



Health Care Visions News

From The Cardiovascular Specialists

2ND QUARTER 2004

Diagnostic Cardiac Catheterization

United Community Hospital Performing Low Risk Diagnostic Catheterization



Marsha Knapik

United Community Hospital in Grove City, Pennsylvania, performed its first diagnostic cardiac catheterization on January 21, 2004. While United desired to implement cardiac catheterization for some time, efforts began in earnest in the summer of 2003. Health Care Visions, Ltd. was formally engaged in September to facilitate program implementation.

Anthony Zelenka, President and CEO at United, led a unique approach to implementing cardiac catheterization services by using mobile equipment in an existing operating room. This allowed for rapid program implementation, and as volumes increase, will permit planning for a fixed catheterization laboratory in the future. Using this approach required a cooperative effort with Surgery management and staff in order to share space, time, and equipment.

Also unique to this project was the selection of two Radiology staff nurses to act as co-coordinators of the project at United. This provided great opportunity for staff input into the program planning and afforded the staff members responsibilities that were new and exciting. Although the hospital administrative team was intimately involved with program planning, they provided multiple opportunities for staff input as several staff members participated in equipment and supply selections, charge description master development, design of patient flow processes, and patient education



United Community Hospital's Dry Run

material development. Also evident in the program planning process was the attention to detail in every aspect of the project. The coordinators spent countless hours working with the physician offices to outline the information needed for the scheduling process for cardiac catheterization. Several "open sessions" were held for hospital employees to keep them informed of project progress and allow for questions. Likewise, written project updates were prepared and distributed for posting on the units.

Staff education was considered critical to quality patient care and HCV provided on-site didactic education not only to the cath lab staff, but also to staff members from Ambulatory, PACU, Critical Care, Telemetry and Emergency Department. Cath lab staff members including RNs and Radiology Technicians received hands-on clinical experience at Allegheny General Hospital in Pittsburgh where they were able to work directly with Dr. David Lasorda, DO, FCP, FACC. Dr. Lasorda will serve as United's Medical Director of the Cardiac Cath Lab and other members of his

cardiology group will provide diagnostic catheterization services at United Community Hospital. The education and training was followed by a "dry run" that included two patient catheterization scenarios (one inpatient and one outpatient). The second scenario was that of a patient who became unstable and required emergency transfer and involved the pre-hospital (ambulance) transport personnel as well.



The rapid timeline for program development with the goal of first catheterization in January of 2004 did not allow for any slow down of effort and the cardiac catheterization team was up to the challenge and was stellar in all aspects of program planning and project follow-through. It was truly a team effort that permitted the program implementation to move aggressively and to allow the first case to be done in a safe, efficient manner on target with the initial timeline. Health Care Visions is honored to have been a part of United Community Hospital's exciting new cardiac catheterization program.

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THE FINANCIAL CORNER

One Stop Post Op Design Reduces Intra-Hospital Transfer Costs



Phil Laux

Whether or not an organization is renovating, expanding or building a new facility, there are numerous questions that need to be answered. How can costs be reduced? Reducing costs is a battle every facility is facing in this ever changing healthcare environment. Hospitals designing or redesigning state-of-the-art open heart surgery centers are incorporating the One Stop Post Op design to reduce intra-hospital transfer costs. The One Stop Post Op design of post-operative open-heart surgery care provides patient focused care across the continuum from the pre and immediate post-op period until discharge. The process of transferring patients is an everyday activity of operating a hospital. There are three basic types of patient transfers: transfer within the nursing unit, transfer between different nursing units at the same hospital or

transfer from one hospital site to another hospital. Transfers within the nursing unit typically occur from patient requests for a private room as they become available. Transfers within the hospital to a different nursing unit involve a different level or type of care. Lastly, transfer from one hospital to another usually is a result of the patient requiring specialized care not offered at the originating site. Reducing intra-hospital transfer costs is one feature of the One Stop Post Op design.



