### Recommendation for Antibiotic Prophylaxis in Patients with Heterotaxy and Asplenia

**Measure Description:** Proportion of patients, < 5 years old, with heterotaxy and asplenia and a documented recommendation for antibiotic prophylaxis.

<table>
<thead>
<tr>
<th><strong>Numerator</strong></th>
<th>Number of patients with at least one documented recommendation for antibiotic prophylaxis within a note in the medical record.</th>
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<tbody>
<tr>
<td><strong>Denominator</strong></td>
<td>Number of patients, &lt; 5 years old, with diagnosis of heterotaxy and asplenia who had an outpatient visit to the pediatric cardiology clinic during the measurement period.</td>
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**Denominator Exclusions**
- Patients with heterotaxy in whom documentation of normal splenic function has occurred (irrespective of method used to determine normalcy of splenic function).
- Patients who do not have congenital heart disease, but who have documented asplenia or hyposplenism and are being seen by a pediatric cardiologist for varied reasons (the most common example would be patients with sickle cell disease).

**Denominator Exceptions**
None

**Definitions/Notes**
1. **Heterotaxy:**
   - Patient should have at least one of the following cardiac malformations: interrupted inferior caval vein, left sided superior caval vein, atrioventricular septal defect, double outlet right ventricle, pulmonary atresia, and anomalous pulmonary venous connection.
   - **AND**
   - Patient should have at least one of the following isomerisms: 1) central nervous system anomaly, 2) intestinal malrotation, 3) bronchial isomerism, 4) pulmonary isomerism, 5) thoraco-abdominal laterality discordance.

2. **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 review of outpatient clinic notes.

**Attribution**
N/A

**Care Setting**
Outpatient

### Rationale
While controversy exists as to the age at which antibiotic prophylaxis should continue to be recommended, most experts agree that antibiotic prophylaxis against severe pneumococcal disease is
appropriate until the age of 5. Documented rates of severe pneumococcal sepsis decrease markedly after the age of 5. However, there is no national published guideline on which to rely for guidance in this issue.

**Clinical Recommendation(s)**


**Challenges to Implementation**

The lack of a standard means to document the recommendation for antibiotic prophylaxis in the medical record may make assessment of adherence to the metric cumbersome. Some institutions may differ on what is included under a diagnosis of “heterotaxy”.

**Authors**

<table>
<thead>
<tr>
<th>Jeffrey Anderson, FACC</th>
<th>Nancy Halnon, NMI</th>
<th>Catherine Krawczeski, FACC</th>
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</thead>
<tbody>
<tr>
<td>Amy Schultz, FACC</td>
<td>Jonathan Johnson, Affiliate</td>
<td>Wayne Franklin, FACC</td>
</tr>
<tr>
<td>Matthew O'Connor, NMI</td>
<td>Cindy Barrett, NMI</td>
<td>James McGovern, FACC</td>
</tr>
<tr>
<td>Jeffrey M. Vinocur, FIT</td>
<td>Eric Graham, FACC</td>
<td>Brandy Hattendorf, FACC</td>
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