### Strategy/Driver: Hospital executive leadership commitment to prevention of surgical site infections

1. Establish Surgical Site Infection prevention as a strategic priority

1.1.a Engage leadership at the highest level, board, and C-suite, to incorporate surgical complications prevention as an organizational goal within the hospital's strategic plan. **E**

1.2.a Identify and commit resources needed to successfully reach organizational goals for surgical site infection prevention (staff education, formulary agreement, purchase of needed equipment, convening a QI committee to address specific issues.) **E**

1.2.b Develop impact plans to help anticipate and forecast the organizational effects of the addition of new processes and procedures. **E**

1.3.a Actively educate internally about organizational goals, expected outcomes, and accountabilities. **E**

1.4.a Incorporate the Institute of Medicine's recommendations for redesigning patient care--care should be safe, effective, patient-centered, timely, efficient and equitable. **E**

1.4.b Adopt a team approach to ensuring patient gets all appropriate care he/she is eligible for. **E**

1.5.a Implement training like TeamSTEPPS and Crucial Conversations to build a team approach to communications and safety. **E**

2. Develop and implement business/strategic plan to secure institutional resources

2.1.a Engage leadership at the highest level, board, and C-suite, to incorporate surgical complications prevention as an organizational goal within the hospital's strategic plan. **E**

2.1.b Identify and commit resources needed to successfully reach organizational goals for surgical site infection prevention (staff education, formulary agreement, purchase of needed equipment, convening a QI committee to address specific issues.) **E**

2.1.c Develop impact plans to help anticipate and forecast the organizational effects of the addition of new processes and procedures. **E**

2.1.d Actively educate internally about organizational goals, expected outcomes, and accountabilities. **E**

2.1.e Incorporate the Institute of Medicine’s recommendations for redesigning patient care--care should be safe, effective, patient-centered, timely, efficient and equitable. **E**

2.1.f Adopt a team approach to ensuring patient gets all appropriate care he/she is eligible for. **E**

2.2.a Implement training like TeamSTEPPS and Crucial Conversations to build a team approach to communications and safety. **E**

3. Identify targets, goals, and the resources required for targets and goals of SCIP initiative

3.1.a Actively educate internally about organizational goals, expected outcomes, and accountabilities. **E**

3.2.a Incorporate the Institute of Medicine’s recommendations for redesigning patient care--care should be safe, effective, patient-centered, timely, efficient and equitable. **E**

3.3.a Adopt a team approach to ensuring patient gets all appropriate care he/she is eligible for. **E**

3.4.a Implement training like TeamSTEPPS and Crucial Conversations to build a team approach to communications and safety. **E**

4. Commit to providing patient-centered care focused on preventing complications related to surgical intervention

4.1.a Actively educate internally about organizational goals, expected outcomes, and accountabilities. **E**

4.2.a Incorporate the Institute of Medicine’s recommendations for redesigning patient care--care should be safe, effective, patient-centered, timely, efficient and equitable. **E**

4.3.a Adopt a team approach to ensuring patient gets all appropriate care he/she is eligible for. **E**

4.4.a Implement training like TeamSTEPPS and Crucial Conversations to build a team approach to communications and safety. **E**

5. Create a “culture of quality” for your hospital

5.1.a Actively educate internally about organizational goals, expected outcomes, and accountabilities. **E**

5.2.a Incorporate the Institute of Medicine’s recommendations for redesigning patient care--care should be safe, effective, patient-centered, timely, efficient and equitable. **E**

5.3.a Adopt a team approach to ensuring patient gets all appropriate care he/she is eligible for. **E**

5.4.a Implement training like TeamSTEPPS and Crucial Conversations to build a team approach to communications and safety. **E**

### Strategy/Driver: Organization-wide adoption of National Guidelines for SCIP (Surgical Care Improvement Project)

2.1 SCIP INF 1: Administer prophylactic antibiotic within one hour prior to surgical incision for included surgeries

2.1.a Medical Staff Surgical committee approves guideline-based, standing order/protocol for surgical antibiotic prophylaxis. **O & E**

2.1.b Prophylactic antibiotic protocol/standing order is initiated during the pre-op clinic visit and then sent to physician for completion. **O**

