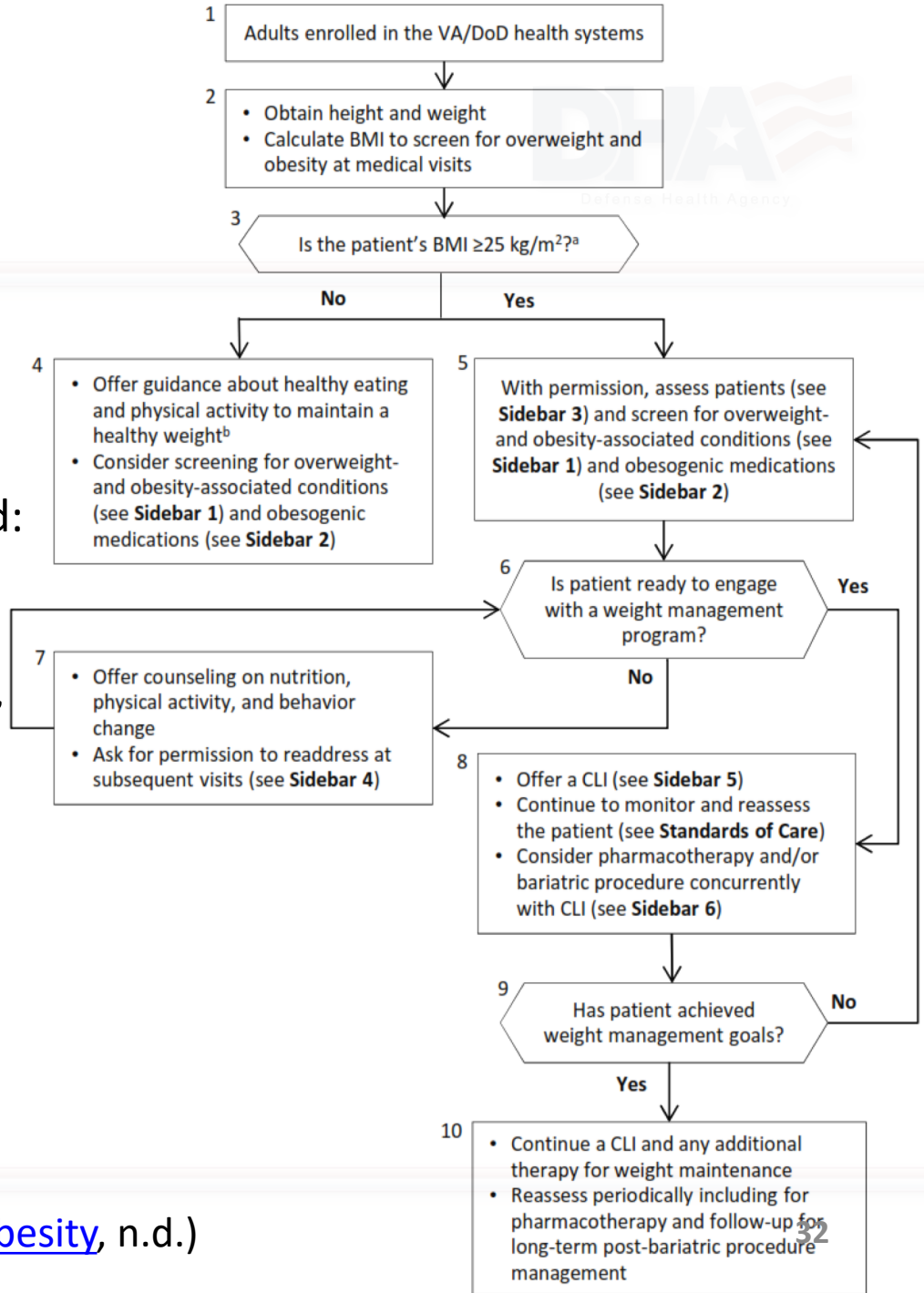
- Specific diet less important than calorie deficit
- Any evidence-based diet can be chosen based on the patient's medical condition and likelihood of adherence
- Evidence-based diets include: low carbohydrate, Dietary Approaches to Stop Hypertension (DASH), low fat, low calorie
- Consider consult with registered dietitian

# CLI Physical Activity Elements

- Recommend at least 150 minutes per week in conjunction with diet to lose weight
- Recommend 200-300 minutes per week to maintain weight loss
- Short bursts of activity or a single longer episode

# Algorithm

- For patients of Asian descent: is BMI ≥23 kg/m$^2$?; for patients >65 years old: consider individualized assessment
- See, for example, 2015-2020 Dietary Guidelines for Americans, 8th edition, available at: https://health.gov/dietaryguidelines/2015/ and Physical Guidelines for American, 2nd Edition, available at: https://health.gov/paguidelines/second-edition/




(www.healthquality.va.gov/guidelines/CD/obesity, n.d.)

