Obesity Management in Primary Care

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An Obesity Paradox

Who's responsibility is it to ensure that a patient is counseled about obesity? (% Responding, single mention)

- Both patient and provider responsibility: 66% PCPs, 61% OB-GYNs, 66% NPs
- It is my responsibility: 31% PCPs, 36% OB-GYNs, 33% NPs
- It is the patient's responsibility: 2% PCPs, 1% OB-GYNs, 0% NPs
- Responsibility of other provider or referral: 1% PCPs, 2% OB-GYNs, 1% NPs

An Obesity Paradox

- **Under-diagnosis**
  - BMI 30-35: 10.2% diagnosed
  - BMI >50: 56.8% diagnosed

- **Under-documentation**
  - 34% of 33,718 patients with severe obesity

- **Under-discussion**
  - 54% with BMI >25 told of excess weight
  - 2% of PCPs discussed recorded BMI with patients

- **Under-counseling**
  - 67% with severe obesity receive weight loss advice
  - Weight discussions last as little as 55 seconds

- **Under-Treatment**

An Obesity Paradox

HCP Knowledge of Basic Obesity Guideline Recommendations

Today

• Why is it so hard to lose weight and keep it off?
• Key clinical guidelines for obesity management
• Clinical obesity treatment options
Why Is It So Hard To Manage Weight?

Effect of Weight Loss on Satiety

Satiety/fullness

Baseline Weight
Weight-10%

Effect of Weight Loss on EE

CDC Framework for Addressing Obesity

- Home & Family
- School
- Community
- Work Site
- Healthcare
- Genetics
- Psychosocial
- Other Personal Factors
- Food and Beverage Industry
- Agriculture
- Education
- Media
- Government
- Public Health Systems
- Healthcare Industry
- Business and Workers
- Land Use and Transportation
- Leisure and Recreation

Individual Factors

Sectors of Influence

Social Norms and Values

Behavioral Settings

Food and Beverage Intake

Physical Activity

Energy Intake

Energy Expenditure

Energy Balance
Key Obesity Guidelines

AHA/ACC/TOS Guidelines for Managing Overweight and Obesity in Adults


Pharmacologic Management of Obesity: An Endocrine Society Clinical Practice Guideline

Sustained weight loss of 3-5% produce clinically meaningful health benefits, and greater weight loss produces greater benefits.

Adults with Obesity and Pre-Diabetes (n=3234)

Behavioral Therapy (1079)  Metformin (1073)  Placebo (1082)

Modest Weight Loss Improves Health and Health Risks

# Modest Weight Loss Improves Health

<table>
<thead>
<tr>
<th>Condition</th>
<th>% weight loss for therapeutic benefit</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Prevention</td>
<td>3% to 10%</td>
<td>DPP (Lancet, 2009) SEQUEL (Garvey et al, 2013)</td>
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<tr>
<td>Hypertension</td>
<td>5% to &gt;15%</td>
<td>Look AHEAD (Wing, 2011)</td>
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<tr>
<td>Dyslipidemia</td>
<td>3% to &gt;15%</td>
<td>Look AHEAD (Wing, 2011)</td>
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<tr>
<td>HbA1c</td>
<td>3% to &gt;15%</td>
<td>Look AHEAD (Wing, 2011)</td>
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<tr>
<td>NAFLD</td>
<td>10%</td>
<td>Assy et al, 2007; Dixon et al, 2004; Anish et al, 2009</td>
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<tr>
<td>Sleep Apnea</td>
<td>10%</td>
<td>Sleep AHEAD (Foster, 2009) Winslow et al, 2012</td>
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<tr>
<td>Osteoarthritis</td>
<td>5-10%</td>
<td>Christensen et al, 2007; Felson et al, 1992; Aaboe et al, 2011</td>
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<td>Stress Incontinence</td>
<td>5-10%</td>
<td>Burgio et al, 2007 Leslee et al, 2009</td>
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<tr>
<td>GERD</td>
<td>5-10% (women) 10% (men)</td>
<td>Singh et al, 2013 Tutujian R, 2011</td>
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<tr>
<td>PCOS</td>
<td>5-15% (&gt;10% optimal)</td>
<td>Panidis D et al, 2008; Norman et al, 2002; Moran et al, 2013</td>
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</tbody>
</table>
Clinical Obesity Treatment Modalities

- Self-directed management
- Intensive behavioral therapy
- Structured or medically monitored diets
- Pharmacotherapy
- Medical devices
- Surgical therapy
Clinical Obesity Treatment Modalities

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Guidelines For Behavioral Therapy

- Patients who need to lose weight should receive a comprehensive behavior management program of at least 6 mo (Level A)
- Gold standard is on-site, high-intensity (14+ sessions during initial 6 mo) comprehensive intervention, either individually or in a group setting, delivered by trained interventionist and persisting for at least 1 year (Level A)
- Low-moderate intensity primary care interventions have not been shown to be effective (Level A)
- Other approaches (e.g., web- or phone-based) lead to less weight loss and health improvement (Level B)

