

THE QUALITY EDGE

Surgical Care Improvement Project



Rose Czarnecki

The Surgical Care Improvement Project (SCIP) is a national quality partnership of organizations committed to improving the safety of surgical care through the reduction of postoperative complications. The SCIP partnership was initiated in 2003 by CMS and the Centers for Disease Control and Prevention through the formation of a steering committee. Representatives of 10 organizations comprise the committee, including the Agency for Healthcare Research and Quality, American College of Surgeons, American Hospital Association, American Society of Anesthesiologists, Association of Peri-Operative Nurses, Centers for Medicare & Medicaid Services, Centers for Disease Control and Prevention, Department of Veterans Affairs, Institute for Healthcare Improvement, and Joint Commission on Accreditation of Healthcare Organizations. It was launched to providers in 2005 and then to consumers in 2006. The SCIP partnership is a multiyear

national campaign to substantially reduce surgical mortality and morbidity. The national goal is to reduce the incidence of surgical complications nationally by 25 percent by the year 2010.



SCIP has six modules:

1. Infection includes seven prevention process measures:

- Prophylactic antibiotic received within one hour prior to surgical incision
- Prophylactic antibiotic selection for surgical patients
- Prophylactic antibiotic discontinued within 24 hours after surgery end time (48 hours for cardiac patients)
- Cardiac surgery patients with controlled 6 a.m. postoperative serum glucose
- Postoperative wound infection diagnosed during index hospitalization
- Surgery patients with appropriate hair removal
- Colorectal surgery patient with immediate postoperative normothermia

2. Venous Thromboembolus includes four prevention process measures:

- 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
- Intra- and postoperative pulmonary embolism (PE) diagnosed during index hospitalization and within 30 days of surgery
- Intra- and postoperative deep vein thrombosis (DVT) diagnosed during index hospitalization and within 30 days of surgery

3. Cardiovascular includes three prevention process measures:

- Surgery patients on a beta-blocker prior to surgery that received a beta blocker during the peri-operative period
- Non-cardiac vascular surgery patient with evidence of

(Continued on page 7)

MESSAGE FROM THE PRESIDENT



Barb Sallo

Although it is difficult to believe that we are beginning the 3rd Quarter of 2007, it may be the appropriate time to re-evaluate progress towards goals set at the beginning of the year.

An article in a local paper suggested to business owners that this is a good time to assess the year-to-date situation. I join them in passing that wise suggestion on to you. Are you completing or making significant progress on the goals that you set for your facility, department or service at the beginning of the new year? Do you need to readjust those goals or set new ones? How is your business doing overall?

While you take the time out to look at your progress you may also want to review and read further on these various items of interest:



An interesting article was recently published in the *New England Journal of Medicine*—“Explaining the Decrease in U.S. Deaths from Coronary Disease, 1980-2000.” From 1980 through 2000, the age-adjusted death rate for coronary heart disease per 100,000 population fell from 542.9 to 266.8 deaths among men and from 263.3 to 134.4

deaths among women. Approximately 47% of this decrease was attributed to treatment and 44% attributed to changes in risk factors.

The bad news from the study, is that obesity is up by 10% and diabetes by 44%, which combined has caused an estimated 60,000 additional coronary heart disease deaths. The increase in obesity and diabetes has the potential to wipe out the gains that have been made.

In addition, the aging of the population will have a major impact on the rate of coronary heart disease as it is one of the most significant risk factors.



The federal government last month unveiled a Web site that provides cardiac care information tracking hospital performance. This is the first reporting of hospital performance in this manner in nearly two decades and was well received by hospital administrators and health-care researchers.

The ratings for the level of cardiac care provided by more than 4,000 hospitals nationwide, can be found at www.hospitalcompare.hhs.gov.

The new data offers a comparison of hospitals' treatment of heart attack and heart failure.

Experts predict consumers will continue to choose hospitals on the basis of proximity, physician recommendation and the experiences of friends and family. It remains to be seen if information from this web site will have an effect on consumer choice.

Regardless, a below-average listing for a hospital ought to be a loud “wake up call” to prompt hospital administrators to examine, and take steps to improve procedures and patient care processes.



