



# Health Care Visions News

Consultants Specializing in Cardiovascular Programs *1st Quarter 2008*

## Expanded Cardiac Services



**Rose Czarnecki**

In May 2005, Magnolia Regional Health Center located in Corinth, Mississippi engaged Health

Care Visions, Ltd. to conduct a Cardiovascular Services Business Feasibility Study to determine if there was a need to expand their cardiac services to include cardiac surgery procedures. The findings of this study unequivocally demonstrated that there was a need to provide advanced cardiac services to the citizens of this community due to the prevalence of coronary artery disease. Magnolia Regional Health Center subsequently applied for a Certificate of Need and in August 2006 received approval to expand their cardiac services.

Program planning and implementation officially began in October 2006 under the direction of Mr. Jason Boyd, Chief Operating Officer and Ms. Angela Jackson, Director of Operative Services. In July, 2007 the team was thrilled to be joined by Mr. Tom Hood, who filled the position of Director of Cardiovascular Services and assumed responsibility for program implementation.



The implementation team at Magnolia Region Health Center was very fortunate to be joined by Dr. Max Hutchinson, cardiovascular surgeon. Dr. Hutchinson's stellar reputation in the community as a skilled surgeon and excellent physician was a key element in accomplishing the team's goal of developing a superior program. His experience and abilities were evident throughout the implementation process and became very apparent to the hospital staff during the dry run mock patient cases which took place in the beginning of October 2007.

The team was also very fortunate to be joined by Ms. Pam Wallis, RN and Ms. Debbie Homan, RN. Ms. Wallis brings many years of critical care and cardiovascular experience; she assumed management responsibility for the new SICU. Ms. Homan has many years of CVOR experience and had worked closely with Dr. Hutchinson in the past; she assumed management responsibility for the CVOR. Under the direction of Ms. Sheila

Calvary, chief nursing officer and Ms. Betsy Wood, assistant director of specialty care. Ms. Wallis and Ms. Homan worked tirelessly to recruit staff, develop policies and procedures, identify equipment needs and provide staff education and training.

Simultaneously with the development of this program, Magnolia Regional Health Center was undertaking a construction project that entailed building a new patient tower. This tower houses 3 new operating rooms, 2 of which serve as the cardiovascular



operating rooms and 12 ICU rooms for patient recover after surgery. After months of preparation, the efforts of the implementation team and the patient care staff were showcased when Magnolia Regional Health Center performed their first coronary artery bypass graft on October 31, 2007.

Health Care Visions, Ltd. was very proud to be a part of the implementation team and wishes the staff of Magnolia Regional Health Center continued success with their cardiac surgical program.

# A Message From the President

## Happy New Year 2008



**Barb Sallo**

For the past several years I have used the first issue of our newsletter to put together a New Year's resolution

list. This year, however, I have decided to postpone that endeavor until the spring. Instead I would like to take this opportunity to reflect back on the "cardiac happenings" that have occurred in 2007, by reviewing some of the literature that was published over the past year.

1. On February 25, 2007 The New York Times published an article **"In the Stent Era, Heart Bypasses Get a New Look"**.

The article reported that: "in the last decade, the number of bypass surgeries in this country had fallen by a third—to about 365,000 in 2006." Meanwhile the number of patients receiving stents soared to nearly a million in that same year.

Two reasons were identified to reevaluate bypass surgery vs. coronary stenting:

- New safety concerns over the long-term risks of stents
- Data indicating that the sickest heart patients may live longer if they receive surgery for revascularization

Studies in the later part of 2006 demonstrated that patients receiving drug coated stents have a slight risk of forming potentially fatal blood clots.

2. On July 12, 2007, in the New York Times' article —**"Shift in Health-Cost Focus is Said to Show Promise"** it was reported that:

Medicare initiated an experiment in April 2005 with 10 physician groups. The physicians were paid for the quality of the care they delivered, rather than on how many tests and procedures they performed. The first year there were 10 clinical quality measures for diabetes care that physicians were to meet. For the second year, clinical measures for heart disease will be added.

