# Echocardiogram for exertional chest pain

**Measure Description:** Proportion of patients, 5-18 years old, with a history of exertional chest pain who had an echocardiogram.

<table>
<thead>
<tr>
<th>Numerator</th>
<th>Number of patients who had an echocardiogram (including comment regarding coronary artery anatomy) performed 6 months prior or 30 days after the clinic visit.</th>
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</thead>
<tbody>
<tr>
<td>Denominator</td>
<td>Number of patients, ages 5-18 years old, seen for initial consultation in an ambulatory pediatric cardiology clinic for chief complaint of exertional chest pain during the measurement period.</td>
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</tbody>
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**Denominator Exclusions**
- Previous cardiac MRI/CT within 6 months with documentation of coronary artery anatomy, or chest pain characteristic of musculoskeletal chest pain or exercise induced asthma.
- Patient refusal

**Denominator Exceptions**
None

**Definitions/Notes**
None

**Measurement Period**
Quarterly

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

**Attribution**
This measure should be reported by physicians or physician extenders.

**Care Setting**
Outpatient

## Rationale
Sudden death may occur with exertion related to coronary artery anomalies.\(^1\)
Coronary artery anomaly is the most common cardiac diagnosis to present with CP.\(^2\)
Exertional CP is useful for identifying coronary anomalies.\(^2\)
Class IIb recommendation.
Level of evidence: B

**References:**

## Clinical Recommendation(s)

**ACC/AHA Guidelines**
### Other guidelines:

## Challenges to Implementation
Exertional CP is an imperfect marker (both sensitivity and specificity)\(^1\)\(^2\), and a high proportion (33% in one cohort) may have exertional CP\(^3\).
Exertional CP could also be exercise-induced asthma, and may not require an echocardiogram.

## References:

### Authors

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<th>Author</th>
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