

Definitions and background

Diagnosis code assignment is based on the provider's clinical judgment and corresponding medical record documentation of the specific obesity condition. There are varying resources providers use to define and diagnose obesity, for example:

- According to the **Centers for Disease Control and Prevention**, 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) advises, "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."
- Likewise, the **American Heart Association** (AHA) advises that if a person has a body mass index (BMI) of 40 or higher, the person is considered extremely obese (or morbidly obese).
- The **NIH** defines morbid obesity as follows:
 - 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
- Obesity classification established by the **World Health Organization** (WHO) in 1997 is based principally on the association between BMI and mortality. WHO states that "the cut-off points for degrees of overweight should not be interpreted in isolation but always in combination with other determinants of morbidity and mortality (disease, smoking, blood pressure, serum lipids, glucose intolerance, type of fat distribution, etc.)."
- The **National Heart, Lung and Blood Institute** (NHLBI) recommends that an assessment of an obese patient should include the 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."

	Body Mass Index (BMI)	Obesity Class
Underweight	<18.5	
Normal	18.5 – 24.9	
Overweight	25.0 – 29.9	
Obesity	30.0 – 34.9	I
	35.0 – 39.9	II
Extreme obesity	≥ 40	III

- The preferred obesity metric in research is the body fat percentage (BF%) — the ratio of the total weight of a person's fat to his or her body weight. Accurate measurement of body fat percentage is much more difficult than measurement of BMI; therefore, BMI is used as a way to approximate BF% and can be easily calculated from a person's height and weight. Although BMI correlates with the amount of body fat, BMI does not directly measure

body fat. As a result, some people (for example, athletes) may have a BMI that identifies them as overweight even though they do not have excess body fat.

- Note: The Centers for Medicare & Medicaid Services (CMS) has developed criteria for bariatric surgery coverage, but these are not guidelines for diagnosis or coding.

In summary: In addition to BMI, 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.

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

Signs and symptoms

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

Diagnostic tools

- Medical history and physical exam
- Height and weight calculation of 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
 - Snoring
 - Difficulty sleeping
 - Fatigue
 - Back and joint pain
- **Long-term**
 - High blood pressure (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 health care providers

- In the subjective section of the office note, document the presence or absence of any current symptoms related to obesity, morbid obesity, overweight, etc.
- In the objective section of the office note, 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 medical record must specifically document the BMI.) The physical exam should include any current associated physical exam findings (such as obese, morbidly obese, overweight, etc.).
- In the final assessment, document the overweight or obesity diagnosis to the highest level of specificity, as in "morbid obesity," "severe obesity," "extreme obesity," "overweight," etc. Include any associated diagnoses that caused the overweight or obesity diagnosis; use terms that clearly show the cause-and-effect relationship (such as "due to," "secondary to," "related to," etc.). Also document any coexisting diagnoses that are impacted by the overweight or obesity diagnosis.
- Do not describe a current obesity diagnosis as "history of."
- In the plan section, document the specific treatment plan for the obesity diagnosis (e.g., referral to nutritionist; patient education related to the obesity condition with information regarding balanced diet; plan for return follow-up; etc.).

ICD-10-CM tips and resources for coders

Overweight and obesity classify to subcategory E66. Fourth and fifth characters are required to specify the particular type of overweight or obesity.

- E66.Ø Obesity due to excess calories
- E66.Ø1 Morbid (severe) obesity due to excess calories
- E66.Ø9 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

Category E66 includes an instructional note that advises to use an additional code to identify BMI if known (Z68.-).

BMI classifies to category Z68.