For cardiovascular administrators or directors involved in equipment and supply decisions, www.medcompare.com may be useful. Once on the site, select “cardiovascular” and then peruse the lists of all products for cath, EP, cardiac surgery, etc. Available are current products, vendors, product specifics, manufacturers details and other useful information.



Google has created a health care advisory group of prominent medical and health care experts chaired by Dean Ornish, MD founder and president of the

(Continued on page 4)

WHOSE CATH LAB IS IT ANYWAY?

PART III



When managing a cardiac catheterization laboratory (especially one that is diverse in procedures performed including pacemakers, peripheral vascular work and electrophysiology), inventory management can become a daunting but critical piece of the operations management. Several key issues that need to be considered include:

- Process to evaluate new products prior to purchase
- Limiting the amount of products and vendors maintained
- Consignment as much as possible
- Just in time ordering for low use products
- Inventory management process/system

While certainly wanting to have all needed items readily on hand for various procedures but yet not wanting to have excessive dollars tied up in supplies, the cardiac catheterization laboratory director must walk a fine line in managing these variables. To limit the inventory to the necessary supply items, yet be able to allow for the introduction of new products, a product evaluation committee is a valuable tool. This committee, usually comprised of physician,

purchasing and cath lab management representation, would review information regarding any new or replacement product to determine if the supply is appropriate, what the cost and reimbursement impact would be, what the vendor negotiations can garner (no shipping fees, consignment, etc.) and what the product trade-out cost implications would be. This group would make recommendations regarding what items to add to the inventory as well as what products should be removed. The group also insures that new products are added, as appropriate, to the department charge master and any hospital information systems billing screens in a timely manner so that charges are not missed once the item is in stock. This product evaluation group should also work to coordinate supply purchase from a select few vendors, generally a primary vendor for most products and one or two secondary vendors to lend some variety and obtain items that may not be available from the primary vendor.

Limiting the number of vendors, forces the volume purchased from each vendor to be higher and higher volumes per vendor will generally translate into a better purchase price for the hospital. Negotiations with vendors should also include the vendor responsibility for shipping charges, vendors providing trade out services (removing old

product lines when new ones are released) and replacement for expiring products at no charge to the hospital. It goes without saying that as many large dollar items as possible should be on the shelf as consignment so that the vendor retains responsibility for the product until such time as it is used and charged.

Just in time ordering is one method to insure that low use, high dollar items are available, but not taking up shelf space and budget dollars. When items are used rarely, there is a need to have available, but a concern that the product may expire prior to use. Just in time ordering allows for products to be ordered from the vendor with guaranteed shipping in an overnight fashion (at the vendor's expense). This insures the product is available for a scheduled case, will not take up shelf space and budget dollars and is not going to expire prior to use.

Finally, a detailed inventory management process should be in place. Many hospitals continue to use a manual inventory system with paper tracking of products, number of units on hand, expiration dates and use a pre determined par level for reordering. This continues to work for many smaller hospitals, however, this can be a time consuming process for personnel.

(Continued on page 4)

WHOSE CATH LAB IS IT ANYWAY? PART III

(Continued from page 3)

The investment in software to computerize the inventory process can prove to pay for itself, especially if the system is interfaced with the documentation process so when a supply is used and documented in the system, it is automatically subtracted from the inventory. Thus, the final inventory tally at the end of the day or week (depending on the frequency of ordering) will permit the printing of a list of supplies to be reordered. Many systems will also interface with the purchasing department and finance systems to also automatically charge and



reorder the supply.

With use of an automated system, if expiration dates are entered, the list can be scanned

periodically for outdated (or near outdated) to have traded out by the vendor. One important aspect of an automated system is that an individual must be held accountable to insure that the inventory in the system is correct

and updated as products are added or replaced with newer supplies.

As you can see, inventory management, especially for a larger laboratory, can be time intensive and many larger facilities have a staff member dedicated to (or with primary responsibility) for the inventory management of the laboratory. Appropriate management of the inventory can save the hospital thousands of dollars by insuring only the appropriate number and types of supplies are in stock and that products are not expiring without vendor replacement.

