Clinical overview

Definitions and background

- **Centers for Disease Control and Prevention (CDC):**
  Overweight and obesity are labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems.

- **MedlinePlus** (a service of the U.S. National Library of Medicine and the National Institutes of Health, or NIH): “Obesity means having too much body fat. It is different from being overweight, which means weighing too much. The weight may come from muscle, bone, fat and/or body water. Both terms mean that a person’s weight is greater than what’s considered healthy for his or her height.”

- **The NIH definition of morbid obesity:**
  o Being 100 pounds or more above ideal body weight; or
  o Having a BMI of 40 or greater; or
  o Having a BMI of 35 or greater and one or more comorbid conditions

- **The National Heart, Lung and Blood Institute (NHLBI):** Assessment of an obese patient should include evaluation of BMI, waist circumference and overall medical risk. NHLBI uses the terms “clinically severe obesity” and “extreme obesity” in place of the commonly used term “morbid obesity.”

<table>
<thead>
<tr>
<th>Body mass index</th>
<th>Obesity class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt; 18.5</td>
</tr>
<tr>
<td>Normal</td>
<td>18.5 – 24.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0 – 29.9</td>
</tr>
<tr>
<td>Obesity</td>
<td>30.0 – 34.9</td>
</tr>
<tr>
<td></td>
<td>35.0 – 39.9</td>
</tr>
<tr>
<td>Extreme obesity</td>
<td>≥ 40</td>
</tr>
</tbody>
</table>

- The preferred obesity metric in research is body fat percentage (BF%) – the ratio of the total weight of a person’s fat to his or her body weight. Accurate measurement of BF% is much more difficult than measurement of body mass index (BMI); BMI can be used to approximate BF%.

**Body mass index (BMI)**

BMI is a mathematical calculation – a person’s weight in kilograms divided by height in meters squared. Although BMI correlates with the amount of body fat, BMI does not directly measure body fat. Thus, some people (athletes, for example) may have a BMI identifying them as overweight even though they do not have excess body fat.

- Other methods to measure body fatness include underwater weighing, bioelectrical impedance, dual-energy X-ray absorptiometry and isotope dilution. However, these methods are not always readily available, they can be expensive, they need to be conducted by highly trained personnel, and they can be difficult to standardize across observers or machines, complicating comparisons across studies and time periods.

In general, BMI is an inexpensive and easy-to-perform method of screening for obesity/morbid obesity. Even though a high BMI can be an indicator of high body fatness, calculation of BMI is only a screening tool; it is not diagnostic of the body fatness or health of an individual.

The correlation between BMI and body fatness is fairly strong, but even if two people have the same BMI, their levels of body fatness may differ.

To determine if a high BMI is a health risk for an individual person, a physician would perform further assessments (such as those methods noted above), as well as evaluations of diet, physical activity, personal history including comorbidities, family history and other appropriate health screenings.

**Summary:** Physicians use multiple resources and criteria to define and diagnose obesity-related conditions. BMI is a screening tool only. It is not the only criterion used to diagnose obesity/morbid obesity. Diagnosis code assignment is based on the physician’s clinical judgment and corresponding medical record description of the specific obesity condition.
Clinical overview – continued

Causes and risk factors for development of obesity
- Physical inactivity
- Unhealthy diet
- Unhealthy eating habits
- Lack of adequate sleep
- Certain medications
- Certain medical conditions
- Genetics and family history
- Older age
- Social and economic issues
- Cultural issues

Prevention and self-management
- Nutritionally balanced diet
- Healthy eating habits, including portion control
- Regular physical exercise
- Good sleep habits
- Tracking and trending weight, BMI and waist circumference
- Behavior modification
- Support groups
- Realistic goal setting

Signs and symptoms
- Clothes feeling tight/need for larger-size clothing
- Increased weight and BMI
- Increased waist circumference

Medical treatment
- Medications
- Weight-loss surgery

Diagnostic tools
- Medical history and physical exam
- Calculation of height, weight and BMI
- Measurement of body fat percentage
- Measurement of waist circumference
- Evaluation of comorbid conditions

Complications and health risks

Short-term
- Shortness of breath with activity and exertion
- Difficulty sleeping
- Snoring
- Fatigue
- Back and joint pain

Long-term
- High blood pressure and hypertension
- High cholesterol and triglycerides
- Type 2 diabetes mellitus
- Metabolic syndrome
- Heart disease
- Stroke
- Kidney disease
- Sleep apnea
- Cancer
- Fatty liver disease
- Gallbladder disease
- Osteoarthritis

Prevention and self-management
- Nutritionally balanced diet
- Healthy eating habits, including portion control
- Regular physical exercise
- Good sleep habits
- Tracking and trending weight, BMI and waist circumference
- Behavior modification
- Support groups
- Realistic goal setting

Medical treatment
- Medications
- Weight-loss surgery
Documentation tips for physicians

Subjective
- Document the presence or absence of any current symptoms related to obesity, morbid obesity, overweight, etc.

