

OBESITY MANAGEMENT IN PRIMARY CARE TRAINING AND CERTIFICATE PROGRAM



Blueprint of Care: Putting It All Together

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Faculty and Disclosure Statement

Angela is a current fellow and past president of the American Association of Nurse Practitioners (AANP). Her tenure as the president of the AANP gives her a unique and overarching perspective of the multifunctional role of the Nurse Practitioner. She is also a Fellow of the Obesity Medicine Association.

Angela has her own primary care practice, NP from Home, LLC, and NP Obesity Treatment Clinic where she provides clinical services as a family nurse practitioner. Angela has a great deal of experience as a consultant in the development of patient education materials. She has given interviews on obesity treatment and authored several peer-reviewed articles and book chapters related to obesity as well as other topics for advanced practice nursing.

Angela has recently published a book, *Treating Obesity in Primary Care*, through Springer Publishing. She presents nationally and internationally on advanced practice with an emphasis on health policy, leadership and clinical care.

Disclosures:

- **Consultant:** Novo Nordisk
- **Advisor:** Celsius Biotechnology, Currax Pharmaceuticals, Eli Lilly and Company, Vivus
- **Speaker's Bureau:** Currax Pharmaceuticals, Novo Nordisk, Vivus

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Faculty and Disclosure Statement



Amy is a nationally respected obesity medicine PA. She has received the highest level of training in obesity medicine for PAs, receiving the Advanced Education of Obesity Medicine from the Obesity Medical Association. This distinction demonstrates her extensive knowledge of evidence-based obesity treatment approaches and an ongoing commitment to patient health.

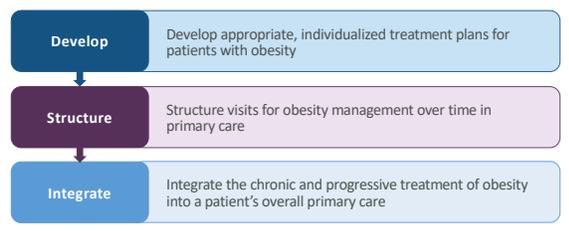
Beyond the office, Amy is immersed in helping to advocate and expand the understanding and complexity of obesity as a chronic disease. She is founder of the PAs in Obesity Medicine special interest group, as well as president and founder of the Arizona Obesity Organization. She is a guest lecturer at Yale School of Medicine Online PA Program on obesity medicine. More than anything, she appreciates being able to help educate other healthcare providers on how to provide optimal evidence-based care for individuals with pre-obesity and obesity.

Novo Nordisk: speakers' bureau for type 2 diabetes and obesity

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Objectives



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graph TD; A[Develop] --> B[Structure]; B --> C[Integrate];
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Develop - Develop appropriate, individualized treatment plans for patients with obesity

Structure - Structure visits for obesity management over time in primary care

Integrate - Integrate the chronic and progressive treatment of obesity into a patient's overall primary care

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Four Pillars of Comprehensive Management

"Medical/Clinical" Management and Evaluation	Behavioral Change	Nutrition	Physical Activity
<ul style="list-style-type: none">HistoryPhysical examLaboratory evaluationObesogenic medication reviewSpecialist referralsBariatric surgery candidatePharmacological management<ul style="list-style-type: none">Anti-obesity medicationsOptimization of other medications	<ul style="list-style-type: none">SleepStressTriggersIntensive behavioral therapy (IBT), SMART goalswhole-person careetc.	<ul style="list-style-type: none">Education to support nutrition to support their individual metabolic profiles and sustainable plan	<ul style="list-style-type: none">NEATDaily activityAerobic trainingAnaerobic trainingSupport long-term management

NEAT, non-exercise activity thermogenesis; SMART, specific, measurable, attainable, realistic, time bound.

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Where to Start?