Evaluating the costs associated with intra-hospital transfers is a complex and continuous process. Typically as hospital bed capacities are decreased and occupancy increases patient transfers can only be expected to increase. Hospitals are designing specialized care units to accommodate these fluctuations. For example, open heart surgery programs performing an average annual volume of 250 open heart surgeries utilizing the One Stop Post Op design can save over \$225,000 in personnel and supply costs directly related to intra-hospital transfers. How do we get to this number? Well, first you need to consider all the processes involved with transferring a patient from one unit to another. The various steps in the transfer process involve such actions as

creating the transfer order, notifications to the various departments, filling out the transfer report, assembling the patient's belongings, documenting the transfer, transferring the patient information, physically transferring the patient and so on. All of these processes take up valuable time for personnel and sometimes duplication of supplies. The typical personnel involved with the patient transfer process include RN's, secretaries, nurse aides, admit clerks, transporters, housekeeping, pharmacy techs, dietary aides and physicians. Other non quantified costs associated with patient transfers are the impact on the patient, family, and physicians. Transfers can create anxiety for the patient and family in a time when they need stability and rest. Physicians and staff spend time locating an available bed and setting up the transfer.

Analyzing all of the previously mentioned factors we can come up with an average cost of \$460 per patient transfer. This cost would include the lost revenue opportunity of an unused patient bed and personnel expenses. There is a significant amount of cost associated with the transfer of one patient. If a patient is transferred on average two times during their admission, costs can really add up. Hospitals which transfer a high proportion of patients between units also tend to have an increased length of hospital stay.

ARE PROFITABLE CV SERVICES BYPASSING YOUR FACILITY??



Kathleen Egan

Health Care Visions (HCV) has assisted numerous hospitals throughout the nation answer this question through conducting Feasibility Studies. In its simplest form a Feasibility Study answers three questions. The first question looks at the demand for services. In the second question HCV examines both the availability of physicians as well as the "buy in" of the physician stakeholders to the considered services. Finally, with the third question HCV consultants determine

what financial resources are required to implement the expansion as well as the projected profitability.

In answering the first question Health Care Visions defines a hospital client's Total Cardiac Target Market™ (TCTM). The TCTM is the geographic area from which the hospital could expect to draw patients for advanced cardiovascular care. Mortality rates, out-migration, patient transfers, market population demographics and procedure use rates are analyzed. If there is a demand for services then HCV proceeds to question number two which involves the physician stakeholders.

Health Care Visions determines the medical staff needs of the proposed cardiovascular services. In addition, through physician interviews HCV identifies current and future issues related to cardiovascular service line expansion. Medical staff guidance is always solicited and considered as physician support and

acceptance are vital to the success of an expanded program.

The third and final step of a Feasibility Study is to develop an accurate financial assessment of the proposed expansion. This includes five-year profitability, return on investment scenarios and cost models for equipment, staffing and supplies.

Feasibility Studies can be used to solicit board approval, secure financing, and meet CON application requirements. Health Care Visions finds that hospital clients use Feasibility Studies as a guide during the preplanning, business plan development and start-up phases of program expansions.

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CAROTID STENTING



Cyndi Havrilak

Carotid endarterectomy (CEA) is presently considered the gold standard of treatment for carotid artery stenosis, but physicians managing this disease will soon be given another treatment option; carotid artery stenting. Carotid angioplasty with stenting (CAS) is a new endovascular procedure that is expected to gain FDA approval by the end of this year or early 2005. In order to offer this new procedure prior organizational effort should be applied to avoid poor patient outcomes or diversion of patients to a competing program offering this new treatment option. The following is information for you to consider when preparing your organization for this service.

Carotid endarterectomy is a very common surgery with about 250,000 cases performed each year in the United States. This procedure is completed in the operating room utilizing local anesthesia, in some cases, and a one day stay which may or may not be in an ICU. The procedure has very low complication rates listed in the literature as about 2%-10% depending on the patient's preoperative risk factors. Ongoing CAS trials have enabled selected facilities to offer this new treatment option to only high risk patients who were not considered to be a surgical candidate. Large scale trials such as Sapphire and Archer have been able to substantiate the long-term safety of the procedure and provide the supporting evidence to gain FDA approval.

Several advantages of CAS over surgery have been identified through the medical research substantiating efforts directed at making this procedure a viable treatment option. CAS involves only a local anesthesia at the puncture site, enabling ongoing neurological assessments throughout the procedure. This procedure also provides a treatment option for patients considered to be too high a risk for surgery and eliminates cranial nerve injury which occurs in 7.6% of surgeries. The less invasive technique is typically preferred by

patients since recovery is quicker and not as painful.

