

Surgical Antibiotic Prophylaxis Guidelines

The Problem

Surgical infection prevention is a key goal of the Surgical Care Improvement Project (SCIP), a major national patient safety initiative. Antibiotic selection, timeliness and discontinuation are among the performance measures in SCIP. BIDMC guidelines for surgical antibiotic prophylaxis have been available for several years, but were not perceived to be uniformly disseminated, sufficiently accessible or consistently followed. This contributed to suboptimal performance on some measures and was evident in antibiotic selection data for procedures reviewed for SCIP.

Aim/Goal

By engaging with stakeholders, revising the prophylaxis guidelines, more widely disseminating revised guidelines and improving supporting medical records documentation, we will improve the provision of surgical prophylaxis to patients at BIDMC, thus improving care (primarily by reducing surgical site infections) and secondarily improve our performance on quality measures reported to SCIP.

The Team

- Silverman Institute for Health Care Quality and Safety
 - Howard Gold, MD; Medical Director, Antimicrobial Mgmt
 - Sharon Wright, MD, MPH; Director, Infection Control/Hospital Epidemiology
- Pharmacy
 - Chris McCoy, PharmD
 - Kathy Cunningham, PharmD; Director, Clinical Pharmacy
- Department of Surgery
 - Donald Moorman, Vice Chair; Associate Surgeon-in-Chief
 - Clinical leadership
 - Orthopedic Surgery – M. Gebhardt, D. Ayres
 - OB/Gyn Surgery – D. Chapin, S. Mann, S. Haider
 - Cardiac Surgery – K. Khabbaz
 - Vascular Surgery – A. Hamdan
 - GI Surgery – M. Callery
- Department of Anesthesia

The Interventions

- Review existing BIDMC guidelines for Cardiac, Vascular, Gastrointestinal (GI), Orthopedic and OB/Gyn Surgery.
- Revise guidelines as needed based on published studies, guidelines and meetings with surgical clinical leadership.
- Obtain approval and support from surgical leadership on guidelines and post on BIDMC intranet and in ORs.
- Facilitate ownership of project by Depts. of Surgery and Anesthesia.
- Educate surgical and anesthesia staff.
- Complete process during FY08.

The Results/Progress to Date

- Completed review of existing BIDMC guidelines for Cardiac, Vascular, GI, Orthopedic and OB/Gyn Surgery.
- Initiative discussed at Surgical Care Committee and HCQ Data meetings.
- Guidelines approved and posted on BIDMC intranet.
- Poster summary of guidelines near completion and will be posted in ORs.
- Began education effort to support guidelines (H.S.G. OB/Gyn Grand Rounds February 20, 2008)

Lesson Learned

Guidelines, however well devised, that are not widely and repeatedly disseminated and are not perceived to be easily accessible are not followed. Ownership by clinicians is necessary for sustained improvement.

Next Steps/What Should Happen Next:

Continue efforts to disseminate guidelines, assess for improvement of quality measures data (specifically antibiotic selection, timeliness and discontinuation) as reported to SCIP and using larger internal datasets. Protocolize prophylaxis with pre-op order sheets and via clinical pathways. Expand scope of guidelines to cover additional surgeries. Assess other areas for opportunities for improvement, including intra-operative redosing of antibiotic prophylaxis.



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