Visit 0



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Intake

- Susan, a 36-year-old woman, arrives at the office for a new patient intake
- She is new to the area and is establishing for primary care
- All new patients have a measured height
- The MA notes a BMI of 34 kg/m² – this triggers the system in place
 - In the room, the MA explains to the patient that a new “vital sign” has been added – a waist circumference
 - Waist circumference (WC) is 40”

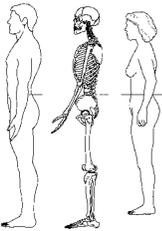


BMI, body mass index; MA, medical assistant.
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How to Perform Waist Circumference Measurement

- Patient should be standing with arms hanging at his/her sides
- Place tape measure on bare skin with measuring tape that doesn't easily stretch
- Locate upper hip bone and top of the right iliac crest
- Place tape parallel to floor around abdomen through top of left iliac crest
- Keep tape snug, but not tight
- Measure at end of expiration



Centers for Disease Control and Prevention. <https://www.cdc.gov/rctis/data/rhaines3/manuals/anthro.pdf>. Accessed September 7, 2021.
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Intake

- PMH
 - Migraines, DM, HTN, osteoarthritis, asthma
- SH: married with one child 8 years old; works as an accountant part time
- Pregnancy prevention plan: husband had vasectomy
- FH: all family members are heavy and most have DM, HTN; dad had an MI; no cancer history
- Medications
 - Sumatriptan prn (uses 10-15 times a month)
 - Propranolol 80 mg ER for headache prevention (started 2 months ago before leaving previous practice)
 - Losartan 50 mg, HCTZ 12.5mg
 - Ibuprofen daily 800 mg BID
 - Albuterol inhaler prn, uses 5-6 times a month
 - Montelukast 10 mg daily
 - Metformin 2000 mg ER
 - Empagliflozin 10 mg qam (started 2 months ago)

BID, twice a day; DM, diabetes mellitus; ER, extended release; FH, family history; HCTZ, hydrochlorothiazide; HTN, hypertension; MI, myocardial infarction; PMH, past medical history; SH, social history.

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Intake

- General: Generally able to accomplish all activities of daily living; works as a medical assistant; no change in strength or exercise tolerance
- Head: No headaches, no vertigo
- Eyes: Normal vision, no diplopia
- Chest: No dyspnea; has not used inhaler in past 4 weeks
- Heart: No chest pains, no palpitations, no syncope, no orthopnea
- Abdomen: No dysphagia, no abdominal pains, no bowel habit changes, no emesis
- Neurologic: No weakness, no tremor, no seizures, no changes in mentation; has not needed sumatriptan in past month
- Endocrine: No changes in skin, no excessive thirst or urination
- Psychiatric: No depressive symptoms, no changes in sleep habits, no changes in thought content
- Sleep: Wakes feeling tired every day
- Pain: Knees are painful when walking daily

RDS, review of symptoms.

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Intake

- VS: BP 130/88 mmHg; HR 80 bpm; RR 16; Height 66"; Weight 211 lbs; BMI 34 kg/m²
- General: patient in NAD, cooperative with examiner, well groomed, alert and oriented x 4
- Eyes: PERRLA, conjunctivae clear, no discharge; Ears: Canals clear bilaterally, TMs normal bilaterally; Nose: Moist, pink mucosa without lesions or mass; Throat: no exudates, no erythema; Fundoscopic exam: Disc margins are sharp, cup to disc ratio <50%, no AV nicking, no exudates or hemorrhages noted
- Neck: Supple, no masses, no thyromegaly, no bruits, no lymphadenopathy
- Chest: BSCTA bilaterally, no rales, no rhonchi, no wheezes, speaking in full sentences, respirations nonlabored
- Heart/CV: RR, no rubs, no gallops; radial and pedal pulses 2+ equal bilaterally
- Abdomen: bowel sounds normal, percussion tones normal, SNT without rebound, no masses, no hepatomegaly
- Neuro: alert and oriented x 4, CN II-XII grossly intact, stable gait, Romberg negative, DTRs 2+ equal bilaterally, recent and distant memory grossly intact
- Extremities: Warm, well perfused, no edema, grips and pushes 2+ equal bilaterally
- Skin: no noted acanthosis nigricans, no striae

AV, arteriovenous; BP, blood pressure; bpm, beats per minute; BSCTA, breath sounds clear to auscultation; CN, cranial nerves; CV, cardiovascular; DTR, deep tendon reflexes; HR, heart rate; NAD, no apparent distress; PERRLA, pupils, equal, round, reactive, light, accommodation; RR, respiratory rate; SNT, soft, non-tender; TM, temporal membrane.

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Visit Zero: Asking Permission and Documentation



- Ask permission to discuss weight
- Document obesity and BMI diagnosis code to chart
- If patient says no:
 - Document obesity diagnosis code and BMI
 - Tell them you are here to help support
 - Follow up with asking permission at the next office visit
- If patient says yes:
 - Give patient obesity-specific intake form
 - Schedule obesity-specific visit
 - Recommend 40-60 minutes

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Asking Permission



Susan, when we look at your vital signs, it shows your BMI is elevated. Are you ok if we discuss your weight?

