Surgical Care Improvement Project (SCIP)

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What is SCIP?

- Surgical Care Improvement Project
- National Partnership among many organizations
- Goal?
  - Reduce Surgical Complications
  - “reduce the incidence of surgical complications nationally by 25 percent”

Importance of SCIP

- Surgical site infections are the second leading cause of nosocomial infections
  - 500,000 annually
- Cost $1-$10 billion annually
- Increased visits to the Emergency Department
- Longer hospital stay
  - 3-4 times

SCIP Criteria

Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision

- Creates a bacteriacidal serum level
  - Helps prevent infections
- Increase in infections the longer time between administration of drug and incision
- Vancomycin and Levoquin can be started within two hours because of long infusion time

Prophylactic Antibiotic Selection for Surgical Patients

- Antibiotics used for broad-spectrum coverage
- May substitute due to allergy
- Check list for appropriate antibiotics

Prophylactic Antibiotics Discontinued Within 24 Hours After Anesthesia End Time (48 Hours for Vascular)

- Long-term dosing may increase risk of the patient developing C. Difficile or drug resistant infections
- May need re-dosing throughout procedure due to long surgical procedure
- Studies show no more benefit after closure of wound

Cardiac Surgery Patients With Controlled 6 A.M. Postoperative Blood Glucose

- Prevent Hyperglycemia
  - ≤ 200mg/dl
- High levels increase risk of infection postoperatively
  - Includes both diabetic and non-diabetic patients
- Helps decrease blood stream infections, renal failure, ventilation support and stays in ICU

Surgery Patients with Appropriate Hair Removal

- Shaving with a razor may cause skin abrasions creating a gateway for organisms to enter the body
- Electric clippers significantly reduce infections
- There is not a contraindication to hair removal but clippers have better benefit

Urinary Catheter Removed on Postoperative Day 1 or Postoperative Day 2 With Day of Surgery Being Day Zero

- Number one hospital acquired infection
- Increase rate of infection if left in longer than two days
- More likely to be readmitted
- Increase in hospital cost
- Surgeon must document why the catheter is left in after day 2

Surgery Patients with Perioperative Temperature Management

- ≥ 96.8^{o} F (36^{o} C)
  - 30 minutes before end of anesthesia time or 15 minutes after
- Hypothermia increases risk of infection, impairs healing, drug metabolism, and adverse cardiac events

Surgery Patients on Beta-blocker Therapy Prior to Arrival Who Received a Beta-blocker During the Perioperative Period

- Beta-blocker therapy should be given prior to surgery
- Helps regulate heart rate variation
- Decreases mortality rate in patients
- Inform anesthesia or surgeon if needed
- Show lower one year mortality rate

Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered

Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery

- 20 times more likely to develop DVT/PE
- Compression hose/SCD/Medications
  - Lovenox (Enoxparin) and Coumadin (Warfarin)

OSF St. Joseph Medical Center
Our Story

OSF St. Joseph Medical Center

»Acute Care Hospital

»Licensed for 157 beds

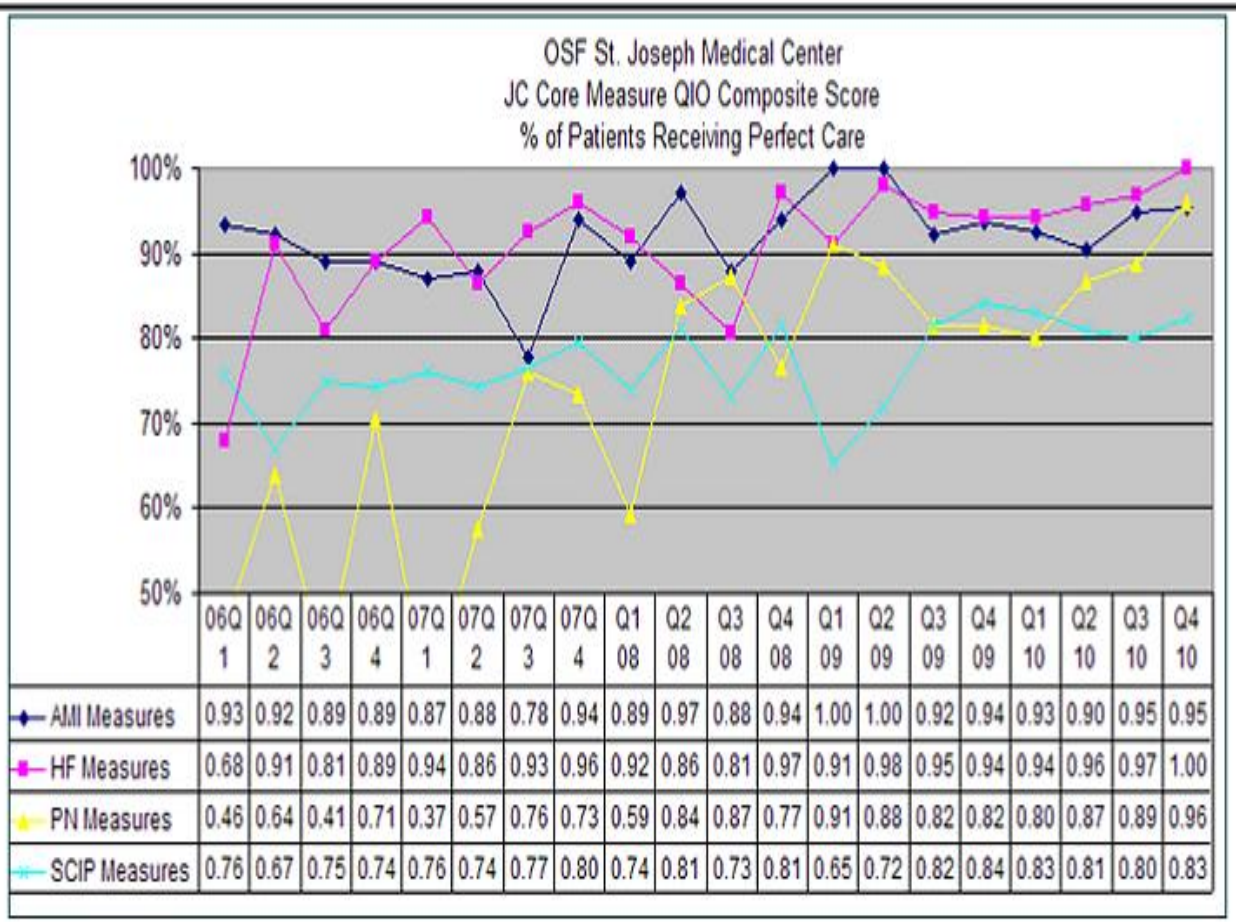
»1600 SCIP Surgeries Annually

The Problem?

SJMC | JC Core Measure QIO Composite Score Percent Patients Receiving Perfect Care | Drill Down To Data | Opportunity

Description: % of patients who receive all of the elements of care in each indicator category. This is a marker of the reliability of our execution of evidence based care.

JC Core Measure QIO Composite Score Summary: 304 of 343 patients received perfect care this quarter (89%). SCIP measures remain a challenge.



	06Q1	06Q2	06Q3	06Q4	07Q1	07Q2	07Q3	07Q4	Q108	Q208	Q308	Q408	Q109	Q209	Q309	Q409	Q110	Q210	Q310	Q410
AMI Measures	0.93	0.92	0.89	0.89	0.87	0.88	0.78	0.94	0.89	0.97	0.88	0.94	1.00	1.00	0.92	0.94	0.93	0.90	0.95	0.95
HF Measures	0.68	0.91	0.81	0.89	0.94	0.86	0.93	0.96	0.92	0.86	0.81	0.97	0.91	0.98	0.95	0.94	0.94	0.96	0.97	1.00
PN Measures	0.46	0.64	0.41	0.71	0.37	0.57	0.76	0.73	0.59	0.84	0.87	0.77	0.91	0.88	0.82	0.82	0.80	0.87	0.89	0.96
SCIP Measures	0.76	0.67	0.75	0.74	0.76	0.74	0.77	0.80	0.74	0.81	0.73	0.81	0.65	0.72	0.82	0.84	0.83	0.81	0.80	0.83

Team

- Physicians
- Preadmission staff
- Periop staff
- Anesthesia
- PACU staff
- Nursing staff on all units 2010-2011

What will we measure?

- Appropriate antibiotic selected for surgical cases
- Antibiotic given within 1 hour of incision (2 hours if Vancomycin)
- Temperature of patient maintained above 96.8F in Peri-op and PACU
- Venous Thrombosis prevention in place when appropriate (TEDS, SCDS, Prophylaxis)
- Order for antibiotic to be discontinued

When will we be measuring?

- Each nursing area will score each patient
- O for perfect and 1 for not perfect.
- Starting goal is 20 cases of perfect care per month

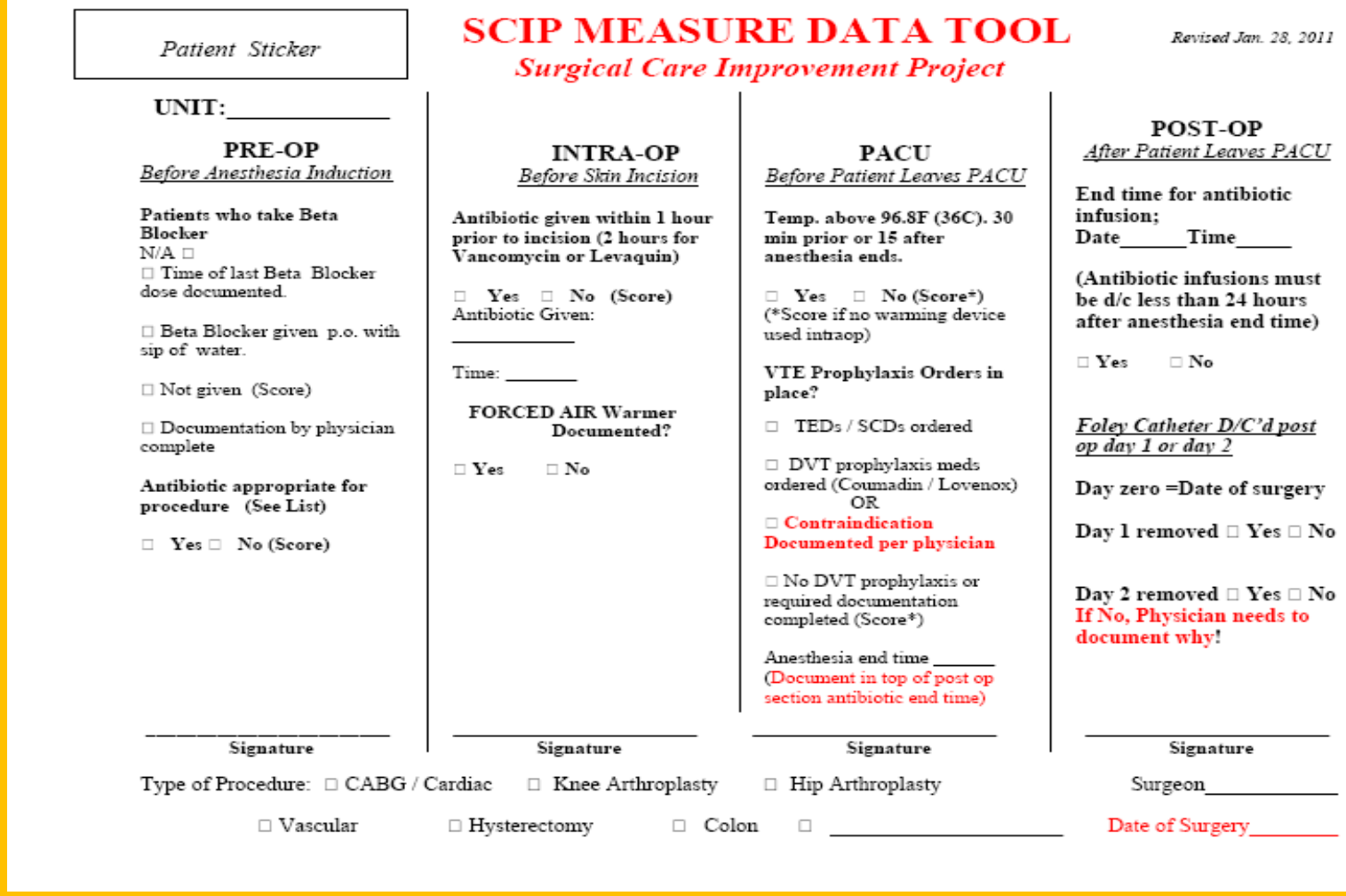
Why are we measuring?

- We want to prevent surgical complications for our patients (SSI, DVT, VAP and Cardiac events)

Tools

- SCIP measure data tool initiated on all surgical patients
- SCIP measures rational to support patient safety
- List of antibiotics appropriate for procedure developed by the SSU team
- Yellow Foley Catheter Algorithm

SCIP Measure Data Tool



Patient Sticker

SCIP MEASURE DATA TOOL

Surgical Care Improvement Project

Revised Jan. 28, 2011

UNIT:_____

PRE-OP
Before Anesthesia Induction

Patients who take Beta Blocker
N/A ☐
☐ Time of last Beta Blocker dose documented.

☐ Beta Blocker given p.o. with sip of water.

☐ Not given (Score)

☐ Documentation by physician complete

Antibiotic appropriate for procedure (See List)

☐ **Yes** ☐ **No (Score)**

_____
Signature

INTRA-OP
Before Skin Incision

Antibiotic given within 1 hour prior to incision (2 hours for Vancomycin or Levaquin)

☐ **Yes** ☐ **No (Score)**
Antibiotic Given:
_____

Time: _____

FORCED AIR Warmer Documented?

☐ **Yes** ☐ **No**

_____
Signature

PACU
Before Patient Leaves PACU

Temp. above 96.8F (36C). 30 min prior or 15 after anesthesia ends.

☐ **Yes** ☐ **No (Score*)**
(*Score if no warming device used intraop)

VTE Prophylaxis Orders in place?

☐ TEDs / SCDs ordered

☐ DVT prophylaxis meds ordered (Coumadin / Lovenox)
OR
☐ **Contraindication Documented per physician**

☐ No DVT prophylaxis or required documentation completed (Score*)

Anesthesia end time _____
(Document in top of post op section antibiotic end time)

_____
Signature

POST-OP
After Patient Leaves PACU

End time for antibiotic infusion;
Date_____**Time**_____

(Antibiotic infusions must be d/c less than 24 hours after anesthesia end time)

☐ **Yes** ☐ **No**

Foley Catheter D/C'd post op day 1 or day 2

Day zero =Date of surgery

Day 1 removed ☐ Yes ☐ No

Day 2 removed ☐ Yes ☐ No
If No, Physician needs to document why!

_____
Signature

Type of Procedure: ☐ CABG / Cardiac ☐ Knee Arthroplasty ☐ Hip Arthroplasty

☐ Vascular ☐ Hysterectomy ☐ Colon ☐ _____

Surgeon_____

Date of Surgery_____

SCIP measure Evidence

Surgical Care Improvement Project (SCIP)

*The Surgical Care Improvement Project (SCIP) is a national quality partnership of organizations focused on improving surgical care by significantly reducing surgical complications.
* Only certain types of cases are tracked for SCIP measures, but we should be following measures for all patients.

Be sure to add the SCIP tool to All surgery patient's chart prior to their procedure!