# Case 1: Background

- Thirty year-old staff sergeant presents for failing to meet body fat standards despite exercise
- Past Medical History (PMHx): knee osteoarthritis
- Physical Exam (PE): obesity, muscle strength 5/5 throughout, no wide/purple stretch marks
- Thyroid function tests: unremarkable

# Case 1: Shared Decision-Making

- Discuss significance of obesity related conditions
- Ask what he would like to do over the next three to six months with his diet and exercise
- Patient thinks he could tolerate riding a bike and using an elliptical better than running
- Patient thinks his diet is generally healthy but is not aware of intake amount
- Encourage food log for portion control

# Case 1: Treatment Course

- Army Wellness Center for dietitian and exercise physiologist coaching
- Integrated behavioral health clinician for sleep hygiene
- Six months later, meets body fat standards and is released from the Army Body Composition Program
- Holistic Health and Fitness (H2F) system for unit's athletic trainer and dietician to avoid weight regain

# Case 1: Return to Treatment

- Ten years after patient retires, BMI is 33 kg/m$^2$ despite attempts at diet and exercise modification
- PMHx: OA, GERD, HTN, hyperlipidemia (HLD), and type 2 diabetes
- Medications: omeprazole, lisinopril, atorvastatin, metformin, exenatide, empagliflozin
- HbA1c: 10%
- Unremarkable laboratory results: complete blood count (CBC), liver function test (LFT), electrolytes, parathyroid hormone (PTH), albumin, iron, ferritin, zinc, vitamin A, vitamin B1, vitamin B12, vitamin D and folate.
- Patient is interested in bariatric/metabolic surgery and you decide he is a reasonable candidate

# Case 1: Shared Decision-Making

- Risks
  - Major surgery, though peri-operative mortality < 0.5%
  - Morbidity < 4% for strictures/ulcer, bowel obstruction, bleeding, venous thromboembolism (VTE), infection, self-harm, malabsorption
- Benefits
  - Most effective and durable weight loss adjunct to diet and exercise
  - Mortality benefit over time
  - Improvement in cardiovascular disease (CVD), T2DM, HLD, and HTN
- Shared Decision: Roux-en Y Gastric Bypass
  - Slightly better weight loss and diabetes remission rates than gastric sleeve
  - Gastric sleeve could worsen GERD

# Case #2: Broaching the Topic of Weight

- Veteran is a 62 year-old woman
- PMHx: type 2 diabetes complicated by neuropathy, high blood pressure
- BMI is 36 $kg/m^2$

First step: Ask for permission!

> "I am concerned about how your weight might be affecting your health. Is this something you feel comfortable discussing today?"

# Case #2: Obesogenic Agent Review

Next: Review medication list

→Look for culprits making weight loss harder

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Next: Review medication list

→Look for culprits making weight loss harder

1. Glipizide 10mg twice daily

3. Metoprolol tartrate 25 mg twice daily

5. Gabapentin 600mg three times daily

**AVOID iatrogenic weight GAIN!**

# Case #2

| Select Medications and Potential Effects on Weight | | |
|---|---|---|
| **Category** | **Potential for Weight Gain** | **Alternative to Consider** |
| **Antidepressants** | Tricyclic antidepressants (amitriptyline, nortriptyline); mirtazapine; SSRIs (paroxetine); Monoamine oxidase inhibitors | bupropion; desvenlafaxine; venlafaxine |
| **Antipsychotics** | quetiapine; clozapine; olanzapine; risperidone; thioridazine | aripiprazole; haloperidol; ziprasidone |
| **Antiepileptics or mood stabilizers** | gabapentin; pregabalin; carbamazepine; divalproex; lithium; valproic acid; vigabatrin | topiramate; lamotrigine; zonisamide |
| **Antihyperglycemic agents** | Insulin; Sulfonylureas; Meglitinides; Thiazolidinediones | GLP-1 agonists; SGLT2 inhibitors; metformin; Alpha-glucosidase inhibitors; pramlintide; DPP-4 inhibitors |
| **Beta-Blockers** | metoprolol; atenolol; propranolol | carvedilol; nebivolol<br>Other drug classes available (ACEIs, ARBs, CCBs, diuretics) per indication |
| **Alpha-Blockers** | terazosin | BPH: doxazosin, alfuzosin, tamsulosin |
| **Glucocorticoids** | prednisone; methylprednisolone; hydrocortisone | NSAIDs, biologics/DMARDs, nontraditional therapies |
| **Hormonal agents** | Progestins | For contraception, consider alternative methods (e.g., copper IUD) |
| **Antihistamines** | cetirizine; cyproheptadine | Depending on symptoms, consider decongestants, inhalers, nasal irrigation |