Medicare compared the hospital and physician bills for 224,000 patients being treated by the groups with the patient bills from other physicians in the same geographic areas to determine whether there were financial savings to the government.

While all of the 10 physician groups participating in the experiment improved their care for patients during the first year, according to the measurements in place, only two earned bonus payments. Those two groups were paid a total bonus of \$7.3 million (in addition to payments for their usual services) for saving Medicare \$9.5 million.

3. An article also in the New York Times—"Study Sees Medicare Savings from Drug-Coated Stents", published on October 23, 2007 reports that:

Medicare data on patients requiring coronary revascularization in 2001 and 2004 show that treatment costs were 5.4 percent less in 2004. "The more recent figure was \$29,663 compared with \$31,343 in 2001."

The savings appeared to be partially a result of a decline in the percentage of patients receiving heart bypass surgery compared with the rising use of coronary interventions. Nearly one-third of the Medicare patients received bypass surgery in 2001. By 2004 that figure had fallen to just below one-fourth of patients.



In addition to cost savings from surgeries avoided, another supposed cost

benefit came from fewer repeat stenting procedures in the 2004 group. That gain is believed to reflect the main advantage of drug-coated stents over the bare-metal versions used in the 2001 patients.

4. On September 14, 2007, the New York Times article—"New Study Favorable to Drug-Coated Stents" reported:

Patients who received drug-coated stents rather than bare-metal stents do not run a higher risk of death

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according to the study cited in this article. The study combined and reanalyzed the latest data available from 38 previous clinical trials. These findings are consistent with several others reported at recent cardiology meetings, and may help allay safety concerns reported last year by news of potentially deadly clots forming.

Sales of drug-coated stents were expected to total \$5.5 billion of the \$6.5 billion worldwide stent market in 2007.

Twenty-nine doctors who collaborated on the article pooled results from many trials into a meta-analysis. Researchers compared Taxus and Cypher with data from more than 18,000 patients in clinical trials where one of the DES stents was compared with a bare-metal one.

Medtronic and Abbott Laboratories are anticipating approval to enter the domestic market in 2008 with drug-coated stents, and Wall Street expects these new entries will take sales from the incumbents.

5. The Massachusetts stent trial was presented at the November American Heart Association's conference. Researchers compared mortality, heart attacks and revascularization procedures (either bypass surgery or another PCI) between the two groups. The adjusted incidence of death at 2 years was 9.4% for those with DES and 11.9% for those with BMS. There was no statistical difference for MI, but the rate

of revascularization was lower in patients treated with DES compared with BMS. Researchers examined 11,516 DES-only patients and 6,210 BMS-only patients with patient follow-up lasting at least two years after a stent implantation.

**6. Systematic Review: The Comparative Effectiveness of Percutaneous Coronary Interventions and Coronary Artery Bypass Graft Surgery**", published in the Annual of Internal Medicine on November 20, 2007 reports:

In a project commissioned by the Agency for Healthcare Research and Quality, the authors identified 23 controlled trials in which 5,019 patients were randomly assigned to PCI and 4,944 patients were randomly assigned to CABG. The difference in survival after PCI or CABG was less than 1% over 10 years of follow-up. CABG was more effective in relieving angina and led to fewer repeated revascularizations but had a higher risk for procedural stroke.

Footnote: Gregory Dehmer, M.D., FSCAI, president of The Society for Cardiovascular Angiography and Interventions posted a letter on the SCAI website in February 2007 that was sent to the Agency for Healthcare Research and Quality on this research.

Dr. Dehmer's Summary: ....the document uses data that in many cases is outmoded by advances in PCI technology. The dynamic

movements in PCI limit any discussion of the comparative nature because as fast as a treatment can be subjected to RCT it is outmoded and replaced by newer technology. Any comparative document as this must note that it is of historical interest and may not reflect contemporary practice. The data contained in this document are specific to BMS and do not include the last 3 years of clinical practice.

This last article won't be published until February 2008 but it is available on the Annals of Internal Medicine web site.