MESSAGE FROM THE PRESIDENT

Preventive Medicine Research Institute. According to Google, the Google Health Advisory Council has a mission of assisting the search engine firm to "better understand the problems consumers and providers face every day and offer feedback on product ideas and development."



According to new guidelines issued by the AHA, women over age 50 should consider Aspirin Therapy to help prevent heart disease and stroke. The guidelines published in the May issue of the journal *Circulation*, focus on the long-term risk of



high blood pressure, smoking, lack of daily exercise or being overweight—even if a woman seems healthy.

Even a single risk factor at age 50 greatly increases the chance of heart disease or stroke later. Only about 10% of American women

are free of these problems, according to the AHA. The Heart Advisor urges women age 50 and older to talk to their doctors about daily aspirin therapy (low dose, 81mg) to determine if this is appropriate for them.

So long for now and have a great second half of this 2007.....



INCORPORATING AN ANKLE BRACHIAL INDEX “ABI” EXAM INTO YOUR PATIENT ASSESSMENT



An ankle brachial index, referred to as an ABI check, is a very simple

Cyndi Havrilak
method of assessing for peripheral vascular disease. Surprisingly this measure is not a standard component of all physical assessments for patients' age 50 and older. The 2006 ACC/AHA Guidelines for the Management of Patients with Peripheral Arterial Disease (PAD), recommends testing be done on asymptomatic adults 50 years and older with walking impairment, claudication, ischemic rest pain, and/or non-healing wounds. Individuals who are symptomatic with lower extremity PAD can be identified by examination and/or measurement of the ABI. Early detection of PAD is optimal to reduce the chronic progression of both peripheral and cardiac vascular conditions.

Incentives for Completing an ABI Exam Includes:

- Requires no patient preparation
- Requires minimal equipment: vascular hand held doppler and blood pressure cuff
- With assigned CPT Code

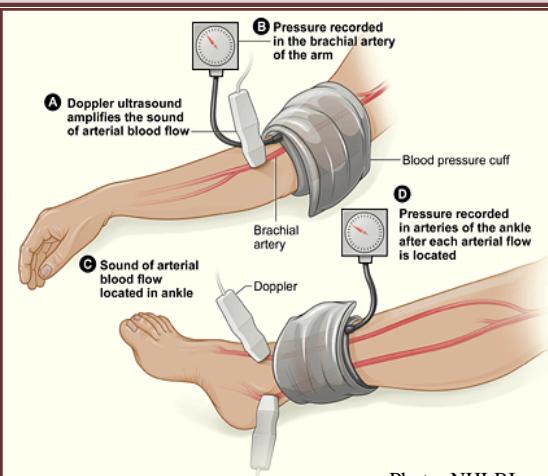


Photo: NHLBI

93922, a reimbursement average of \$75

- Requires only basic medical skills to complete
- Provides immediate clinical data without a turnaround time
- Provides reliable information the physician can use to determine if any additional clinical testing is indicated (a method of trending status in-between examinations, post exercise or post intervention)
- Total exam time is approximately 15 minutes
- Cost-effective
- Non-invasive test

When I ask physicians if they routinely complete an ABI for their adult patients over 50 as a part of their physical assessment, frequent responses are that it would add time or they don't think of it, and therefore, the test is rarely done.

An ABI exam is usually not a

familiar assessment tool used by nursing staff. Many are not aware of how to complete the exam or its clinical significance. That is reason enough to outline the steps involved in completing an ABI exam and an explanation of the findings

Procedure for Obtaining Ankle Brachial Index:

Brachial measurement:

1. The patient must lay in a supine position for a few minutes prior to the test.
2. Ask the patient if both arms may be used to obtain a blood pressure. Do not perform blood pressure on an upper extremity with an AV shunt or fistula or any other contraindication without a physician's order.
3. Place an appropriately sized blood pressure cuff around the upper arms.
4. Locate the brachial pulse and apply ultrasound gel.
5. Angle the doppler probe at a 45 degree angle and move the probe to obtain best arterial sound. Arterial sounds are synchronized with every heartbeat with a rhythmic “whooshing”. Venous sounds are spontaneous and vary with respirations, sounding like the wind blowing.