# Case #2

| Select Medications and Potential Effects on Weight | | |
|---|---|---|
| **Category** | **Potential for Weight Gain** | **Alternative to Consider** |
| **Antidepressants** | Tricyclic antidepressants (amitriptyline, nortriptyline); mirtazapine; SSRIs (paroxetine); Monoamine oxidase inhibitors | bupropion; desvenlafaxine; venlafaxine |
| **Antipsychotics** | quetiapine; clozapine; olanzapine; risperidone; thioridazine | aripiprazole; haloperidol; ziprasidone |
| **Antiepileptics or mood stabilizers** | gabapentin; pregabalin; carbamazepine; divalproex; lithium; valproic acid; vigabatrin | topiramate; lamotrigine; zonisamide |
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| **Alpha-Blockers** | terazosin | BPH: doxazosin, alfuzosin, tamsulosin |
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# Case #2: Obesogenic Agent Alternatives

- Consider regimen that does not include a beta blocker if no CV event history
- Consider SWITCH from glipizide (sulfonylurea) to alternative hypoglycemic agent (SGLT2i or GLP-1 agonist associated with weight loss; DPP4i weight neutral)
- Suggest WEAN DOWN on gabapentin while adding one or more:
  - Topiramate (OFF label; Warnings/Precautions include: nephrolithiasis and acute closed angle glaucoma, teratogenic)
  - Duloxetine (FDA indication for diabetic neuropathy)
  - Capsaicin cream (usually not monotherapy)
  - Topical lidocaine
  - Topical NSAID

*Refer to respective VA or DoD formulary listings, pre-authorization requirements, criteria for use, or other clinical recommendations.

# Case #2: Weight Management Options

- Ask about weight history: weight loss attempts, barriers and facilitators to success
- Ask if she would be interested in considering referral to the MOVE! program for CLI.
- Simultaneously, is she interested in considering starting a medication for weight loss?
- Would she be interested in more information regarding bariatric surgery option?

# Case #2: Weight Management Pharmacotherapy Considerations

- Obtain history:
  - ❑ Kidney stone in the past
  - ❑ Seizure as a child
  - ❑ Trying to quit smoking
  - ❑ Insomnia

# Resources and Links

- Clinical Practice Guideline and Tools: www.healthquality.va.gov
- MOVE! – www.move.va.gov
- DoD toolkit and programming www.qmo.amedd.army.mil
- VA Pharmacotherapy Criteria for Use:
  https://vaww.cmopnational.va.gov/cmop/PBM/default.aspx
  https://www.pbm.va.gov/
- VA Academic Detailing Service Documents and Resources:
  https://vaww.portal2.va.gov/sites/ad/SitePages/WeightManagement.aspxhttps://vaww.portal2.va.gov/sites/ad/Education%20Materials/Weight%20Management/WM_Provider_QuickReferenceGuide_IB101159.pdf

# Key Takeaways

- Obesity is a chronic disease that requires lifelong management
- Shared decision-making is fundamental to weight management
- Review medications and eliminate obesogenic agents used to treat other medical illnesses
- Consider weight neutral agents or those that promote weight loss.
- Comprehensive lifestyle intervention (CLI) is central to successful and sustained weight loss and maintenance
- Negative energy balance should be achieved through decreased caloric intake and increased physical activity

# Key Takeaways

- Dietary supplements or nutraceuticals do not contribute to clinically meaningful weight loss or weight management
- Pharmacotherapy and/or bariatric procedures are options in conjunction with CLI; both require long-term follow-up
- Individualize FDA-approved medications for weight loss based on efficacy, safety, potential side effects, patient tolerability, and preference
- Bariatric procedures are effective for weight loss and particularly helpful for Type 2 diabetes
- Combining CLI, pharmacologic, and surgical options simultaneously can enhance weight loss and maintenance

# References


Biener, A.I., & Decker, S.L. (2018). Medical care use and expenditures associated with adult obesity in the United States, *JAMA,* 319(3), 218. http://doi.org/10.1001/jama.2017.21063

Cao, Q., Yu, S., Xiong, W., & et al. (2018). Waist-hip ratio as a predictor of myocardial infarction risk: A systematic review and meta-analysis. *Medicine (Baltimore),* 97(30), e11639. http://doi.org/10.1097/MD.0000000000011639

Colditz, G.A., & Dart, H. (2018). Epidemiology and health and economic consequences of obesity. In T.A. Wadden & G.A. Bray, (2 Ed.). *Handbook of obesity treatment: Second edition*. (pp. 3-23). New York: Guilford Press.

