Measure Abbreviation: FLUID 01-C

Description: Percentage of cardiac cases in which colloids were not administered intraoperatively.

Measure Time Period: Anesthesia Start to Anesthesia End

Measure Type: Process

Measure Summary: The purpose of this measure is to identify the use of colloids for patients that likely do not need them in the cardiac surgery patient population. It is the expectation that providers will uphold the ASA’s Choosing Wisely program by avoiding colloids and using crystalloid instead when appropriate.

Rationale: There is a lack of consistent evidence to suggest improved survival with the use of colloids as compared to crystalloids in the surgical population. Because colloids are more expensive than crystalloids, it is recommended that anesthesia providers avoid the use of colloids in most instances.

Inclusions:

All patients undergoing general anesthetics, spinals, and epidurals AND documentation of a cardiac case indicated by one of the following:

- Cardiac surgery without pump (CPT: 00560)
- Cardiac surgery with pump and <1 year old (CPT: 00561)
- Cardiac surgery with pump and > 1 year old (CPT: 00562)
- Cardiac surgery with hypothermic arrest (CPT: 00563)
- CABG with pump (CPT: 00567)
- Heart Transplant (CPT: 00580)
- An intraoperative note with one of the following MPOG concepts:
  - 50399 Cardiopulmonary bypass -- aortic clamp on/off note
  - 50409 Cardiopulmonary bypass terminated
  - 50410 Cardiopulmonary bypass initiated (full)
  - 50416 Cardiopulmonary bypass -- crossclamp and circulatory arrest time totals
  - 50417 Cardiopulmonary bypass -- Access cannula removed note
  - 50714 Cardiopulmonary bypass - Bypass start / stop event
- Cases performed by cardiac surgical service: MPOG concept 80005.
Exclusions:
- Non-cardiac cases
- ASA 5 and 6 cases
- ≥ 2L EBL
- ≥ 4 units PRBC transfusion
- Patients that are in prone position for more than 4 hours
- Patients that are in Trendelenburg position for more than 4 hours
- Patients with ascites

MPOG Concept IDs Required:

<table>
<thead>
<tr>
<th>Colloid MPOG Concepts</th>
<th>Patient Position MPOG Concepts</th>
<th>Patient Dx MPOG Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>10017  Albumin 25%</td>
<td>50136</td>
<td>10500 Ascites</td>
</tr>
<tr>
<td>10018  Albumin 5%</td>
<td>50137</td>
<td>Estimated Blood Loss MPOG Concept</td>
</tr>
<tr>
<td>10557  Albumin 20%</td>
<td>50818</td>
<td>10499 EBL</td>
</tr>
<tr>
<td>10458  Hetastarch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10459  Pentastarch</td>
<td>10489</td>
<td>Packed Red Blood Cells-Autologous</td>
</tr>
<tr>
<td>10601  Hydroxyethyl Starch 130/0.46% in 0.9% Saline (Voluven)</td>
<td>10490</td>
<td>Packed Red Blood Cells-Homologous</td>
</tr>
<tr>
<td>10605  Hydroxyethyl Starch 6% in Lactated Solution (Hextend)</td>
<td>10616</td>
<td>Packed Red Blood Cells-Unknown Type</td>
</tr>
</tbody>
</table>

Data Diagnostics Affected:
- Percentage of Cases with any Fluid Recording
- Percentage of Fluids with a Meaningful Fluid Mapping
- Percentage of Cases with Colloids Administered

Phenotypes Used:
- AnesthesiaEnd
- AnesthesiaStart
- AsaNotes
- Asa5or6
- ProneOrTrendelenburg
- SurgeryEnd
- Cardiac
- Fluid01

Other Measure Build Details:
Measure Start/End Time is defined as Anesthesia Start to Anesthesia End.

Success: Colloids are not administered during the case.

Threshold: None.

Responsible Provider: The provider signed in at the time of the colloid administration.

Method for determining Responsible Provider:
Measure is evaluated on a per provider basis: multiple providers can be attributed per case. If multiple providers are signed in at the time of colloid administration, all providers signed in will be attributed.

Risk Adjustment (for outcome measures):
Not applicable.

References:

