Adult Obesity (Age ≥ 18) Practice Guideline

EVALUATION AND TREATMENT

Assessment of Adult Patient to Evaluate for Obesity

- Obtain height, weight, blood pressure (BP), body mass index (BMI) **(TABLE A)**

Underweight
BMI < 18.5kg/m²

Sanford Adult Obesity Guidelines do not apply

Normal Weight
BMI 18.5-24.9kg/m²

- Maintain weight trajectory and reassess annually
- Manage risk factors

Overweight/Obese
BMI ≥ 25kg/m²

- Focus history and exam on risk factors, complications, and healthy behaviors/attitudes
- Assess for major and minor comorbid conditions **(TABLE B)**
- Review medications associated with weight gain **(TABLE C)**
- Screen patient with PHQ4; if positive, administer PHQ9 and/or GAD7 and refer to *Sanford Anxiety* or *Sanford Depression Practice Guidelines*

Obtain Appropriate Laboratory Tests

- Evaluate for Metabolic Syndrome: Baseline ECG, chest x-ray, complete blood count (CBC), CMP, thyroid function tests and lipid profile

Assess Patient Readiness For Weight Loss

Patient Is Ready to Lose Weight

- Negotiate goals and management strategy to achieve weight loss **(TABLE D)**
- Refer to risk appropriate resources as needed

Patient Is Not Ready to Lose Weight

- Review goals, risk factors, and counsel regarding weight management

Management Recommendations For Weight Loss

- Consider RN Health Coach, Behavioral Health Triage Therapists or other trained professional for motivational interviewing to focus on lifestyle changes **(TABLE E)**
- Consider referral to Registered Dietitian
- Consider approved weight loss medications when appropriate **(TABLE F)**

Management Recommendations For Weight Loss

- Consider referral to RN Health Coach, Behavioral Health Triage Therapists or other trained professional for motivational interviewing to focus on lifestyle changes **(TABLE E)**
- Consider referral to Registered Dietitian

Periodic Re-evaluation of Patient

- Measure height, weight, and calculate BMI

Revised 08072013 ARR

REFERENCE INFORMATION

TABLE A: Measure Height and Weight, and Calculate Body Mass Index

Calculate the body mass index (BMI) at least annually for screening and as needed for management. Classification is based on the body mass index categories.

Body Mass Index Calculation

$$\frac{\text{Weight}}{\text{Height squared}} = \frac{\text{kg}}{\text{m}^2} \quad \textit{OR} \quad \frac{\text{lbs}}{\text{inches}^2} \times 703$$

BMI	Category
Less than 18.5	Underweight
18.5-24.9	Normal weight
25-29.9	Overweight
30-34.9	Obese-class I
35-39.9	Obese-class II
40 or more	Extreme obesity-class III

TABLE B : Assess for and Categorize Minor and Major Comorbid Conditions

- It is important to assess for other conditions as treatment decisions and outcomes may be influenced by their presence.
- Waist circumference greater than or equal to 40 inches for males and greater than or equal to 35 inches for females is an additional risk factor for complications related to obesity.
- To rule out depression and eating disorders, brief screenings: PHQ-4 and *Starting The Conversation* **(APPENDIX A)** should be conducted if appropriate.
- Assessment should include a complete medical history including identifying medications that may induce weight gain or interfere with weight loss.
- Screening for sleep disorders should also be completed.

