Obesity/Body mass index (BMI)

Clinical overview

Definitions and background

- 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.[1]
- The definition of morbid obesity:[2]
  - Being 100 pounds or more above ideal body weight; or
  - Having a BMI of 40 or greater; or
  - Having a BMI of 35 or greater and one or more comorbid conditions

Body mass index (BMI)[3]

Body mass index (BMI) is a medical screening tool that measures the ratio of your height to your weight to estimate the amount of body fat you have. Healthcare providers calculate BMI by using weight in kilograms (kg) divided by the square of height in meters (m2).

Causes/risk factors[4]

- Unhealthy lifestyle habits (sedentary, diet, sleep hygiene)
- Genetics
- Health conditions or medications

Signs and symptoms[4]

- There may be no specific symptoms
- Increased weight and BMI
- Increased weight circumference

Diagnostic tools[5]

- Medical history and physical exam
- Calculation of BMI, measurement of body fat percentage
- Evaluation of comorbid conditions

Health risks[6]

- High blood pressure and high levels of cholesterol and triglycerides
- Type 2 diabetes mellitus and metabolic syndrome
- Heart disease

Medical treatment[7]

- Weight-loss medications
- Weight-loss surgery
- Lifestyle changes, such as adopting a healthy eating plan and increasing physical activity

Best documentation practices for healthcare providers

Subjective
In the subjective section of the office note, document the presence of current symptoms (e.g., increased weight, increased BMI, increased waist circumference, etc.) 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.)[8]
- In the physical exam, describe to the highest specificity any current associated observations (e.g., "the patient is morbidly obese.")

Assessment
- **Specificity:** Document the overweight or obesity diagnosis to the highest level of specificity, as in "morbid obesity," "severe obesity," "obesity due to excess calories," etc.
- **Comorbid conditions:** Document clear linkage between underlying conditions that caused the overweight or obesity condition and between the BMI and other diagnoses for which the BMI has significance.

Plan
Document a clear and concise treatment plan (e.g., referral to nutritionist; patient education related to the obesity condition with information regarding healthy eating plan and increasing physical activity; plan for return follow-up; etc.)

Coding tips

Code assignment for BMI may be based on medical record documentation from clinicians who are not the patient's provider, since this information is typically documented by other clinicians involved in the care of the patient (e.g., a dietitian often documents BMI).[8]

However, the associated primary diagnosis (such as overweight, obesity, diabetes mellitus, etc.) must be documented by the patient's healthcare provider during an acceptable encounter type 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.[9]

Significance of BMI
BMI codes are reported only as secondary diagnoses in association with a primary diagnosis for which the BMI has clinical significance has impact on the care, treatment and management and solely only when the BMI meets the definition of a reportable additional diagnosis (per ICD-10-CM Official Guidelines for Coding and Reporting).[8]
- Principal or first-listed diagnoses are not limited to overweight, underweight or obesity-related conditions.
- A primary diagnosis for which BMI has impact on the care, treatment and management 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.[10]

Examples include but are not limited to heart disease, diabetes mellitus type 2, hypertension, high cholesterol, breathing issues such as asthma and sleep apnea, joint disease.[11]

AHA Coding Clinic – Obesity designated by class, Fourth Quarter 2024, effective 10/1/24:
Code **E66.8-**, Other obesity, has been expanded with the creation of subcategory **E66.81**, Obesity class, which has new codes to specifically identify three classes of obesity, as well as a code to capture other obesity that is not classified elsewhere.[11]

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Providers may document a patient's obesity in terms of an obesity class. A code from subcategory E66.81, Obesity class, is assigned when the class is documented by the provider in the medical record. The Centers for Disease Control and Prevention defines the obesity classes as follows:

- E66.811, Obesity, class 1: BMI of 30 to < 35
- E66.812, Obesity, class 2: BMI of 35 to <40
- E66.813, Obesity, class 3: BMI of 40 or higher

Additional reminder:

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

Coding examples

Example 1	
Medical record documentation	73-year-old male here for 6-month follow-up. Review of Systems - unremarkable. Active Problems List: Atherosclerosis, CKD stage 3a, Diabetes, short of breath, chronic pain. Vitals: weight 489 pounds, height 65 inches and BMI 81.36. Musculoskeletal exam- abnormal gait with limited mobility.
Assessment	Obesity
ICD-10-CM codes	**E66.9** Obesity, unspecified **Z68.45** Body mass index (BMI) 7Ø or greater, adult
Rationale	With no option to query the healthcare provider, code **E66.9** must be assigned for the final diagnosis stated as simply "obesity." The coder is not allowed to apply a clinical interpretation to the recorded weight and BMI or to change the provider's final impression to "morbid obesity." Code **Z68.45** for BMI of 81.36 would be assigned as a secondary diagnosis for the primary diagnosis of obesity documented by the provider.

Example 2	
Medical record documentation	68-year-old female here for follow-up of chronic conditions. Patient has a history of HTN and Diabetes. Physical Exam - Ht. 5'10" Wt. 269 BMI 41 BP 144/90. Constitutional: Well nourished, morbidly obese female in no acute distress. Diabetic foot exam within defined limits.
Assessment	Hypertension, uncomplicated diabetes mellitus type 2, Class 3 obesity
ICD-10-CM codes	**I1Ø** Essential (primary) hypertension **E11.9** Type 2 diabetes mellitus without complications **E66.813** Obesity, class 3 **Z68.41** Body mass index [BMI] 40.0 -44.9, adult
Rationale	Class 3 (high-risk) obesity is characterized by a BMI that is equal to or greater than 4Ø. Category E66 includes an instructional note advising to use an additional code to identify the BMI if known (**Z68.-**). Therefore, code **Z68.41** is assigned for the documented BMI of 41.9 BMI is only one diagnostic indicator of morbid obesity. Providers diagnose morbid obesity based on multiple considerations including, but not limited to, waist measurement, calculation of body fat, muscular structure and medical risks associated with comorbidities.

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Example 3	
Medical record documentation	Three-month follow-up for diabetes mellitus, hypertension. Patient also complains of ear pain. Vital signs: BP 126/70, weight 23Ø pounds, height 62 inches, body mass index 42.06. Physical exam shows decreased sensation in the lower extremities and inflammation of the right external ear canal.
Assessment	Diabetes Type 2 with diabetic neuropathy Benign essential hypertension, controlled Otitis externa, right ear
ICD-10-CM codes	**E11.4Ø** Type 2 diabetes mellitus with diabetic neuropathy, unspecified **I1Ø** Essential (primary) hypertension **Z68.41** Body mass index (BMI) 40.0 -44.9, adult **H6Ø.91** Unspecified otitis externa, right ear
Rationale	**Z68.41** is assigned since the BMI will impact the care, treatment and management of the comorbid conditions (diabetes and hypertension). *However, without the presence of diabetes and hypertension, the BMI may not be significant and therefore the code for BMI would not be assigned.*

Example 4	
Medical record documentation	Medical record documents a 68-year-old female with a BMI of 35.
Assessment	Hypertension, uncomplicated diabetes mellitus type 2, morbid obesity
ICD-10-CM codes	**I1Ø** Essential (primary) hypertension **E11.9** Type 2 diabetes mellitus without complications **E66.Ø1** Morbid (severe) obesity, due to excess calories **Z68.35** Body mass index (BMI) 35.0-35.9, adult
Rationale	Morbid obesity codes to **E66.Ø1**. Category E66 includes an instructional note advising to use an additional code to identify the BMI if known (**Z68.-**). Therefore, code **Z68.35** is assigned for the documented BMI of 35. BMI is only one diagnostic indicator of morbid obesity. Physicians diagnose morbid obesity based on multiple considerations including, but not limited to, waist measurement, calculation of body fat, muscular structure and medical risks associated with comorbidities.

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