- **Prophylactic Antibiotics**
  Appropriate Prophylactic Antibiotics are to be administered within 1 hour of incision time. Also, they are discontinued within 24 hours after anesthesia end time (48 hours for cardiac surgery).
  Preop: Make sure the antibiotic ordered is appropriate to pt. case and that they do not have allergy to ordered antibiotic. We have a list of the appropriate antibiotics.
  Postop: Make sure that the prophylactic IV antibiotic is stopped within 24 hours of the End of Anesthesia Time (can find on Anesthesia Record)
  Why: no benefit to patient to receive antibiotic after 24 hours of anesthesia end time; increase risk of C-Diff infections (exception- 48 hours for hearts)
- **Blood Glucose**
  6am Blood Glucose needs to be less than 200 mg/dl on second day post op for cardiac surgery patients. Check 3am glucose (prior to 6am glucose check on 2nd post op day) and if above goal range at 3am, notify physician so orders can be initiated to lower glucose.
  Postop: Check 6 am Blood Glucose for 2 days after surgery. Notify physician if greater than 200mg/dl.
  Why: Risk of infections higher if blood glucose levels elevated
- **Appropriate Hair Removal**
  Surgery patients will have appropriate hair removal with clippers or depilatory. No razors should be used.
  Preop: Instruct patients not to shave surgical site prior to procedure. Use clipper for hair removal when ordered for preop.
  Why: Shaving with razor causes skin abrasions which may lead to infections
- **Urinary Catheter Removal**
  Surgical patients will have urinary catheter removed on Postop Day 1 or 2.
  Postop: Check Postop day 1 to see if there is an order to remove foley by postop day 2. Remove foley by postop day 2 and document. Complete and place yellow sheets in folder.
  Why: Increase UTI with increase duration of Foley catheter
- **Normothermia**
  Surgical patients should be actively warmed during surgery or have at least one recorded body temp equal to or greater than 96.8 F within 30 minutes prior to the end of anesthesia to 15 min after anesthesia end time.
  Preop: Place Bair Paws gowns on patients if available.
  Postop: Ensure a postop temp was obtained and documented.
  Why: Delayed wound closure which results in prolong hospitalization; 3 x greater incidence of surgical site infections with hypothermia
- **Beta-blockers**
  Surgery patients **who are on beta-blockers prior to admission** should continue beta-blocker therapy during the perioperative period.
  Preop: Continue to give patient their beta blocker as ordered with a sip of water on the day of surgery (even though they are NPO). If patient is on beta blocker and did not take it, notify anesthesia and/or surgeon for order to give it.
  Why: Higher mortality-risk associated with discontinued Beta-Blocker use in peri op period.
- **Venous Thromboembolism (VTE) Prophylaxis**
  Surgery patients will be screened and appropriate VTE prophylaxis will be implemented from hospital arrival to 48 hours after Anesthesia end time. (We have the pre-printed orders that include nationally recommended guidelines)
  Preop: Complete the VTE risk assessment. Ensure the VTE form is on the chart and fill in the risk score. Apply TED hose if ordered.
  Postop: Continue the VTE Prophylaxis according to the physician's orders.
  Why: Reduce pulmonary embolism and DVT.

Revised 10/27/2010

Process

- SCIP measure data tool to be pulled and used on each surgical patient
- Tool will follow the patient through the surgical process and be included in the handoff process and kept in the patient's room at the bedside until the Foley catheter removed
- Yellow Foley Catheter Algorithm kept at the bedside
- Nursing staff to return SCIP measure data tool to Nurse manager
- Nurse manager real time enter each measure on a spreadsheet compliance with measure