**7. "Balancing Efficacy & Safety of Drug-Eluting Stents in Patients Undergoing Percutaneous Coronary Intervention"** reports:

Numerous studies and registries have demonstrated that when used for "on-label" indications, drug-eluting stents are effective at reducing restenosis and the need for repeat revascularization in all patient subgroups and lesions types, without an increase in late MI or excess mortality.

It was recommended that all patients should undergo rigorous screening before the coronary intervention to assess their ability to tolerate and comply with uninterrupted dual antiplatelet therapy for a minimum of 3 to 6 months and preferably 1 year, as suggested by the Society for Cardiovascular Angiography and Interventions.

See you in the spring for that resolution list.....



## Whose Cath Lab is it Anyway Part IV

In previous sections of this series we have looked at the diversity that impacts the cardiac catheterization laboratory. We have discussed the different physician specialties, procedure types and the



**Marsha Knapik**

associated equipment/inventory, staffing mixes and the use of physician extenders. This section will discuss how to ensure that staff is appropriately educated, trained and how to maintain ongoing competencies.

There are several aspects to staff education and training in the cardiac catheterization laboratory including:

- Department general orientation
  - Didactic (classroom education)
  - Clinical training (both observational and participative)
- Ongoing clinical competencies
- ACLS, BCLS
- Equipment/supply/ pharmaceutical education (vendor)

While ensuring appropriate staff education and training (and ongoing education) is not a new concept, it is becoming more and more of a challenge to “keep up” with it. Staffing in today’s hospitals does not generally allow for any excess to provide coverage or relief to pull staff out of the

staffing pattern for educational activities. Likewise, the budget cuts have eliminated educator positions and markedly decreased the dollars dedicated to ongoing staff education and training. This means that many catheterization laboratories, especially in smaller hospitals, are struggling to find creative and less expensive ways to maintain the level of education and training for their staff.

A unit specific educator is somewhat of a luxury today, however if a department has this individual, they should be responsible for coordinating all orientation and educational



activities. The educator can oversee orientation, present or coordinate didactic education, arrange vendor provided education for equipment, supplies and pharmaceuticals and develop a method to ensure and document ongoing annual competencies. For those hospitals that do not have this individual, the overall responsibility generally rests with the department director/manager who may have limited time to dedicate to this endeavor. One way many labs handle this is to have one (or in some cases a few) staff members work to coordinate the department education activities in addition to their clinical roles. One staff member may be responsible for vendor provided education, while

another handles the coordination of new staff orientation. The department director should meet with these individuals to determine what resources and time they may need to dedicate to this as well as providing some guidance for the development of guidelines, content, documentation, etc. This method allows for staff involvement in the department operations and certainly staff members have a vested interest in the training and development of their skills and abilities. These staff members may be given some scheduled time to dedicate to the education projects or may work on them when the cath lab schedule is “lighter” and they can be pulled from the lab for shorter periods of time.

Providing a solid general orientation to the department for new individuals hired is critical to quickly embrace them into the department. The department director or manager should have an established program developed for orientation including a well-defined orientation competency list and a mentoring program (to link a new staff member with a seasoned staff member). In addition, if the new staff member has no previous cath lab experience, some didactic content should be provided as a basis for all other activities. Content that should be included for a new staff member who has no previous cath lab experience includes (but is not limited to): A review of cardiac A&P including coronary artery identification with an explanation of what is high risk

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coronary anatomy; a review of hemodynamics and an introduction to additional hemodynamics that are specific to cath lab patients (gradients, shunts, valve areas, pull back pressures, etc.); an overview of basic cath lab procedures including what is included in a left heart catheterization, right heart catheterization and a combined heart catheterization, and an overview of the types of coronary interventions. This will provide some basic information upon which the new orientee can build when in their initial training experience in the cath lab. If it is too time and resource intensive to provide classroom education to a single individual (or a very small group) there are a few options to address this. The content could be provided through a self learning module either hard copy, computer based or a live presentation which could be videotaped for future use. The length of orientation should be specific to the individual and take into account previous experience and what volumes and types of cases they have had exposure to during their orientation period. It is during the orientation period that the lab director can expand the amount of time and apply extra effort with a staff member for education and training since this will not have a negative impact on the current staffing pattern as orientees are generally not considered a part of the normal staffing pattern.