UCorn Rudd Center for Food Policy & Obesity



I guess so. What exactly does it mean having an elevated BMI?

Picture courtesy of Canadian Obesity Network

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Use Person-First Language that is Empowering, Not Stigmatizing

Words to use:

- Weight
- Excess weight
- BMI/body mass index
- Nutrition plan/guide
- Physical activity/daily movement

Could go both ways pending on how used in conversation:

- Overweight
- Fat/fat cells
- Affected by obesity

Words that create bias/stigma

- Morbidly obese
- Morbid obesity
- Willpower
- Calories in/calories out
- Diet/exercise
- Obese

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Person-First Language

- Recognizes the potential hazards of referring to or labeling individuals by their disease
- Thus, "patient affected by preobesity or obesity" or "patient with preobesity or obesity" are preferred over "obese patient"

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What Are Her Diagnoses?

- Obesity, E66.8
- BMI 34 kg/m²
- Migraines
- T2DM, controlled
- HTN
- Osteoarthritis, bilateral knees



T2DM, type 2 diabetes mellitus. Picture courtesy of Canadian Obesity Network. Copyright © 2022 AAPA, TCA, NACE. All rights reserved.

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Weight Bias vs. Weight Stigma

- Weight stigma refers to the discriminatory acts and ideologies targeted toward individuals because of their weight and size
- Weight bias refers to the negative ideologies associated with obesity
- Weight stigma is a result of weight bias



World Obesity. <https://www.worldobesity.org/what-we-do/our-policy-priorities/weight-stigma>. Accessed September 3, 2021. Copyright © 2022 AAPA, TCA, NACE. All rights reserved.

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Weight Bias

- Weight bias and stigma can:
 - Impact approach clinically
 - Limit reimbursement
- Can keep patients from seeking healthcare
 - Resulting in increased morbidity and mortality



Courtesy of Canadian Obesity Network. 18. Fildes M. <https://doi.org/10.1016/j.puhe.2019.04.014>. 2019;161:101-10. University of Connecticut. <https://today.uconn.edu/2017/02/weight-biased-stigma-obstacle-sustaining-weight-loss/>. Accessed September 15, 2021. Copyright © 2022 AAPA, TCA, NACE. All rights reserved.

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Weight Stigma



“Experiencing weight stigma undermines health by contributing to obesity, metabolic disease, psychological disorders, and ultimately mortality.”

Courtesy of World Obesity Federation
Himmelstein M, et al. 2018, Obesity 30(10):1-9
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Which of the following describes weight stigma?

Polling Question



- A. Actions against people that cause exclusion or inequities
- B. Negative attitudes toward a person because of their weight
- C. Stereotypes and labels assigned to people who have obesity
- D. Attitudes affecting actions and decisions unconsciously

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Obesity Management History Tools



Questionnaire

Patient completes prior to visit and clinician reviews with patient

Clinician asks questions during visit



Weight Graph

Illustrates timing of changes in weight and contributing factors

Patient completes prior to visit or with clinician

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Visit 1

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Visit 1

- VS: BP 136/82 mmHg; HR 82 bpm; RR 16; Height 5'6"
- Weight history
 - Patient has been as high as 300 lbs; has been attending WW for past 4 months – did this previously and then regained
 - Finds she has cravings for food most evenings, especially sweets
- No specific activity – walks about 3000 steps a day using her watch to monitor, but can't walk more as it is too painful
- Review labs from previous provider done 2 months ago
 - Dyslipidemia (patient unaware): total cholesterol is 245 mg/dL, LDL is 134 mg/dL, triglycerides 192 mg/dL, HDL 38 mg/dL
 - DM: HbA1c 7.2
 - Liver enzymes: AST 23 U/L, ALT 26 U/L

ALT, alanine transaminase; AST, aspartate aminotransferase; HbGA1c, hemoglobin A1c; HDL, high density lipoprotein; LDL, low density lipoprotein.
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Visit 1