Department of Health and Human Services. (2020). 2015-2020 Dietary Guidelines for Americans, 8th edition, *Office of Disease Prevention and Health Promotion*, https://health.gov/dietaryguidelines/2015/

Department of Health and Human Services. (2020). Physical Guidelines for American, 2nd Edition, *Office of Disease Prevention and Health Promotion,* https://health.gov/paguidelines/second-edition/

Department of Veteran Affairs, Department of Defense. Guideline for guidelines. Veterans Health Administration, Office of Quality & Performance, Evidence Review Subgroup; Revised January 29, 2019.

Department of Veterans Affairs. (n.d.). VHA Corporate Data Warehouse. [Data file].

Estes, C., Razavi, H., Loomba, R., Younossi, Z., & Sanyal, A.J. (2018). Modeling the epidemic of nonalcoholic fatty liver disease demonstrates an exponential increase in burden of disease. *Hepatology,* 67(1), 123-133. http://doi.org/10.1002/hep.29466

# References


Hales, C.M., Carroll, M.D., Fryar, C.D., & Ogden, C.L. (2017). Prevalence of Obesity Among Adults and Youth: United States, 2015-2016. *Centers for Disease Control and Prevention: National Center for Health Statistics Data Brief*, 288, 2018-1209.

Khera, R., Murad, M.H., & Chandar, A.K. (2016). Association of Pharmacological Treatments for Obesity With Weight Loss and Adverse Events: A Systematic Review and Meta-analysis. *JAMA*, 315(22), 2424-2434. http://doi.org/10.1001/jama.2016.7602

Krukowski, R.A., Hare, M.E., Talcott, G.W., & et al. (2018). Dissemination of the Look AHEAD intensive lifestyle intervention in the United States military: A randomized controlled trial. *Obesity (Silver Spring),* 26(10), 1558-1565. http://doi.org/10.1002/oby.22293

LeBlanc, E.L., Patnode, C.D., Webber, E.M., Redmond, N., Rushkin, M., & O'Connor, E.A. (2018). Behavioral and pharmacotherapy weight loss interventions to prevent obesity-related morbidity and mortality in adults: An updated systematic review for the U.S. Preventive services task force. *JAMA*, 320(11), 1172-1191. http://doi.org/10.1001/jama.2018.7777

Mai, K., Brachs, M., Leupelt, V., & et al. (2018). Effects of a combined dietary, exercise and behavioral intervention and sympathetic system on body weight maintenance after intended weight loss: Results of a randomized controlled trial. *Metabolism,* 83, 60-67. http://doi.org/10.1016/j.metabol.2018.01.003

Meadows, S.O., Engel, C.C., Collins, R.L., & et al. (2015). 2015 Department of Defense Health Related Behaviors Survey (HRBS). Santa Monica, CA: RAND Corporation, 2018. https://www.rand.org/pubs/research_reports/RR1695.html.

Puhl, R.M., & Pearl, R.L. (2018). Psychosocial contributors to and consequences of obesity. Handbook of Obesity Treatment. In T.A. Wadden & G.A. Bray, (2 Ed.). *Handbook of obesity treatment: Second edition*. (pp. 149). New York: Guilford Press.

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# Questions?

# How to Obtain CE/CME Credit

**To receive CE/CME credit, you must register by 0745 ET on 25 September 2020 to qualify for the receipt of CE/CME credit or certificate of attendance. You must complete the program posttest and evaluation before collecting your certificate. The posttest and evaluation will be available through 8 October 2020 at 2359 ET. Please complete the following steps to obtain CE/CME credit:**

1. Go to URL: https://www.dhaj7-cepo.com/content/clinical-communities-speaker-series-military-health-care-select-promising-practices-24-sept
2. Click on the REGISTER/TAKE COURSE tab.
   a. If you have previously used the CEPO CMS, click login.
   b. If you have not previously used the CEPO CMS click register to create a new account.
3. Follow the onscreen prompts to complete the post-activity assessments:
   a. Read the Accreditation Statement
   b. Complete the Evaluation
   c. Take the Posttest
4. After completing the posttest at 80% or above, your certificate will be available for print or download.
5. You can return to the site at any time in the future to print your certificate and transcripts at https://www.dhaj7-cepo.com/
6. If you require further support, please contact us at dha.ncr.j7.mbx.cepo-cms-support@mail.mil