- BMI adult codes are used for persons 21 years of age or older. For the adult BMI codes, fourth and fifth characters are assigned to specify the BMI range.
- BMI codes should be reported only as secondary diagnoses. As with all other secondary diagnosis codes, the BMI codes should be assigned only when they meet the definition of a reportable additional diagnosis (see the ICD-10-CM Official Guidelines for Coding and Reporting, Section III, Reporting Additional Diagnoses).
- For BMI, code assignment may be based on medical record documentation from clinicians who are not the patient's provider (i.e., physician or other qualified health care 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 diagnosis (such as overweight or obesity) must be documented by the patient's provider. If there is conflicting medical record documentation, either from the same clinician or different clinicians, the patient's attending provider should be queried for clarification. (ICD-10-CM Official Guidelines for Coding and Reporting)

Coding examples

Example 1	
Scenario	ICD-10-CM Coding
Medical record documents a current diagnosis of severe obesity. Record states the patient's height is 5'4" and weight is 244 lbs. There is no documentation of BMI.	Code E66.Ø1 can be assigned based on documentation of a current diagnosis of severe obesity. No code can be assigned for BMI, as the medical coder is not allowed to calculate the BMI and assign a corresponding ICD-10-CM code. Rather, the BMI must be calculated and documented in the medical record by the provider.

Example 2	
Scenario	ICD-10-CM Coding
Vital signs section of record documents weight 489 pounds, height 65 inches and BMI 81.37. Final Impression documents simply "Obesity."	With no option to query the provider, code E66.9 must be assigned for the final diagnosis documented 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 81.37 would be assigned as a secondary diagnosis.

Example 3	
Scenario	ICD-10-CM Coding
Medical record documents a BMI of 38, but final assessment includes a diagnosis of morbid obesity.	Assign code E66.Ø1 for morbid obesity. BMI is only one diagnostic indicator of morbid obesity. Providers may use other criteria to arrive at a final diagnosis of morbid obesity.

Example 4	
Scenario	ICD-10-CM Coding
Patient presents to the office with complaints of severe right ear pain. Vital signs section of the record documents weight 275 pounds, height 62 inches and BMI of 50.3. After physical exam, the provider documents a final impression of right otitis externa.	Assign code H6Ø.91, Unspecified otitis externa, right ear. The BMI should not be coded, since there is no documentation that shows the BMI has clinical significance for otitis externa.

Example 5	
Scenario	ICD-10-CM Coding
Final Assessment documents "Extreme obesity with body mass index of 68.4."	Assign codes E66.Ø1 and Z68.44. Extreme obesity is equivalent to severe or morbid obesity.

Example 6	
Scenario	ICD-10-CM Coding
Record documents 3-month follow-up for diabetes mellitus and hypertension. Vital signs section of the record documents BP 126/70, weight 230 pounds, height 62 inches and body mass index of 42.06. After blood pressure check, physical exam and lab assessment, the provider documents the final impressions of	Assign codes E11.9, I1Ø, Z68.41. Body mass index is coded since the BMI has clinical significance for diabetes and hypertension.

diabetes type 2 controlled with no complications, benign essential hypertension with good control and BMI of 42.

Example 7

Scenario	ICD-10-CM Coding
<p>Record states the patient presents to the office for physical exam. Patient reports she is doing well, needs medication refills and has no other complaints. Vital signs section of record documents height 54.5 inches, weight 260.8 pounds and BMI 61.96. Final impression documents "Well Adult Exam." The recommendations section states the patient was advised to lose weight. The patient instructions section documents: 1) Discussed importance of regular exercise and recommended starting or continuing a regular exercise program for good health; and 2) The patient was encouraged to lose weight for better health.</p>	<p>Assign code Z00.00, Encounter for general adult medical examination without abnormal findings. The BMI should not be coded, since there is no associated principal diagnosis that shows its clinical significance. Even though the recommendations section shows the patient was encouraged to lose weight and exercise, the provider does not link this treatment plan to a current primary diagnosis with which the secondary BMI code can be assigned.</p> <p>Provider did not document a specific current diagnosis.</p>

References: American Hospital Association Coding Clinic; American Heart Association; Centers for Disease Control and Prevention; 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; Cleveland Clinic