- Medications
 - Sumatriptan prn (uses 10-15 times a month)
 - Propranolol 80 mg ER for headache prevention (started 2 months ago before leaving previous practice)
 - Losartan 50 mg, HCTZ 12.5 mg
 - Ibuprofen daily 800 mg bid
 - Albuterol inhaler prn, uses 5-6 times a month
 - Montelukast 10 mg daily
 - Metformin 2000 mg ER
 - Empagliflozin 10 mg qAM (started 2 months ago)
- Screening tools: PHQ-9 3, BED-7 0, STOP-BANG 5, PAR-Q – pain in knees
- PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences, radial pulse has RRR, skin is normal color, capillary refill is < 2 seconds, gait is normal
- Assessment: migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity

BED-7, Binge Eating Disorder Questionnaire-7; PE, physical exam; PAR-Q, Physical Activity Readiness Questionnaire; PHQ9, Patient Health Questionnaire-9
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	?
	Polling Question
What class and stage would Susan's obesity be classified as?	A. Class 1, Stage 2 B. Class 2, Stage 1 C. Class 2, Stage 2 D. Class 3, Stage 3
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Visit 1	
<ul style="list-style-type: none">• Assessment: migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity• Medications: sumatriptan, propranolol, losartan, ibuprofen, albuterol inhaler, montelukast, metformin, empagliflozin• Screening tools: PHQ-9 3, BED-7 0, STOP-BANG 5, PAR-Q – pain in knees• PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences, radial pulse has RRR, skin is normal color, capillary refill is <2 seconds, gait is normal	
<small>RRR, regular rate and rhythm. Copyright © 2022 AAPA, TCA, NACE. All rights reserved.</small>	

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	?
	Polling Question
All of the following are likely referrals at this point except:	A. Physical therapy B. Sleep specialist C. Orthopedics D. Cardiologist
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Medical/Clinical Management and Evaluation

- **Obesogenic Medication Evaluation:**
 - Stop propranolol, monitor BP and migraine incidence
- **Obesity-related Complications**
 - May need to add medication for diabetes, ask patient to monitor fasting glucose and three 2-hour postprandial measurements
- **Referrals**
 - Sleep study (STOP-BANG score and neck circumference)
 - Physical therapy if patient unable to walk without pain

BP, blood pressure.
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Nutrition Pillar

Track food until next visit

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Food choices plans

OPTIONS:

There is research out of Tulane University indicating that following the guidelines of the Mediterranean Plan provides very good health benefits, while the research on whole food, plant based is also encouraging, additionally especially for those with any metabolic component (like diabetes either yourself or a history in the family) the ketogenic eating plan (or low carbohydrate) has additional research (for some patients).

populations. All of these plans are "clean" food - meaning not processed, partial meal replacement to make well. And finally, all the guidelines reduced calorie of 500 Kcal a day were eating more than 2000 cal.

While looking over these options week here are the first small steps:

1. Start to reduce processed labels and find out if there's
- if the food comes past

An example is bread - four ingredients - Flour with highlighted items items that your body of Wheat Flour, Water, S

Mindful Eating

What is Mindfulness?

Mindfulness means being fully aware of what is going on within and around you in each moment... the things around you eating may help with weight management. Being fully conscious of the amount of food you eat and how you feel physically, emotionally, and mentally. It means paying attention to each energy moment.

What is Mindful Eating?

Mindful eating is the concept of mindfulness and applies it to why, when, where, what, and how you eat. This means being aware of both the physical and emotional things connected to eating.

- **Observe your body:** Notice hunger and fullness signals that guide you to start and stop eating.
- **Be kind to yourself** or your reaction to food.
- **Notice your reactions to food:** What do you like, what don't you like?
- **Leave your food:** While eating, savor all of the taste, smell, texture, and texture of the food.

Mindfulness may help you to avoid overeating. First this may be for meal planning, and additional this may not be as pleasurable. This can help with portion control.

BE AWARE: Ask yourself, "Am I...?"

- Physically hungry? (on scale from "1" to "10")
- Eating out of boredom?
- Eating in the moment - Am I mindlessly reaching or overlooking each bite?

Adapted from **U.S. THINWAVE** by **Dr. Michaela T. Moore, PhD**
with Dr. University for the US
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Schedule Follow Up

- Follow-up visit in 2 weeks
- Handouts provided:
 - Mindfulness
 - Meal planning

WHY – Vision....