Who will be performing this procedure? Interventional radiologists and interventional cardiologists are the most likely practitioners since the procedure requires advanced imaging and catheter based skills. Some vascular surgeons are now training to

perform catheter based procedures in their fellowships preparing them also for the future of minimally invasive procedures. The technique for carotid stenting is different from coronary, iliac and renal artery stenting, therefore, practitioners will require hands on training to perform CAS. The literature and professional associations have published little on the recommended training components, a collaborative panel of the American Society of Interventional and Therapeutic Neuroradiology, the American Society of Neuroradiology, and the Society of Interventional Radiology published suggested guidelines to begin with a physician experience level of at least a 100 diagnostic cervicocerebral angiograms and then at least 10 hands on carotid stenting as principal operator under supervision. These strict guidelines are suggested due to the threat of stroke. The Society on Interventional Radiology (SIR) plans to devote a portion of their March symposium to CAS training recommendations which should provide guidance on developing your privileging requirements. Simulator training, didactic and proctoring components are anticipated to be among the recommended training requirements. Credentialing/privileging guidelines should be established to certify completion of these components.

As with any invasive procedure there are



The less invasive technique is typically preferred by patients since recovery is quicker and not as painful.

patient complications that require planned strategies to reduce the risk. The most common complication of distal embolization resulting in neurological complications is thought to be minimized by the use of distal embolization protection devices (DPD). These are small filters placed into the artery that catch downstream particles which are removed with the device once the stenting is completed. The use of these devices increase the procedure time and the technical skill required of the operator. Due to this potential complication documentation of the patient's baseline neurological status needs to be a standard step in the pre-procedure workup. Artery dissection is another major complication the can occur but usually it is repaired with stenting. For the rare case that may require surgical conversion prior participation of the surgical division should be included as a step in preparing for this new service.

A multidisciplinary meeting involving your interventional radiologists, interventional cardiologist, neurologist and vascular surgeons should be considered to communicate specifics of the service and establish patient selection guidelines. Although the trials have included only high risk patients, appropriate patient selection beginning with low risk patients felt to be instrumental in maintaining low complication rates. Anticipate resistance from the disciplines that have not acquired the skills to perform the procedure and stand to lose patient volume as well as revenue. A multidisciplinary physician planning approach will allow opinions to be voiced and addressed, while forward progress continues in development of this new service.

CAS is expected to be FDA approved in the near future. Preparing your program for this new service will keep your facility on the cutting edge of cardiovascular services.

¹Higashida RT: Vascular Stenting and Angioplasty on the Carotid Artery; Department of Radiology, Interventional Neuroradiology Division, University of California San Francisco, UCSF Medical Center, 5/20/02.

²Dieter Robert S., Laird John R., Carotid Artery Stenting Risk Reduction. *Endovascular Today*. September 2003; 69-73

MESSAGE FROM THE PRESIDENT



Barb Sallo

Health Care Visions, Ltd. has had great exposure over the past seven years to cardiovascular administrators since cardiovascular consulting is our sole mission. During this time, we have noticed

that the competition for patients has grown and that CV specialty services are a very "critical" area, accounting for a significant percent of revenue—sometimes up to 40% of the hospital's total.

Since cardiovascular and cardiology are essential to financial success, marketing of services becomes crucial. Sometimes, I think it is still hard for hospitals and their staff to "market" themselves since in the past this was not necessary and was

generally frowned upon by the "old guard." Times have changed and the administrators who are going to "win" with the consumer will use "marketing" efforts to educate them about their services and provide value added elements.

The first step is to identify what would be a good fit for you and your organization. Hospitals are participating with health fairs and heart walks but much more is available. Two organizations that have informative web pages and focus on community could be reviewed for seeds for thought:

The National Center for Early Defibrillation located in Pittsburgh, PA was recently a Health Care Hero Finalist. The organization started four years ago and is creating the nation's sole information clearinghouse dedicated to sudden cardiac arrest and defibrillation. Their mission is to help communities learn how to set up comprehensive early defibrillation response systems and place automated external defibrillators. www.early-defib.org

The Boomer Coalition is a virtual association that helps promote heart research and cardiovascular-disease

awareness. It is a coordinated effort by Pfizer and the American Heart Association. www.boomercoalition.org

The CV administrators who feel it is their job to serve the community and make their part of the world a heart healthy place to live will win!

Top Ten Things You Don't Want to Hear During Surgery

10. Hand me that... uh... that uh... thingy.
9. There go the lights again...
8. Everybody stand back! I lost my contact lens!
7. Rats! Page 47 of the manual is missing!
6. What's this doing in here?
5. I hate it when they're missing stuff in here.
4. Well folks, this will be an experiment for all of us.
3. Don't worry. I think it is sharp enough.
2. FIRE! FIRE! Everyone get out!
1. Could you stop that thing from beating? It's throwing my concentration off!

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