Implementation Strategies

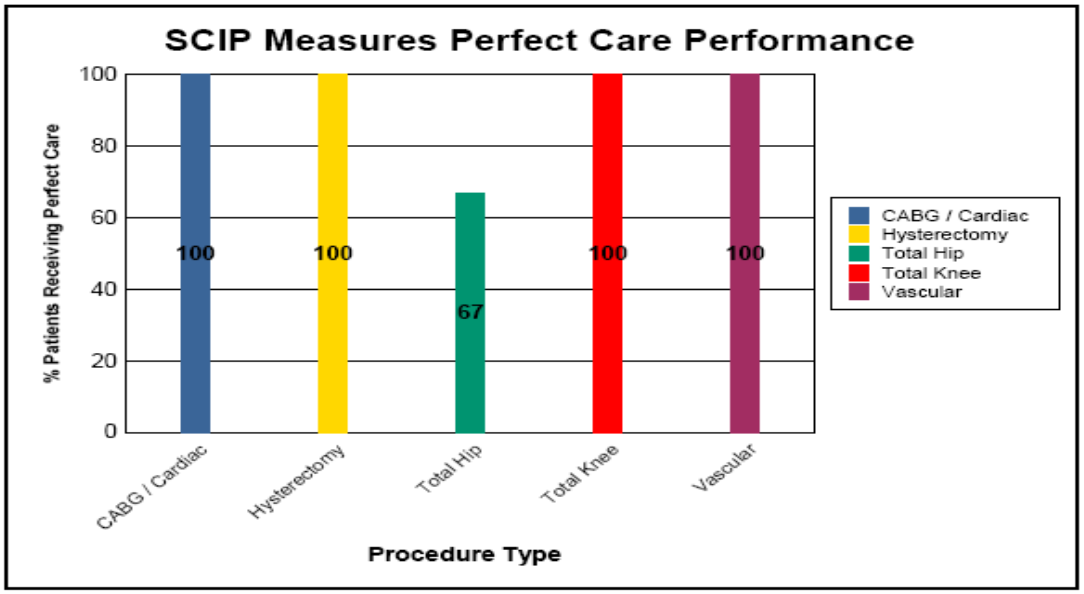
- Education at Unit Meetings by SCIP team
- Education at departmental share governance councils
- Posting weekly charts for the number of perfect cases
- Announcement at morning briefing by each nursing unit, the number of SCIP patients and if SCIP measure met for phase of care

How are we doing?

SCIP Concurrent Review
For the Week of January 30th to February 5th

OSF St. Joseph Medical Center

	Average Score	# Perfect	# Cases	% Perfect
CABG / Cardiac	7.00	3	3	100.00%
Hysterectomy	7.00	1	1	100.00%
Total Hip	6.67	2	3	66.67%
Total Knee	7.00	4	4	100.00%
Vascular	7.00	2	2	100.00%
	6.92	**12**	**13**	**92.31%**



Prepared by QRM Department - SJMC

February 09, 2011

New Implementation Strategies

–Walking Grand Rounds

–SCIP FAIR

SCIP Fair

Let's SCIP to the next level!

We do a good job, but we can (and must) do better!
Goal is to achieve 100% reliable performance
on core measure performance.

learn more at the

SCIP Day Fair

February 18
Business and Conference Center
7 - 9 a.m. and 11 a.m. - 2 p.m.

Door prizes, food, and fun!
Education on SCIP and
CORE Measures for Nursing


GOOD OUTCOMES
AND
Value Based Purchasing
CRITICAL CONVERSATIONS

...oes the patient have orders for
...utaneous long acting insulin to be
...2 hours prior to discontinuing
...in infusion? Does the patient
...s for subcutaneous insulin
...ulin infusion has stopped?
...om going too high after infusion has ceased.)

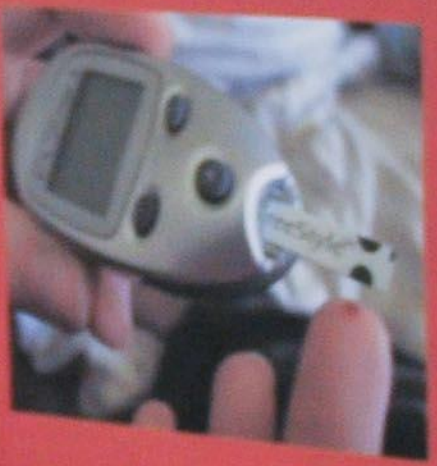
...consulted a Hospitalist
...tes APN for insulin
...?

