### BMI measurement in ambulatory pediatric cardiac patients

#### Measure Description:
Proportion of patients, 3-18 years old, who had their BMI measured and BMI percentile calculated.

#### Numerator
Number of patients who had documentation of BMI\(^1\) measurement and percentile\(^2\) calculated during the measurement period or in the 12 months prior to the outpatient visit\(^3\).

#### Denominator
Number of patients, 3-18 years old, with at least one pediatric outpatient visit during the measurement period.

#### Denominator Exclusions
- Patients in whom an accurate height and weight cannot be obtained for medical reasons.

#### Denominator Exceptions
None

#### Definitions / Notes
1. **Measurement of BMI should be done as follows:**
   Body mass index (BMI): a measure derived from the division of the square of the height in meters into the weight in kilograms

2. **BMI percentile should be calculated as follows:**
   A patient’s BMI percentile is determined from plotting the BMI on CDC growth charts

3. **Clinic Visit:** If the patient has had multiple visits during the measurement period, use the most recent visit (i.e. last visit in the measurement period).

#### Measurement Period
Quarterly

#### Sources of Data
Retrospective medical record review, electronic medical record

#### Attribution
Clinician, practice or institution

#### Care Setting
Outpatient

#### Rationale
Obesity has become one of the most important public health problems in the United States. One third of the children are overweight (BMI >= 85\(^{\text{th}}\) percentile). BMI is the single most important predictor of cardiovascular morbidity.

#### Clinical Recommendation(s)

**ACC/AHA Guidelines:**
None available

**Other guidelines/references:**
Pediatric Cardiovascular Risk Reduction Initiative by NHLBI
## Challenges to Implementation

Some clinicians may not have electronic systems to support BMI documentation. Documentation of BMI may be viewed as time consuming, and not a sub-specialty problem. This problem is exacerbated by the perception that family and patients may not comply with recommendations and because the impact of intervention is delayed with no perceived immediate reward.

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