Minor Comorbid Conditions	Major Comorbid Conditions
• Cigarette smoking • Hypertension (BP greater than or equal to 140/90) or current use of antihypertensives • LDL cholesterol >130 mg/dL • HDL cholesterol <40 mg/dL for men; less than 50 mg/dL for women • Prediabetes • Family history of premature coronary artery disease • Age ≥ 55 years for males • Age ≥ 65 years for females or menopausal females	• Waist circumference (males≥ 40 inches, females ≥ 35 inches) • Established coronary artery disease (MI, angioplasty, CABG) • Peripheral vascular disease • Abdominal aortic aneurysm • Symptomatic carotid artery disease • Type 2 diabetes mellitus • Obstructive sleep apnea

TABLE C: Drug Classes Associated with Weight Gain

- Diabetic (insulin, sulfonylureas, thiazolidinedione)
- Many selective serotonin reuptake inhibitors (SSRI), tricyclic antidepressants (TCA)
- Anti-psychotics
- Anti-epileptics
- Steroid hormones (progestins and glucocorticoids)

Consider alternative drugs not associated with weight gain:

- Metformin
- Bupriopion
- Topiramate
- Exenatide

Revised 08072013 ARR

REFERENCE INFORMATION

TABLE D: Treatment Grid and Overview of Management Recommendations

Comorbid Condition	BMI			
	25-30	30-35	35-40	40+
0	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication considerations	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication considerations	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication and surgical considerations
1-2 Minor Comorbid Conditions	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication considerations	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication and surgical considerations	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication and surgical considerations
Major Comorbid Conditions OR 3 Minor Comorbid Conditions	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management **The FDA approves drug therapy only for BMI >27**	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication and surgical considerations	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication and surgical considerations	Counsel and educate: • Nutritional/Physical activity changes • Behavioral management • Medication and surgical considerations

TABLE E: Overview of Management Recommendations

Nutrition (balanced healthy eating plan or lower calorie balanced eating plan)

- Encourage at least five servings of fruit and vegetables per day, whole grains with fiber intake of 20-35 grams of fiber daily, less than or equal to 30% of calories from fat (7%-10% of calories from saturated fat, less than or equal to 1% from trans fat).
- For weight loss, encourage calorie reduction by evaluating portion sizes and journaling food intake.
- Provide tips for managing eating in social situations, dining out, take-out food and food label reading.
- Provide referral to a dietician, nutritionist or structured medically supervised weight loss program if available.
- Consider the use of meal replacements or very low calorie diet (VLCD) under medical supervision to help achieve weight loss in patients who are interested in such programs.

Physical Activity

- Minimally, all patients should be encouraged to do at least 10 minutes of physical activity above what they are already doing each day and gradually increase the amount of time, followed by an increase in intensity.
- Ideally, all patients should meet the current recommendations of 60 minutes of moderate-intensity activity on most days per week. This can by done in 10-minute increments.
- Patients with chronic activity limitations (e.g. arthritis, respiratory dysfunction, neuropathy, morbid obesity) should be evaluated and managed to establish or enhance patient mobility.
- Small bouts of physical activity, not generally considered exercise, such as taking the stairs, parking farther away, exercising while watching TV, standing rather than sitting and activity breaks from screens (TV, computer, other media) are also important for healthy body weight.

Behavioral Management

- Identify behaviors that may lead to increased weight gain; for example, stress, emotional eating, boredom and poor sleep.
- Help patients set specific, measurable, time-limited goals to decrease calorie intake and increased physical activity as appropriate.
- Suggest patients weigh themselves weekly and record the amount and type of food/beverages consumed and physical activity completed.
- Provide support and encourage patients to also seek support from family, friends and support groups in order to assist them with their eating, activity and weight goals.

Medication

- Evaluate for medications that may promote weight gain, and change when appropriate to a more weight-neutral alternative.
- Pharmacotherapy for weight loss should be included only in the context of a comprehensive treatment strategy that includes physical activity and nutritional support.
- Phentermine and orlistat are safe for most patients when carefully monitored by a physician. They may be part of a program for weight management or maintenance, which should include nutrition and physical activity changes when indicated.

Surgery

- Bariatric surgery is indicated in carefully selected patients. Patients should be motivated, well informed in disease management, psychologically stable and accepting of operative risks.