## Behavioral Therapy for Obesity

| Counseling | • Regular interaction via group or individual contact  
| • Intensive initial counseling frequency |
| Diet | • Calorie-reduced diet  
| | • 1200-1500 kcal for <250 lb; 1500-1800 kcal for ≥250 lb |
| Physical activity | • 150 minutes/week of moderate activity  
| | • Strength training desirable |
| Behavioral strategies | • Structured curriculum of behavior change education, including identifying target behaviors and building skills to achieve target behaviors  
| | • Self-monitoring of food intake, physical activity, and/or weight  
| | • Goal setting, problem solving, stimulus control  
| | • Addressing barriers to change  
| | • Behavioral resources (e.g., portion controlled meals)  
| | • Regular feedback and guidance from an interventionist  
| | • Weight maintenance strategies and relapse prevention |
Behavioral Therapy in Patients with Obesity and Diabetes

Comorbidity Improvements With Behavioral Therapy

What About When Standard Behavioral Therapy Isn’t Enough?

• How do we escalate treatment for those who don’t respond to standard behavioral therapy?
• How do we enhance initial weight loss for those who don’t achieve sufficient weight loss to improve health status/risks?
• How do we support long term weight maintenance and minimize regain?
Clinical Obesity Treatment Modalities

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• Intensive behavioral therapy
• **Structured or medically monitored diets**
• Pharmacotherapy
• Medical devices
• Surgical therapy
Very Low Calorie Diet with Meal Replacement Products

Very Low Calorie Diet with Meal Replacement Products in T2DM

Lean ME et al. Lancet 2017;6736(17)
Clinical Obesity Treatment Modalities

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Effect of Weight Loss on Satiety

Guidelines For Pharmacotherapy

• Use pharmacotherapy as adjunct to diet, exercise, and behavioral counseling for adults... (Level 1, strong evidence)
  – with BMI 30+; or 27+ with comorbidity;
  – who are unable to lose and successfully maintain weight;
  – who meet label indications

• Assess efficacy and safety monthly for the first 3 months, then every 3 months thereafter (Level 2, weak evidence)

• At 3 months, if loss is 5% or more, continue; if not, discontinue and seek alternative approaches (Level 1, strong evidence)

• Use medications to promote long-term weight loss maintenance (Level 2, weak evidence)

Obesity Pharmacotherapy

- 5 FDA-approved short-term medications
  - Phentermine, phendimetrazine, diethylpropion, benzphetamine, methamphetamine
- 5 FDA-approved long-term medications
  - Orlistat
  - Phentermine/topiramate ER
  - Lorcaserin
  - Naltrexone/Bupropion SR
  - Liraglutide 3.0 mg
Pharmacotherapy Increases Magnitude and Likelihood of Weight Loss

Pharmacotherapy Increases Magnitude and Likelihood of Weight Loss

Long-Term Benefits Generally Require Long-Term Use

Outcomes by Responder Status

LOR = lorcanerin; PBO = placebo.

Pharmacotherapy Improves RFs and Prevents Comorbid Conditions

<table>
<thead>
<tr>
<th></th>
<th>Orlistat</th>
<th>Lorcaserin</th>
<th>Phentermine/topiramate ER</th>
<th>Naltrexone/bupropion SR</th>
<th>Liraglutide 3.0 mg</th>
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Pharmacotherapy Decreases Progression to Diabetes by 40-80%

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<tr>
<th>Medication (years)</th>
<th>Medication (%)</th>
<th>Placebo (%)</th>
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<tr>
<td>Lorcaserin (BLOOM/BLOSSOM)</td>
<td>2</td>
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<td>Phentermine-tpx (2 years) (SEQUEL)</td>
<td>&lt;1</td>
<td>4</td>
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<td>Liraglutide (3 years) (SCALE)</td>
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<td>Orlistat (4 years) (XENDOS)</td>
<td>2.9</td>
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## Tolerability

<table>
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<tr>
<th>Treatment</th>
<th>Completion (%)</th>
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<tr>
<td>Lorcaserin (BLOOM)</td>
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<td>Naltrexone-Bupropion (COR-1)</td>
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<td>Phentermine-tpx (CONQUER)</td>
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<td>Liraglutide (SCALE)</td>
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<td>Orlistat (XENDOS)</td>
<td>52</td>
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Guidelines For Bariatric Surgery

• Advise patients with BMI $\geq 40$ (or $\geq 35$ with comorbidity) that bariatric surgery may be an appropriate option to improve health (Grade A)
• Offer referral to an experienced bariatric surgeon for consultation and evaluation (Grade A)
• Insufficient evidence to recommend for or against surgery for BMI <35
• No clear guidance for medical devices

Medical Devices for Obesity Treatment

- VBLOC
- Gastric Balloons
- Gastric Band
- Aspire Assist

Kahan, 2016
Bariatric Surgery

Sleeve Gastrectomy

Roux-en-Y Gastric Bypass
Bariatric Surgery Has Long Term Data

Trajectories of Weight Change After Surgery

Bariatric Surgery Improves Comorbidities and Mortality

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Thank you

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