2.1.c Protocol is placed in patient’s chart and chart is transferred to OR. Pre-op nurse hangs IV antibiotic in pre-op holding area, but doesn’t open clamp. **O**

2.1.d Assign accountability for administering prophylactic antibiotic to a key OR team position (e.g. anesthesia staff or circulating nurse). This person begins drug delivery and documents on record. **O**

2.1.e Incorporate antibiotic delivery check process into surgical “time out.” **O**

2.1.f Administer antibiotic according to published guidelines for drug, dose,
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**2.2 SCIP INF 2: Appropriately select antibiotic for surgical infection prophylaxis according to surgery type**

- Implement a systematic method of documentation of antibiotic administration for drug, timing, route, and dose on every patient chart (paper or electronic).
- Employ visible reminders, checklists that include delivery information for prophylactic antibiotics. (Brightly colored stickers, reminder posters outside OR).
- Create and share drug matrix pocket cards for OR staff and surgical team.

**All of the above plus:**

- Establish a pharmacy and therapeutics committee (or equivalent) that meets annually and as needed to review standard formulary for antimicrobial prophylaxis.
- Ensure availability of formulary antibiotics or physician approved prophylactic antibiotics available in or near OR.

**2.3 Discontinue prophylactic antibiotics within 24 hours of surgery end time (48 hours for cardiac patients)**

- Medical Staff Surgical committee approves guideline-based, standing order/protocol for automatic discontinuation of surgical antibiotic prophylaxis.
- Develop a policy or assigned responsibility for pharmacy staff to automatically discontinue antibiotic prophylaxis within the appropriate timeframe.
- Implement an automatic stop order for prophylactic antibiotics whereby physicians must manually write an order and a reason (ongoing infection) to continue antibiotics.

**2.4 SCIP INF 4: Control serum glucose in cardiac surgery patients (≤ 200mg/dl @ 6am post-operative days 1/2)**

- Medical Staff approval/adoption of a standardize glucose management protocol to maintain serum glucose ≤ 200 mg/dl in patients undergoing cardiac surgery.
- Medical Staff approval/adoption of a standardized protocol for intra-operative post-operative serum glucose management in patients.
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| **2.5 SCIP INF 6**: Use national guideline approved method for surgical site hair removal | **2.4.c** Undergoing cardiac surgery or having a diagnosis of diabetes.  
**2.4.d** Medical staff approval/ adoption of a standardized glucose management protocol, which includes transitioning from IV insulin to insulin injections to oral hypoglycemic agents as required.  
**2.4.e** Implement process for identifying all patients with hyperglycemia prior to surgery.  
**2.4.f** Adopt a multidisciplinary approach to address intra-operative and post-operative glucose control.  
**2.4.g** Assign accountability to individual staff or category of staff for management of glucose levels. | **2.5.a** Gain support from Chief of Surgery.  
**2.5.b** Adopt a policy to avoid shaving surgical site with razors/ any hair removal will be performed with clippers.  
**2.5.c** Send letters to surgeons and staff regarding the change from razors to clippers and the timeline.  
**2.5.d** Remove all razors from operating suites and surrounding patient support areas or requisition surgical prep kits without razors.  
**2.5.e** Purchase and place electric clippers throughout the holding and operating rooms where hair removal is likely to occur.  
**2.5.f** Educate surgeons and clinical staff on appropriate hair removal techniques, and purchasing personnel on appropriate supplies.  
**2.5.g** Implement “NO SHAVE” posters throughout hospital clinical areas.  
**2.5.h** Modify documentation forms to include a standard documentation field in pre-op/operative records for method of hair removal.  
**2.5.i** Educate patients to not shave surgical site by developing patient education materials on why not to shave and approved hair removal techniques. |
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<td>2.7</td>
<td>SCIP VTE 1: Order written for appropriate method of VTE prophylaxis for surgical patients</td>
<td>2.6.d Assign accountability for either admitting staff or pharmacy to review home medications for beta-blocker history, or include prompt for documentation of BB treatment on nursing admission assessment. O</td>
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<td>2.8</td>
<td>SCIP VTE 2: Administer appropriate VTE prophylaxis as ordered to surgical patients within 24 hrs prior to and after surgery.</td>
<td>2.7.a Develop a policy for universal VTE risk assessment of all patients admitted to the hospital. O 2.7.b Assign accountability for which category of staff will complete the assessment and a timeframe. O 2.7.c Medical staff adopts a protocol/standing order set to administer correct prophylactic treatments based on identified risk factors. O 2.7.d Engage vascular lab director as project champion for DVT prophylaxis. Implement a DVT Awareness campaign for hospital staff and training. O</td>
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<td>2.9</td>
<td>HF 3: Heart Failure patients with left ventricular systolic dysfunction without ACE1 and ARB contraindications who are surgical patients. O</td>
<td>2.8.a Develop a policy for universal VTE risk assessment of all patients admitted to the hospital. O 2.8.b Assign accountability for which category of staff will complete the assessment and a timeframe. O 2.8.c Medical staff adopts a protocol/standing order set to administer correct prophylactic treatments based on identified risk factors. O 2.8.d Engage vascular lab director as project champion for DVT prophylaxis. Implement a DVT Awareness campaign for hospital staff and training. O</td>
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<td>2.9.a Develop protocol/algorithm for documentation of Left ventricular dysfunction. (I.e. documentation of diagnostic tests, etc.) O</td>
<td>2.9.b Medical Staff approval of implementation of standing orders to</td>
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### Prevention Strategies

