



Measure Abbreviation: BP 01

Measure Description: Percentage of unique time intervals during a case that sustained intraoperative hypotension was avoided.

NQS Domain: Patient Safety

Measure Type: Process

Measure Summary: BP 01 measures the cumulative time of Mean Arterial Pressure (MAP) <55mmHG for a given case and provider. BP 01 includes non-invasive and invasive blood pressure monitoring captured using automated and manually entered physiologic data.

Inclusions:

All patients requiring general anesthesia or monitored anesthesia care (MAC).

Exclusions:

- Patients <18 years old
- ASA 5 and 6 cases
- Baseline MAP <60 mmHG
- Obstetric Non-Operative Procedures (CPT: 01958, 01960, 01967)
- Obstetric Non-Operative Procedure Rooms (Rooms tagged as OB-GYN – Labor and Delivery)
- Obstetric Non-Operative Procedures with procedure text: “Labor Epidural”
- 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)
- Liver Transplant Surgery (CPT: 00796, 47135)
- Lung Transplant Surgery (CPT: 32851, 32852, 32853, 32855)

Success:

- MAP <55mmHG that does not exceed cumulative time of 20 minutes **OR**
- MAP >55mmHG throughout case length.

Threshold: 90%.

Responsible Provider: All providers for a given case whose individual cumulative MAP < 55mmHG exceeds the 20 minute timeframe.

Risk Adjustment (for outcome measures):

Not applicable.

References:

Bijker JB, Persoon S, Peelen LM, Moons KG, Kalkman CJ, Kappelle LJ, van Klei WA. Intraoperative hypotension and perioperative ischemic stroke after general surgery: a nested case-control study. *Anesthesiology*. 2012 Mar 116(3): 658-64. doi: 10.1097/ALN.0b013e3182472320. PMID: 22277949

Bijker JB, van Klei WA, Vergouwe Y, Eleveld DJ, van Wolfswinkel L, Moons KG, Kalkman CJ. Intraoperative hypotension and 1-year mortality after noncardiac surgery. *Anesthesiology*. 2009 Dec 111(6): 1217-26. doi: 10.1097/ALN.0b013e3181c14930. PMID: 19934864

Sun LY, Wijeyesundera DN, Tait GA, Beattie WS. Association of Intraoperative Hypotension with Acute Kidney Injury after Elective Noncardiac Surgery *Anesthesiology*. 2015 Sep123(3): 515-23. doi: 10.1097/ALN.0000000000000765. PMID: 26181335

Walsh M, Devereaux PJ, Garg AX, Kurz A, Turan A, Rodseth RN et al. Relationship between intraoperative mean arterial pressure and clinical outcomes after noncardiac surgery: Toward an empirical definition of hypotension. *Anesthesiology* 2013; 119:507-515. Doi: 10.1097/ALN.0b013e318a10e26. PMID: 23835589.