It's not "who's on first" or "too honest" enough you won't be able to stay motivated

After your visit by sharing your vision

- ... Losing weight because I have to
- ... Losing weight because I can't lose
- ... Losing weight because I can't have...
- ... Being strong which looks like... not needing a nap in the afternoon and walking instead
- ... Lower BP
- ... Lower blood sugar
- ... Take fewer medicines
- ... Move better which looks like
- ... walking all day or work with my family keeping up with the kids
- ... Being a healthy adult
- ... Being fit

SUCCESS

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Visit 2

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Visit 2

- History
 - ROS: no changes, has not had to use albuterol or sumatriptan
- VS: BP 128/82 mmHg; HR 78 bpm; RR 16; O2 98%; Weight 207 lbs; BMI 33.41 kg/m²
- PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences; radial pulse has RRR, skin is normal color, capillary refill is <2 seconds, gait is normal
- FBS: range 98-168 mg/dL, 2-hour postprandial 200-210 mg/dL
- Assessment
 - Migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity class II, stage II
- Medications
 - Sumatriptan prn (uses 10-15 times a month)
 - Losartan 50 mg, HCTZ 12.5 mg
 - Ibuprofen daily 800 mg bid
 - Albuterol inhaler as needed, uses 5-6 times a month
 - Montelukast 10 mg daily
 - Metformin 2000 mg ER
 - Empagliflozin 10 mg qAM (started 2 months ago)

FBS, fasting blood sugar.
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Pillars of Care Review

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Medical/Clinical

- Discuss anti-obesity medication (AOM) for intensification of obesity treatment
- Increase empagliflozin to 25 mg
- Has Susan scheduled appointment from sleep apnea referral?



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Nutrition

- Review food log – eats fast food 3-4 times a week, drinks NSS beverages – 32 ounces a day, CHO 330 g average, protein 35 g, calories 1500-2800 range
- Handouts – protein grams and protein snacks, hunger scale, medication handout
- Determine food plan
 - Selecting a plan or modification process:
 - 30 grams of protein with breakfast
 - Decrease CHO to less than 200 g – use log to teach what a CHO is
 - Needs to monitor hunger for next visit

CHO, carbohydrate; NSS, non-sugar sweetened beverages; PRO, protein.
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Physical Activity



- Review physical activity – averaging 3000 steps a day
- Has Susan scheduled appointment from referral for physical therapy?

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Behavioral



- Create SMART goal related to food for next visit
- Reduce carbohydrates to under 200 g/day

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Schedule Follow Up



- Follow-up visit in 2 weeks

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Visit 3

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Visit 3

- History
 - Go over tracking of food and water intake, increase of empagliflozin
- VS: BP 126/84 mmHg; HR 80 bpm; RR 16; O2 97%; 204 lbs; BMI 32.92 kg/m²
- History
 - ROS: no changes, has not had to use albuterol or sumatriptan
- PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences, radial pulse has RRR, skin is normal color, capillary refill is <2 seconds, gait is normal
- FBS: range 92-158, 2PP 180-205 (improving)
- Assessment
 - Migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity stage II, class III
- Medications
 - Sumatriptan prn (uses 10-15 times a month)
 - Losartan 50 mg, HCTZ 12.5mg
 - Ibuprofen daily 800 mg bid
 - Albuterol inhaler as needed, uses 5-6 times a month
 - Montelukast 10 mg daily
 - Metformin 2000 mg ER
 - Empagliflozin 25 mg qAM

PP, postprandial.

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Pillars of Care Review

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Medical/Clinical

- Evaluate patient hunger and discuss the use of medication to impact the hormonal dysregulation
 - Patient reports hunger still high, especially at night
- Ask about asthma – any use of rescue inhaler? (no)
- Ask about migraines – any need for sumatriptan (once in past week)
- Blood sugars improving and tolerating increase of empagliflozin with no issues

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Using RXAOM for Shared Decision-making

	R	X	A	O	M
Liraglutide	Cost – will need patient to check coverage	No history of cancer or MENS	Diabetes without control	If 3 mg not approved could prior auth the lower dose for diabetes	✓
Naltrexone/bupropion	\$99/month	HTN is controlled, no seizure disorder or eating disorder, no opioid use	Cravings for sweet foods in evening Possibly depression but will need to monitor closely		✓
Orlistat	OTC ~\$11/month Rx ~\$450/month	No contraindication			✗ Patient concerned about GI SE
Phentermine	Low cost			Long-term use	✓
Phentermine/topiramate	\$98/month if not covered	No glaucoma, hyperthyroidism, no MAOI	Migraine prophylaxis	Could use just topiramate off label	✓
Semaglutide	Cost – will need patient to check coverage	No history of cancer or MENS	Diabetes without control	If 2.4 mg not approved could prior authorize the lower dose for diabetes	✓

MAOI, monoamine oxidase inhibitors; MENS, multiple endocrine neoplasia; OTC, over the counter; RX, prescription.
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Polling Question 

What medication is your first choice for Susan?

- Liraglutide
- Naltrexone/bupropion
- Phentermine
- Phentermine/topiramate
- Semaglutide

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Nutrition

- Had 30 g protein 5 days of 7 – not on weekends
- Review SMART goal – any roadblocks
 - CHO under 200 g every day
- Revisit eating decisions – modifications with SMART goals versus meal plan
 - Continue with modifications
 - Could decrease fast food or continue to decrease carbohydrate load

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Physical Activity



She is doing well with PT and slowly increasing her daily steps

PT, physical therapy

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Behavioral



- Create SMART goal around eating for next 2 weeks
- Continue to decrease carbohydrates – new goal 150 g; use diary to find more places to decrease CHO
- Intensive lifestyle interventions (ILI) – select an education handout for today; 5-minute review of the handout

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Lose Weight By Planning Ahead!

Plan ahead, here are some ideas:

- Set your physical activity and dietary goals.
- Plan your menu for the week.
- Go to the grocery store with a list.
 - Stick to the list.
 - Shop on the sides of the store.
 - Avoid going to the grocery store when you're hungry.
- Fill your plate in the kitchen and bring it to the table to eat. Leave the serving bowls in the kitchen.
- Drink plenty of water throughout the day and with your meals. 8 ounces of water before each meal.
- Choose restaurants with healthy options. Avoid "all-you-can-eat" buffets.
- Don't go to a social event on an empty stomach.
- Pack a healthy meal and/or snack for work or travel.
- Make time for physical activity. Ten-minute blocks make a difference.
- Plan a physical activity that you enjoy.
 - Look for a physical activity class or group you can join.
 - Find a walking buddy.
 - Join local physical activity events in your community.
- Consider activities you can do throughout the day.
 - take the stairs
 - park farther away
 - walk to the store
 - clean your home

Adapted from the "HEALTHY" for LIFE program, Inc. 2011
Flagstaff, AZ
520.743.8213
Fax: 520.743.8213

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Schedule Follow Up



2-week follow-up visit scheduled

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Visit 4

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Visit 4

- VS: BP 128/82 mmHg; HR 78 bpm; RR 16; O2 98%; Weight: 202 lbs; BMI 32.60 kg/m²
- Blood sugar continues to improve
 - FBG range 88-98 mg/dL, 2-hour postprandial 150-168 mg/dL (have improved with change in eating)
- Assessment
 - Migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity, OSA (newly diagnosed)
- PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences, radial pulse has RRR, skin is normal color, capillary refill is <2 seconds, gait is normal
- Medications
 - Sumatriptan Ptm (Uses 10-15 Times A Month)
 - Losartan 50 Mg, HCTZ 12.5 Mg
 - Ibuprofen Daily 800 Mg Bid
 - Albuterol Inhaler As Needed, Uses 5-6 Times A Month
 - Montelukast 10 Mg Daily
 - Metformin 2000 Mg ER
 - Empagliflozin 25 Mg Qam

FBG, fasting blood glucose; OSA, obstructive sleep apnea. Copyright © 2022 AAPN, TCN, NACE. All rights reserved.

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Pillars of Care Review

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Medical/Clinical



- Medication decision for AOM – opted for phentermine/topiramate ER
 - Handout – medication, pregnancy prevention, informed consent
 - Pregnancy prevention is monogamous relationship and husband's vasectomy
- Sleep specialist study results back – patient has OSA and is being fitted for BIPAP
- Doing well with improvement of her blood sugar control

BIPAP, bilevel positive airway pressure. Copyright © 2022 AAPN, TCN, NACE. All rights reserved.

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Nutrition



- Go over tracking of food and water intake
 - Continues adding protein at breakfast
- Review SMART goal – any roadblocks
 - Met CHO goal 10 of 14 days
 - Stop here and determine the issues on the other 4 days – help patient look for solutions
- Revisit eating decisions – modifications with SMART goals versus meal plan

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Physical Activity



- She continues in physical therapy
- Daily steps at 3000/day

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Behavioral



- ILI: 5-minute review of the handout, *Not Enough Time*
- Create SMART goal around eating for next 2 weeks
 - Same goal of 150 g/day or less, increase protein to 80 g/day

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Not Enough Time?

