## FOCUS: CARDIOLOGY

## American Heart Month – A Good Time to Access CAD Diagnostics

eart disease remains the leading cause of death in the United States with the most common reason being coronary artery disease. According to the Center for Disease Control and Prevention, in 2008, an estimated 770,000 Americans will have a new coronary event and 430,000 will have a recurrent event. Since 1963 Congress has required the president to proclaim February "American Heart Month." The American Heart Association (AHA) works with the administration to draft and sign this annual proclamation. During the month volunteers from the AHA raise funds for research and education and provide information regarding heart disease and stroke to their neighbors. It is also good time for us to take stock of the health of our hearts and determine what we can do to decrease and/or eliminate our risk factors for developing heart disease.

While we as individuals take stock of our personal cardiac health, February is also a good month for healthcare institutions to assess their cardiac programs and the services they offer. Results of these assessments may indicate that hospitals could enhance their services by adding additional diagnostic and/or treatment modalities. CT angiography is becoming quickly embraced as a modality that can be offered even by those institutions that do not provide invasive cardiac services such as catheterization and percutanous coronary interventions.

Many health care institutions through out the country either have a 64 slice CT scanner or are in the process of purchasing one and plan to implement a cardiac CT angiography service line. Health Care Visions, Ltd. conducted a survey regarding hospital's acquisition and use of 64 Slice CT scanning for cardiac diagnostic work. Two hundred and forty-one responses were received. The survey included hospitals with bed sizes from less than 100 (11.7%) to hospitals with greater than 300 beds (34.2%) with the majority of respondents from the South (37.2%) and Midwest (36.8%). Remarkably, over half (54.4%) of the hospitals already have 64 slice (or higher) CT scanning capability with over 85% already performing CT angiography of the coronary arteries.

One of the pressing issues for hospitals has been the competition between radiologists and cardiologists for the opportunity to interpret these studies. This survey indicated that most facilities have opened reading to both disciplines; 54.3% have both radiologists and cardiologists interpreting cardiac studies. Only 7.9% have interpretations performed exclusively by cardiologists while 32.3% have radiologists exclusively performing interpretation.

Recent articles discussing use of cardiac



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CT angiography have debated its impact on cardiac catheterization and cardiac stress testing volumes and raise the issue that CT angiography could become just another "layer" of diagnostic testing. Results from the survey seem to bear out this concern, at least at this early stage of cardiac CT angiography use. The survey indicated:

- No net impact on diagnostic cardiac catheterization volumes as reported by 81.8% of the respondents
- No net impact on cardiac stress testing volumes as reported by 82.6% of the respondents
- Cardiac CT angiography was used as an additional "layer" of diagnostic testing by nearly three quarters of the respondents, and
- Only 16.2% of respondents used cardiac CT angiography "in place of" other screening tools

Study results also concluded that most facilities are maintaining the location of CT scanning within the Radiology department (88.5%) and most staff CT cardiac imaging with Radiology/CT Technologists and an RN (66.7%). Over 90% of the facilities performing cardiac CT angiography are using established imaging protocols. Hospitals continue to choose to own the equipment (96.4%) as opposed to joint venturing with the physicians in some manner. Imaging is not available 24/7 at more than half of the facilities (55.6%) and of those were imaging is available 24/7 often interpretation was not. In essence, less than a quarter of the facilities (23.1%) were able to provide cardiac CT imaging and interpretation on a 24 hours a day, seven days a week basis.

More than half of the facilities performing cardiac CT angiography report having difficulty receiving reimbursement (59.6%) for the testing. Most hospitals stated that several of their insurers consider it to still be investigational and not a covered service. Several of the surveyed facilities are in the very early days of offering cardiac CT imaging and have yet to determine if they will be successful in receiving reimbursement. Those facilities who are receiving some reimbursement are seeing it from both commercial payors as well as from CMS. It is believed that CMS will issue a statement on payment for cardiac CT in the spring of 2008.

Of the respondents who do not currently have 64 slice (or higher) CT available, a total of 49% are planning to purchase a system within the next 12 months with an additional 27.9% planning a purchase within two years. Only about 10% of respondents have not planned for this type of purchase. Of those planning to purchase a high level CT scanner over 80% said that cardiac work will definitely be included in the scanner's use.

## **Overall, the survey indicates:**

• The majority of hospitals that were surveyed have 64 slice CT scanning and of those who don't the vast majority are planning to add this equipment in the next 1-2 years.

• The facilities that have 64 slice CT scanning are employing it for cardiac work (coronary CT angiography) and the majority are using it as an additional layer of testing as opposed to using it to replace other diagnostics.

• The overwhelming majority of facilities that plan to add a 64 slice CT scanner expect to perform cardiac work on that equipment

• Reimbursement remains a questionable area with mixed comments on the ability to receive reimbursement.

• The majority of facilities surveyed have radiologists as well as cardiologists involved in study interpretation. *Rose Czarnecki and Marsha Knapik are Senior Consultants with Health Care Visions, Ltd., a cardiovascular services consulting company. For more information, visit www.hcvconsult.com.*