(Continued on page 6)

INCORPORATING AN ANKLE BRACHIAL INDEX “ABI” EXAM INTO YOUR PATIENT ASSESSMENT

(Continued from page 5)

6. Inflate the cuff to a pressure of 20-30 mmHg above the audible arterial doppler signal.
7. Deflate the cuff slowly and record the pressure reading when the first arterial signal is heard.

Obtain blood pressure in both arms (if no contraindications). Use the highest systolic number to represent the brachial reading.

Ankle measurement:

1. May use either the dorsalis pedis or posterior tibial artery, whichever gives the strongest signal.
2. Place appropriately sized cuff around the ankle, just above the foot.
3. Locate the dorsalis pedis or posterior tibial artery and apply gel.
4. Angle the probe pointing up the leg, applying light pressure since the artery can be compressed against the bone, reducing blood flow.
5. Inflate the cuff 10 to 20 mmHg above the point that you can no longer hear the pulse.
6. Deflate the cuff pressure slowly and note the point at which the pulse is audible. Allow the cuff to fully deflate for about a minute prior to inflation. Repeat the procedure for the posterior tibial artery.

Repeat using the other foot.

Interpretation:

1. Divide each of the ankle systolic numbers by the highest brachial systolic number to determine the ankle-brachial index. List the values of DP and PT for both legs.

$$\text{Equation: } \frac{\text{A}}{\text{B}} = \text{ABI}$$

ABI	Interpretation
1.10 to 1.0	Normal
Less than 0.9	Some arterial disease
Less than 0.9 to More than 0.5	Claudication, should have further testing
Less than 0.5	Severe arterial disease

Reference: Society of Interventional Radiology & ACC/AHA Guidelines for Management of Patients with PAD-2006

Technique tips:

1. Avoid repeated inflations or having cuff inflated for long periods.
2. Be sure to use the same size cuff on both the arms and the ankles.
3. High reading may be obtained when the vessels are calcified, (associated with diabetes), the legs are large, the cuff size is too small, or the legs are in a dependent position.
4. Results may be inaccurate when the systolic blood pressure cannot be abolished by cuff inflations (such as non-compressible arteries).

Providing an ABI exam is often performed as a component of community vascular screenings programs due to the low cost and simplicity of the procedure. This screening tool should be performed more frequently to assist in earlier detection of vascular conditions.

THE QUALITY EDGE

(Continued from page 1)

coronary disease who received beta-blockers during peri-operative period

- Intra- or postoperative acute myocardial infarction (AMI) diagnosed during index hospitalization and within 30 days of surgery

4. Respiratory includes four prevention process measures:

- Number of days ventilated surgery patient had documentation of Head of Bed (HOB) being elevated from recovery end date (day zero) through postoperative day seven
- Patients diagnosed with postoperative ventilator-associated pneumonia (VAP) during index hospitalization
- Number of days ventilated surgery patient had documentation of stress ulcer disease (SUD) prophylaxis from recovery end date (day

zero) through postoperative day seven

- Surgical patients on a ventilator who were placed on a ventilator weaning protocol

5. Vascular Access includes one prevention process measure:

- Permanent hospital end stage renal disease (ESRD) vascular access procedure that are autogenous AV fistulas

6. Global includes two prevention process measures:

- Mortality within 30 days of surgery
- Readmission within 30 days of surgery

Hospitals from almost every state are participating in this project through Medicare Quality Improvement Committee (MedQIC). Hospitals can also

participate through their state's Quality Improvement Organization as a federal VA facility, through a participating health system, and/or through submission of data to Hospital Compare.

In 2007, hospitals that are paid by Medicare under the acute-care inpatient prospective payment system (IPPS) and want to receive their full market basket update must collect data on 2 measures from the surgical care improvement project:

- Prophylactic antibiotic received within one hour prior to surgical incision
- Prophylactic antibiotic discontinued within 24 hours after surgery end time (48 hours for cardiac patients)

Hospitals that do not participate will receive a reduction of 2.0 percent in their Medicare Annual Payment Update.

Health Care Visions
3283 Babcock Boulevard
Pittsburgh, PA 15237

Phone: (412) 364-3770
Fax: (412) 364-3161
E-mail: hcv@hcvconsult.com
www.hcvconsult.com
Consultants Specializing in Cardiovascular Programs