Making the time to focus on your weight and health can be challenging. Here are some tips:

- Write down everything you need or want to do each day. Decide which are absolute "must do" things. Make physical activity and healthy eating as top on the list and schedule them. Consider the app **Timeful** to assist with this.
- Fill in any leftover time with those things that you may want to do, but that aren't as important as the others.
- Always allow extra time! Things usually take longer than expected. Allow time for grocery shopping, meal preparation, and warm-up and cool-down when exercising.
- Focus when doing tasks, stay present. Avoid letting little interruptions get in the way.
- If you are overcommitted, begin saying "No." Delegate some of your responsibilities to others whenever possible. You don't have to do everything yourself!



Adapted from VA **TARDUS** for **NF (Weekly Treatment Clinic)**
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 nfm@nfmva.org

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Schedule Follow Up



2 weeks to review AOM start

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Visit 5

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Visit 5

- VS: BP 125/78 mmHg; HR 79 bpm; RR 16; O2 99%; Weight: 200 lbs; BMI 32.30 kg/m²
- Blood sugar continues to improve
 - FBG range 88-98 mg/dL, 2-hour postprandial 150-168 mg/dL (have improved with change in eating)
- Assessment
 - Migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity, OSA (newly diagnosed)
- PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences, radial pulse has RRR, skin is normal color, capillary refill is <2 seconds, gait is normal
- Medications
 - Sumatriptan prn (uses 10-15 times a month)
 - Losartan 50 mg, HCTZ 12.5 mg
 - Ibuprofen daily 800 mg bid
 - Albuterol inhaler as needed, uses 5-6 times a month
 - Montelukast 10 mg daily
 - Metformin 2000 mg ER
 - Empagliflozin 25 mg qam
 - Phentermine/topiramate XR 7.5 mg/46 mg

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Pillars of Care Review

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Medical/Clinical



- Evaluate migraine incidence
- Review use of asthma rescue inhaler
- Review blood sugar logs
- She is on BiPAP and is using it nightly
- Check for side effects from AOM
 - Evaluate hunger on the beginning dose
 - tolerating well without side effects
 - if not improved, increase dose

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Nutrition



- Go over tracking of food and water intake
 - CHO under 150 g each day
 - 30 g protein daily for breakfast and averaging 50 g/day
- Review SMART goal – any roadblocks
 - Difficulty getting protein grams higher
- Revisit eating decisions – modifications with SMART goals versus meal plan
 - Increase protein to 1-1.2 g/kg

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Physical Activity



- She continues in physical therapy
- Daily steps 3000/day

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Behavioral



- ILI: select a VA Move education handout for today – 5-minute review of the handout
- Create SMART goal around eating for next 2 weeks
 - Increase protein to 80 g/day – refer to protein handouts given previously
- SMART goal
 - Increase steps by 500 each day to 4000 total

VA, veteran's affairs. Copyright © 2022 APPA, TCA, NACE. All rights reserved.

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Schedule Follow Up



2-4 week follow up

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According to the ACSM preparticipation guidelines, which of the following is accurate?

Polling Question



Susan has DM, HTN, osteoarthritis, asthma, and migraines. Her BMI is 34. You diagnosed her with class 2, stage 2 obesity. You ask permission to address her obesity, and she indicates she would like to discuss an obesity management plan. She returns in 4 weeks. As part of her physical activity assessment and counseling, she indicates that she does not currently participate in regular physical activity.

- A. Medical clearance not necessary; light-to-moderate activity recommended with progression to vigorous
- B. Medical clearance recommended; following clearance, light-to-moderate activity recommended with progression as tolerated
- C. Medical clearance not necessary if no changes in symptoms within the last 12 months; moderate or vigorous intensity is recommended
- D. Medical clearance recommended; following clearance, moderate to vigorous activity recommended with progression as tolerated

ACSM, American College of Sports Medicine.
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Visit 6