GOAL in the CCC!

*8AM BLOOD GLUCOSE MUST BE LESS THAN OR EQUAL TO 200 MG/DL FOR THE FIRST TWO POST OP DAYS IN CARDIAC SURGERY PATIENTS!

POST-OP: Check 8am blood glucose for 2 days after surgery. Please notify physician if greater than 200 mg/dL.

WHY: Risk of infection is higher if blood glucose levels are elevated!

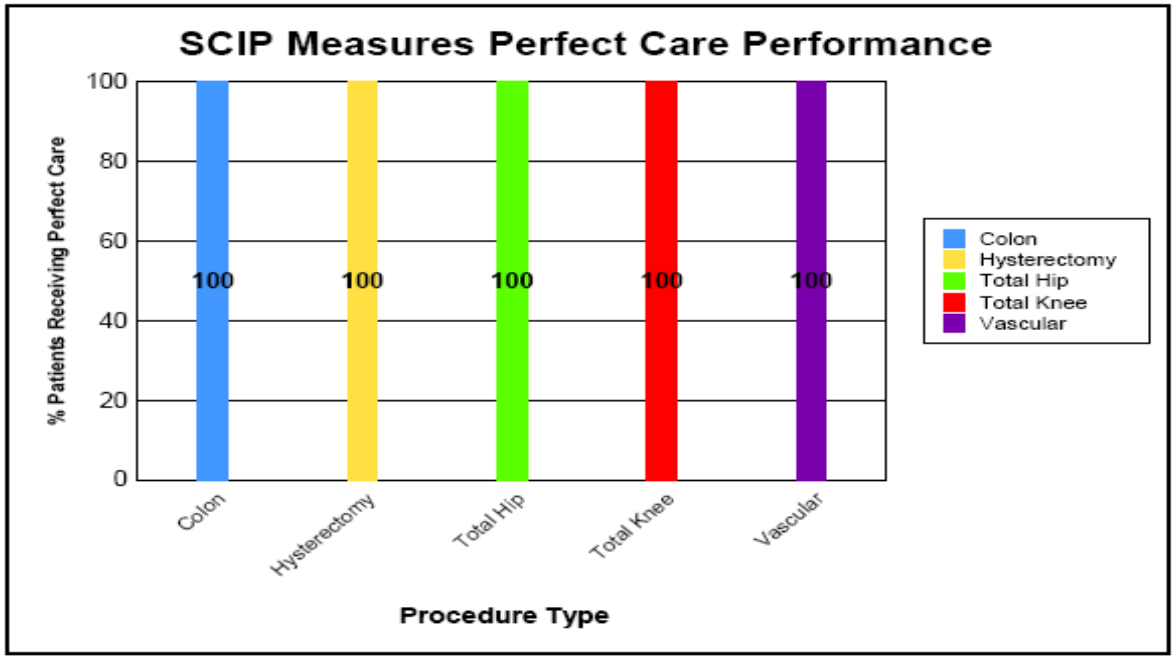


Week of Feb 27 to March 5th

SCIP Concurrent Review
February 27th to March 12th

OSF St. Joseph Medical Center

	Average Score	# Perfect	# Cases	% Perfect
Colon	7.00	2	2	100.00%
Hysterectomy	7.00	3	3	100.00%
Total Hip	7.00	4	4	100.00%
Total Knee	7.00	11	11	100.00%
Vascular	7.00	4	4	100.00%
	7.00	**24**	**24**	**100.00%**



Congratulations on 24 consecutive cases of Perfect Surgical Care!!!

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March 18, 2011

Implications for Nursing Practice

- Use of a checklist tool did improve the completion of the SCIP measures however more time is needed to measure if there was a reduction in surgical complications
- Healthcare systems must adopt a zero tolerance to Hospital Acquired Infections and SCIP checklist tool creates a culture of teamwork and accountability that translates into preventing HAIs when evidence based practice used by all caregivers.

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