**Experience Indicates those items in BOLD are Critical to Success**

1. Prescribed ACE1/ARB at discharge

2. **Provide staff education on contraindications for ACE1/ARB prescription and where to find ventricular systolic dysfunction documentation**

3. **Assign accountability for either discharge staff or pharmacy to chart for ventricular systolic dysfunction, or include prompt for documentation ACE1 ARB contraindications or order for ACE1 or**

### Action Strategies

**Experience Indicates those items in BOLD are Critical to Success**

**Key:**

- E=Executive Action Item
- O=Organization-wide Action Item
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- T=Team Activity

1. Incorporate administration of ACE1/ARB at discharge of no contraindications

2. **Provide staff education on contraindications for ACE1/ARB prescription and where to find ventricular systolic dysfunction documentation**

3. **Assign accountability for either discharge staff or pharmacy to chart for ventricular systolic dysfunction, or include prompt for documentation ACE1 ARB contraindications or order for ACE1 or**
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<td><strong>3. Develop dedicated team</strong></td>
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<td>3.1. Organize around and empower committed surgeons</td>
<td>3.1.a Recruit proactive, experienced, and high-performing surgeons and physicians with a passion for, commitment to, and focus on preventing surgical site infections. T</td>
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<td>3.2. Recruit, train, and retain program staff that are specialized, dedicated, and committed</td>
<td>3.1.b Recruit a physician champion for every important quality/safety patient-centered initiative. T</td>
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<td>3.3. Create a multidisciplinary team that meets regularly to discuss successes and gaps in performance related to SCIP</td>
<td>3.1.c Maintain selective and competitive residency and fellowship programs to attract, train, and recruit emerging talent. T</td>
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<td>3.2.a Employ recruiting practices that attract, train, and retain committed and talented Nursing staff. T</td>
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<td>3.2.b Proactively provide continuing education on improving care for all staff having contact with surgical patients T</td>
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<td>3.3.b Actively consider the input of all SCIP team members, including surgeons, physicians, nurse coordinators, social workers, dieticians, and other allied health staff, inpatient care decisions. T</td>
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<td>3.3.c Involve entire SCIP team, including surgeons, physicians, nurse coordinators, social workers, pharmacists, infectious disease physicians, and administration, in periodic (e.g., monthly) meetings and dedicated events (e.g., annual retreats) to discuss the program and ways for improving it (e.g., reviewing protocols and policies, discussing new technologies and pharmaceutical therapies in preventing surgical site infection). T</td>
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<td>3.3.d Encourage the surgical and physician leadership to abide by and reinforce a collegial, team approach to care. T</td>
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<td>4. Measure and report outcomes</td>
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<td>Implement a performance measurement reporting system</td>
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<td>Use quality models (TQM, Baldrige, Six sigma, etc.) to guide and measure progress</td>
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<td>4.3</td>
<td>Use data to drive improvement by regularly monitoring performance and compliance data and providing feedback to staff</td>
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<td>4.4</td>
<td>Manage variation</td>
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