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Visit 6

- VS: 125/78; HR 79; RR 16; pOx 99%; Weight 200 lbs; BMI 32.30
- BS continue to improve
 - FBG range 88-98, ZPP 150-168 (have improved with change in eating)
- Assessment
 - Migraines, DM, HTN, osteoarthritis, asthma, hyperlipidemia, obesity, OSA
- PE: Patient is alert and oriented x 4, recent and remote memory intact, breathing is nonlabored, patient speaking in full sentences, radial pulse has RRR, skin is normal color, capillary refill is <2 seconds, gait is normal
- Medications
 - Sumatriptan prn (uses 10-15 times a month)
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 - Ibuprofen daily 800 mg bid
 - Albuterol inhaler as needed, uses 5-6 times a month
 - Montelukast 10 mg daily
 - Metformin 2000 mg ER
 - Empagliflozin 25 mg qam
 - Phentermine/topiramate XR 7.5 mg/46 mg XR, extra release.

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Pillars of Care Review

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Medical/Clinical



- Check for side effects of medication for obesity; evaluate hunger on the beginning dose – if not improved, then increase dose
- Continue BiPAP use nightly, review impact on hunger/satiety hormones
- Check on use of rescue inhaler, use of migraine medication
- Order follow-up labs

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Nutrition



- Go over tracking of food and water intake
 - CHO under 150 g each day
 - 80 g protein daily
- Review SMART goal – any roadblocks
 - None
- Create SMART goal around eating for next 2 weeks
 - Increase protein to 80 g/day – refer to protein handouts given previously
 - Protein at 65 g per day – need to work on the roadblocks to increase protein

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Physical Activity



- Steps have increased to 4000/day
- She has been discharged from PT and is continuing in-home exercise program

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Behavioral



ILL: select a VA Move education handout for today – 5-minute review of the handout

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Schedule Follow Up



Follow up in 4-6 weeks

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Visit: Chronic Management (Indefinite)

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What Impact Has Management of Her Obesity Had?



- BP improved from 130/88 mmHg to 118/78 mmHg
- WC improved from 40" to 34"
- Weight improved from 211 lbs to 200 lbs
- BMI improved from 34 kg/m² to 32 kg/m²
- Her knee pain has improved, and she is able to be active without pain
- Laboratory assessment:
 - HbA1c reduction from 7.2% to 6.5%
 - Triglycerides improved to 118 mg/dL
 - HDL improved to 42 mg/dL

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Visit 7 Through 22



- Food
- Activity
- Weight
- Goals for QoL
- Evaluate other diseases intermittently during these visits

QoL, quality of life. Copyright © 2022 AAPD, TCA, NACE. All rights reserved.

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Metabolic Adaptation

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Maintaining Weight Loss

Weight regain typically occurs when medication is stopped¹

Successful weight maintenance includes:²

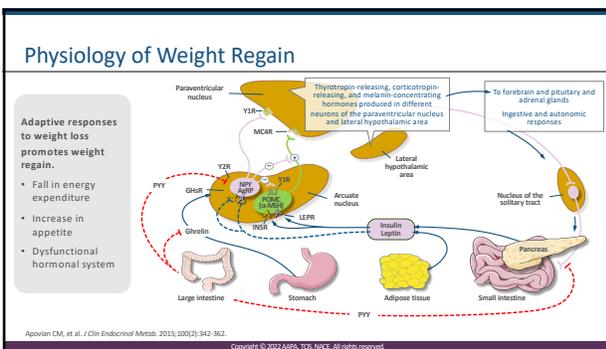
- Self-monitoring
- Weight loss of >2 kg in 4 weeks
- Frequent/regular attendance at weight loss program
- Self-belief that weight can be controlled

Maintaining weight loss is made difficult by the reduction in energy expenditure that weight loss induces

Continue the medical treatment program

1. Apovian CM, et al. / Clin Endocrinol Metab. 2015;100(2):342-62.2. Thomas JS, et al. Am J Prev Med. 2014;46(1):17-23
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Practice Notes/Pearls

- 01 Obesity has different causes for different people and is not one disease
- 02 Acknowledge that patients with a diagnosis are more likely to get treatment
- 03 Staging the disease has value for morbidity and mortality
- 04 No single eating plan is THE plan for everyone
- 05 Recognize other providers that can support the obesity treatment team

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Practice Notes/Pearls



- 06 Treating obesity treats many other diseases seen and treated in primary care
- 07 Recognize that there is greater urgency, with the need for more aggressive therapy, if the patient has complications and/or comorbidities with obesity
- 08 This is a journey in a chronic, relapsing, AND treatable disease, so partner with your patient to provide long-term care

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