The department director/manger should determine what procedures or skills need evaluated annually. A

competency skills checklist should be developed to document the skill's assessment and a timeframe determined for staff completion. Some cath labs provide 1-2 days of



skill lab sessions to complete competencies when they have been unable to document staff competency by hands-on experience. Other labs schedule a particular competency to be completed over a month or two to allow for clinical/observational experience and if that is not completed in the allotted timeframe, then the director (or the staff member responsible for ensuring annual competencies) will perform an individual skill lab with the staff member(s) who need completed. Performing one competency every month or so allows for the completion of competencies spread out over the course of the year, rather than completed all at once in a 1-2 day skill lab. Annual competencies generally include those procedures or skills that are of high risk and/or low volume such as IABP insertion, timing, etc.

While the hospital education department is generally responsible for providing access to the education and training for ACLS and BCLS completion, it is the responsibility of the department director/manager to ensure that all staff members are current and to keep abreast of when staff members need to be scheduled for renewal. A computer spreadsheet is useful

to keep track of this if the hospital education department does not have a system in place to provide notification of staff members who are due for renewal.

Hospital educators should also pursue continuing education unit (CEU) credits for any programs or education content that meets the requirements as many health care disciplines now require this for recertification or licensure renewal.

Vendor provided education is valuable and essential to the cath lab staff's ongoing competencies. It is critical for staff to have a clear understanding of how to utilize new equipment, supplies and medications safely and efficiently. In many institutions, this education is coordinated by the purchasing or materials management department (for new equipment/supplies) or the pharmacy (for new medications). If this is the case the department director should take full advantage of this assistance and keep in good communications with those departments to coordinate this education as new products are introduced. If the cath lab is responsible for setting up these types of inservices, the department director (or the staff member who is responsible for vendor education) should identify any new products or medications and work with the individual vendors to set up dates and times for the programs.

An additional item to mention is the need to keep thorough documentation of education, training and competencies in

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an organized manner for each year. Sign in sheets for each and every education session should be provided and kept in a file with the content, outline, dates and times of sessions. Individual sheets should be completed for each competency for each staff member and, of course, each new orientee should have a completed orientation competency on file. Education and training records are frequently

reviewed by state regulatory agencies as well as accrediting organizations and having organized and complete records maintained on an ongoing basis will be one less worry for the department director when the representatives of these organizations appear.

Education and training of staff members is important not only for compliance to regulatory agencies, but for patient safety and

good outcomes as well as for staff benefit. Ongoing staff education should not be left to chance or done in a haphazard manner. There should be a department education program in place with an annual plan that is periodically reviewed and revised by the department director, selected staff members and the hospital education department representatives.

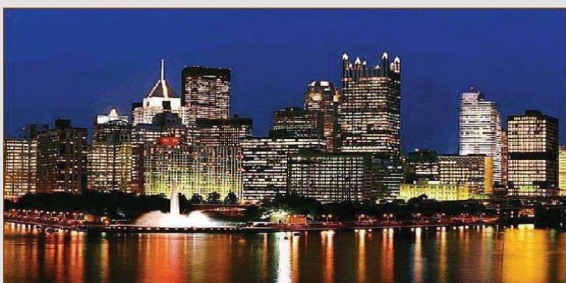
Hospitals emergency departments served 3.6 million more people in 2006 than in the prior year, while the number of inpatient admissions held steady, according to the 2008 edition of AHA Hospital Statistics, which presents data from the AHA's Annual Survey of Hospitals.

ED visits totaled 118.4 million, up from 88.5 million in 1991. Contributing to the rise in ED visits, is the increased use of hospital services from baby boomers who recently turned 60, an age when use of health care services begin to increase dramatically. Hospitals employed more than 5 million people in 2006, over 100,000 more than in 2005.

(Source American Hospital Assn.)

Our staff of clinical and business experts are always happy to answer any questions you may have concerning your cardiovascular program.

We are just a phone call (or email) away.



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