



**Measure Abbreviation:** FLUID 01-C

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

**NQS Domain:** Efficiency and Cost Reduction

**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.

**Inclusions:**

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

- Primary surgical service is mapped as MPOG concept 80005: Cardiac.
- 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

**Exclusions:**

- Non-cardiac cases
- ASA 5 and 6 cases
- $\geq 2$ L EBL
- $\geq 4$  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

**Success:** Colloids are not administered during the case.

**Threshold:** None.

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

**Risk Adjustment (for outcome measures):**

*Not applicable.*

**References:**

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Perel P, Roberts I, Pearson M. Colloids versus crystalloids for fluid resuscitation in critically ill patients (Review). *The Cochrane Collaboration*. (2009) Published by JohnWiley & Sons, Ltd.

Schick M, Isbary J, Stuber T, Brugger J, Stumpner J, Schkegel N, Roewer N, Eichelbronner O, Wunder C. Effects of crystalloids and colloids on liver and intestine microcirculation and function in cecal ligation and puncture induced septic rodents. *BMC Gastroenterology* 2012, 12:179. <http://www.biomedcentral.com/1471-230X/12/179>.

Youssef MA, Al-Inany HG, Evers JL, Aboulghar M. Intra-venous fluids for the prevention of severe ovarian hyperstimulation syndrome. *Cochran Database Systematic Reviews* 2011, 16(2): CD001302. Doi: 10.1002/14651858.CD001302.pub2.