Revised 08072013 ARR

TABLE F: Medications Used for Weight Loss

The FDA approves drug therapy only for BMI >27

Drug	Mechanism of Action	Risks/Side Effects
Phentermine	Appetite suppressant: sympathomimetic amine	Cardiovascular, gastrointestinal
Diethylpropion	Appetite suppressant: sympathomimetic amine	Palpitations, tachycardia, insomnia, gastrointestinal
Orlistat	Lipase inhibitor: decreased absorption of fat	Diarrhea, flatulence, bloating, abdominal pain, dyspepsia
Bupropion	Appetite suppressant: mechanism unknown	Paresthesia, insomnia, central nervous system effects
Fluoxetine	Appetite suppressant: selective serotonin reuptake inhibitor	Agitation, nervousness, gastrointestinal
Sertraline	Appetite suppressant: selective serotonin reuptake inhibitor	Agitation, nervousness, gastrointestinal
Topiramate	Mechanism unknown	Teratogenicity, paresthesia, changes in taste
Zonisamide	Mechanism unknown	Somnolence, dizziness, nausea

References

1. Fitch, A., Everling, L., Fox, C., Goldberg, J., Heim, C., Johnson, K., Kaufman, T., Kennedy, E., Kestenbaun, C., Lano, M., Leslie, D., Newell, T., O'Connor, P., Slusarek, B., Spaniol, A., Stovitz, S., Webb, B. Institute for Clinical Systems Improvement. Prevention and Management of Obesity for Adults. Updated May 2013.
2. Brethauer, S., Kashyap, S., Schauer, P. *Cleveland Clinic Disease Management Project: Obesity*. Retrieved from http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/endocrinology/obesity/
3. HealthTeamWorks (2011, March 11). *Adult Obesity Guideline*. Retrieved from http://healthteamworks-media.precis5.com/e2f9247929b404b2fe98ba6f32301e3b
4. Paxton, A., Strycker, L., Toobert, D., Ammerman, A., Glasgow, R. (2011). Starting the conversation: Performance of a brief dietary assessment and intervention tool for health professionals. *American Journal of Preventive Medicine*, 40(1):67-71.

APPENDIX A: Starting the Conversation

Starting The Conversation: Diet

(Scale developed by: the Center for Health Promotion and Disease Prevention, University of North Carolina at Chapel Hill, and North Carolina Prevention Partners)

Over the past few months:

1.	How many times a week did you eat fast food meals or snacks?	Less than 1 time ☐ 0	1–3 times ☐ 1	4 or more times ☐ 2
2.	How many servings of fruit did you eat each day?	5 or more ☐ 0	3–4 ☐ 1	2 or less ☐ 2
3.	How many servings of vegetables did you eat each day?	5 or more ☐ 0	3–4 ☐ 1	2 or less ☐ 2
4.	How many regular sodas or glasses of sweet tea did you drink each day?	Less than 1 ☐ 0	1–2 ☐ 1	3 or more ☐ 2
5.	How many times a week did you eat beans (like pinto or black beans), chicken, or fish?	3 or more times ☐ 0	1–2 times ☐ 1	Less than 1 time ☐ 2
6.	How many times a week did you eat regular snack chips or crackers (not low-fat)?	1 time or less ☐ 0	2–3 times ☐ 1	4 or more times ☐ 2
7.	How many times a week did you eat desserts and other sweets (not the low-fat kind)?	1 time or less ☐ 0	2–3 times ☐ 1	4 or more times ☐ 2
8.	How much margarine, butter, or meat fat do you use to season vegetables or put on potatoes, bread, or corn?	Very little ☐ 0	Some ☐ 1	A lot ☐ 2

SUMMARY SCORE (sum of all items): _____

Scoring the STC tools

The scoring system for the STC tool is listed to the right of each answer (0-1-2). Answers in the far left column for any question is scored a 0, middle column is scored a 1, and right column is scored a 2. The higher the score, the more unhealthy the patient's diet or more sedentary life style.

The main purpose of the instrument is to guide counseling rather than use as a measurement tool. Providers and users of this tool could utilize a reduction in score to reinforce efforts in behavior change.