



## SDPS MEMORANDUM

MEMO NBR: 05-323-SI

DATE: August 31, 2005

SUBJECT: Change in the National Hospital Quality Measure SIP-3 for Patients Undergoing Cardiac Surgery, Prophylactic Antibiotics Discontinued Within 48 Hours After Cardiac Surgery End Time

TO: SDPS CEO Point of Contact, SDPS HCQIP Point of Contact, SDPS AMI-HF Point of Contact, SDPS SIP Point of Contact, SDPS PNE Point of Contact, SDPS UNDRSVD Point of Contact

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Earlier this year, The Society of Thoracic Surgeons (STS) Workforce on Evidence Based Surgery published a new guideline on *Antibiotic Prophylaxis in Cardiac Surgery: Duration of prophylaxis*.<sup>1</sup> The guideline provides a detailed review of the published literature on antibiotic prophylaxis for cardiac surgery and provided the following recommendations:

- The duration of antibiotic prophylaxis should not be dependent on indwelling catheters of any type.
- Single dose antibiotic prophylaxis may be effective in cardiac surgery, but there are inconclusive data to confirm this effectiveness. There is insufficient evidence to recommend routine use of single-dose prophylaxis in cardiac surgery.
- Antibiotic prophylaxis of up to 48 hours duration is unlikely to produce antibiotic resistance.
- Antibiotic prophylaxis of 48 hours duration is clinically effective in minimizing infectious complications in cardiac surgery.
- Antibiotic prophylaxis of 48 hours duration may be as effective as prophylaxis administered for longer than 48 hours.

The guideline authors conclude that: “There is evidence indicating that antibiotic prophylaxis of 48 hours duration is effective. There is some evidence that single-dose prophylaxis or 24-hour prophylaxis may be as effective as 48-hour prophylaxis, but additional studies are necessary

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<sup>1</sup> <http://www.sts.org/sections/aboutthesociety/practiceguidelines/antibioticguideline/>

before confirming the effectiveness of prophylaxis lasting less than 48 hours. There is no evidence that prophylaxis administered for longer than 48 hours is more effective than a 48-hour regimen.”

The Centers for Medicare & Medicaid Services (CMS) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) are aware of this guideline and recognize that the conclusion conflicts with the current National Surgical Infection Prevention Project performance measure on duration of antimicrobial prophylaxis for cardiac surgery (Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time). CMS and JCAHO have agreed to change this performance measure for patients undergoing cardiac surgery (Prophylactic Antibiotics Discontinued Within 48 Hours After Cardiac Surgery End Time). However, because of the timing of publication of the STS guideline the change in the performance measure will not go into effect until the January 2006 updates to the Release Notes and performance measure algorithms.

Nationally, one-third of Medicare patients undergoing cardiac surgery have their antimicrobials discontinued within 24 hours after surgery end time.<sup>2</sup>

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<sup>2</sup> Bratzler DW, Houck PM, Richards C, et al. Utilization of antimicrobial prophylaxis for major surgery. Baseline results from the National Surgical Infection Prevention Project. *Arch Surg*. 2005;140:174-182.