Objective
- Document the patient’s height, weight and BMI. (The medical coder is not allowed to use the patient’s documented height and weight to calculate the BMI and assign a corresponding ICD-10-CM code. Rather, the healthcare provider must specifically document the BMI in the medical record.)
- In the physical exam, document with the highest specificity any current associated observations or findings (such as overweight, obese, morbidly obese, etc.).

Final assessment/impression
- Document the overweight or obesity diagnosis with the highest level of specificity, as in “morbid obesity,” “severe obesity,” “extreme obesity,” etc.
- Include any associated diagnoses that caused the overweight or obesity condition.
  - Use terms that clearly show the cause-and-effect relationship (such as “due to,” “secondary to,” “related to,” etc.).
- Include any coexisting diagnoses that are impacted by the overweight or obesity diagnosis.
- Do not describe a current obesity diagnosis as “history of.”

Plan
- Document a clear and concise treatment plan (e.g., referral to nutritionist; patient education related to the obesity condition with information regarding balanced diet; plan for return follow-up; etc.).
Obesity/body mass index (BMI)

ICD-10-CM tips and resources for coders

### Coding obesity

Overweight and obesity classify to subcategory E66:

- **E66.0**: Obesity due to excess calories
  - **E66.01**: Morbid (severe) obesity due to excess calories
  - **E66.09**: Other obesity due to excess calories

- **E66.1**: Drug-induced obesity

- **E66.2**: Morbid (severe) obesity with alveolar hypoventilation

- **E66.3**: Overweight

- **E66.8**: Other obesity

- **E66.9**: Obesity, unspecified

### Use an additional code to identify BMI if known (Z68).

Individuals who are overweight, obese, morbidly obese, etc., are at risk for certain medical conditions when compared to persons of normal weight. Therefore, these diagnoses always are clinically significant and reportable when they are documented and supported in the medical record as current conditions.

### Coding BMI – category Z68

Adult BMI codes are used for persons 21 years of age or older and classify as follows:

- **Code Z68.1**: Body mass index [BMI] 19 or less, adult

- **Subcategories (fifth digits required to identify the BMI range within each of these subcategories)**
  - **Z68.2-**: Body mass index [BMI] 20-29.9, adult
  - **Z68.3-**: Body mass index [BMI] 30-39.9, adult
  - **Z68.4-**: Body mass index [BMI] 40 or greater, adult

### Clinical significance of BMI

BMI codes are reported only as secondary diagnoses in association with a primary diagnosis for which the BMI has clinical significance and only when the BMI meets the definition of a reportable additional diagnosis (per ICD-10-CM Official Guidelines for Coding and Reporting).

- Principal or first-listed diagnoses are not limited to overweight, underweight or obesity-related conditions.

- A primary diagnosis for which BMI has clinical significance is any primary condition that can be
  a) Improved if the patient loses weight or lowers his/her BMI; or
  b) Worsened if the patient gains weight or increases his/her BMI.

Examples include but are not limited to: diabetes mellitus, hypertension, obstructive sleep apnea, hyperlipidemia.

### Additional tips for coding BMI

Code assignment for BMI may be based on medical record documentation from clinicians who are not the patient’s provider (i.e., physician or other qualified healthcare practitioner legally accountable for establishing the patient’s diagnosis), since this information is typically documented by other clinicians involved in the care of the patient (e.g., a dietitian often documents BMI).

- However, the associated primary diagnosis (such as overweight, obesity, diabetes mellitus, etc.) must be documented by the patient’s healthcare provider during a face-to-face visit with the patient. If there is conflicting medical record documentation, either from the same clinician or different clinicians, the patient’s attending healthcare provider should be queried for clarification.

### Reminder

Physicians use multiple resources and criteria to define and diagnose obesity-related conditions. BMI is a screening tool only; it is not the only criterion used to diagnose obesity/morbid obesity. Diagnosis code assignment is based on the physician’s clinical judgment and corresponding medical record description of the specific obesity condition.

### References

- American Hospital Association Coding Clinic; Centers for Disease Control and Prevention; Cleveland Clinic; ICD-10-CM Official Guidelines for Coding and Reporting; Mayo Clinic; MedlinePlus; National Heart, Lung and Blood Institute; National Institute of Diabetes and Digestive and Kidney Diseases; National Institutes of Health