SDPS MEMORANDUM

MEMO NBR: 06-456-HD

DATE: November 7, 2006

SUBJECT: Anticipated Public Reporting of National Hospital Quality Measure SIP-2 (SCIP Infection 2), Appropriate Antibiotic Selection for Surgical Prophylaxis

TO: SDPS AMI-HF Point of Contact, SDPS ANA Point of Contact, SDPS CDAC Point of Contact, SDPS CEO Point of Contact, SDPS COMM Point of Contact, SDPS DBA Point of Contact, SDPS HCQIP Point of Contact, SDPS HRI Point of Contact, SDPS MEDPCC Point of Contact, SDPS PNE Point of Contact, SDPS SIP Point of Contact, SDPS UNDRSVD Point of Contact

THROUGH: Sheila C. Blackstock, RN, BSN, JD
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The purpose of this memorandum is to notify you of anticipated public reporting of National Hospital Quality Measure SIP-2 (SCIP Infection 2), Appropriate Antibiotic Selection for Surgical Prophylaxis on the *Hospital Compare* website for hospital discharges starting July 1, 2006.

On June 21, 2005, the Centers for Medicare & Medicaid Services (CMS) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) issued a joint statement announcing the temporary suspension of National Hospital Quality Measure SIP-2 (SCIP Infection 2), Appropriate Antibiotic Selection for Surgical Prophylaxis. CMS and JCAHO have continued to collect data on antibiotic selection for surgical prophylaxis during the temporary suspension and, after consultation with a technical expert panel of authors of surgical antimicrobial prophylaxis guidelines, have revised the measure to address the issues that resulted in the temporary suspension.

Revisions to the measure are summarized in the attached table and additional explanation for the revisions was recently published*:

- **Increasing prevalence of both healthcare-associated methicillin resistant *Staphylococcus aureus* (MRSA) and community-acquired MRSA.** While there is little published guidance on when vancomycin should be used for surgical prophylaxis and few studies that provide evidence upon which to base recommendations, there was a general consensus among the experts that some accounting of patient risk factors for MRSA infection should be entertained before the decision to use vancomycin is made. Because of the uncertainty about use of vancomycin for surgical prophylaxis, the performance measure for antibiotic selection has been modified to allow the use of vancomycin as an acceptable antibiotic for patients undergoing cardiac, vascular, or orthopedic surgery. In the absence of a documented β-lactam allergy, physician documentation of the reason for use of vancomycin will be required in the medical record for the case to pass the performance measure.

- **National shortages of antibiotics recommended for surgical prophylaxis**. There have been periodic shortages or discontinued manufacture of antibiotics (e.g., cefotetan and cefoxitin) that are commonly recommended for surgical antimicrobial prophylaxis. For colorectal surgery and hysterectomy, the technical expert panel recommended adding ampicillin/sulbactam to the list of acceptable antibiotics.

- **Recommendations for the prevention of endocarditis.** Individuals at highest risk of endocarditis are those who have prosthetic heart valves, a previous history of endocarditis (even in the absence of other heart disease), complex cyanotic congenital heart disease, or surgically constructed systemic pulmonary shunts or conduits. While there is little evidence that antibiotic prophylaxis prevents endocarditis, if the clinician decides to provide endocarditis prophylaxis for a patient having surgery, a drug that will inhibit growth of *Enterococcus* species should be used. Since ampicillin/sulbactam has been added as an acceptable antibiotic for patients undergoing colorectal surgery and hysterectomy, no additional modifications to the measure were necessary. If the clinician so chooses, they can add a single preoperative dose of gentamicin as recommended in the 1997 American Heart Association recommendations for prevention of bacterial endocarditis.

CMS and JCAHO are committed to continued maintenance and revision of this and other performance measures as recommendations from evidence-rated guidelines change. We appreciate your attention to the revisions necessary to lift suppression of this measure and so that it can be publicly reported with SIP-1 and SIP-3 (SCIP Infection 1 and SCIP Infection 3).

Please notify your internal point of contact if you have any questions. They may contact the QualityNet Help Desk if information and/or assistance are needed.

*Bratzler DW, Hunt DR. The Surgical Infection Prevention and Surgical Care Improvement Projects: national initiatives to improve outcomes for patients having surgery. *Clin Infect Dis*. 2006;43:322-30.

Prophylactic Antibiotic Regimen Selection for Surgery

Surgical Procedure	Approved Antibiotics
CABG, Other Cardiac Or Vascular	Cefazolin, Cefuroxime, or Vancomycin* If β-lactam allergy: Vancomycin** or Clindamycin**
Hip/Knee Arthroplasty	Cefazolin or Cefuroxime, or Vancomycin* If β-lactam allergy: Vancomycin** or Clindamycin**
Colon* **	Oral: Neomycin Sulfate + Erythromycin Base **OR** Neomycin Sulfate + Metronidazole (Administered for 18 hours preoperatively) Parenteral: Cefotetan, Cefoxitin, Cefazolin + Metronidazole, or Ampicillin/Sulbactam *If β-lactam allergy*: Clindamycin + Gentamicin, or Clindamycin + Quinolone, or Clindamycin + Aztreonam **OR** Metronidazole with Gentamicin, or Metronidazole + Quinolone
Hysterectomy	Cefotetan, Cefazolin, Cefoxitin, Cefuroxime, or Ampicillin/Sulbactam If β-lactam allergy: Clindamycin + Gentamicin, or Clindamycin + Quinolone, or Clindamycin + Aztreonam **OR** Metronidazole + Gentamicin, or Metronidazole + Quinolone **OR** Clindamycin monotherapy
Special Considerations	*Vancomycin is acceptable with a physician documented justification for its use in the patient's medical record **For cardiac, orthopedic, and vascular surgery, if the patient is allergic to β-lactam antibiotics, Vancomycin or Clindamycin are acceptable substitutes. ***For colorectal surgery, a case will pass the antibiotic selection indicator if the patient receives oral prophylaxis alone, parenteral prophylaxis alone, or oral prophylaxis combined with parenteral prophylaxis.