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Cardiology

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**Are Doctors Shackled
by Malpractice Insurance?
Where It's Going, What We Can Do**

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Opening the Discussion on Malpractice Insurance

Right now, health care reform dominates both national and ACC news, and much of the dialogue encompasses health insurance options. Yet, we don't hear much discussion about the malpractice insurance crisis and tort reform, and we won't. It is well-known that tort reform comes off the table for many members of Congress, particularly if they are Democrats. At the same time, members of Congress are hearing from the medical community that meaningful reform will be impossible to achieve if some form of tort reform is left out of the equation.

Many physicians are frustrated by this seeming lack of movement on what they feel is a key component in the escalation of health care costs. However, ACC has been working on the issue with advocacy efforts that assist ACC chapters at the state level, and *Cardiology* has carried regular updates on these activities.

Also, as you will read in this issue, the ACC Working Group on Malpractice Insurance, which was impaneled in 2008, has made great strides in finding a way, other than tort reform, to help members deal with the medical malpractice insurance crisis. Of course, we all can hope that eventually tort reform will gain prominence in the health care reform discussions, but until then the Working Group has formulated some excellent strategies that will help physicians have more control in minimizing their liability risk.

Other topics that are rising to the surface in the health care reform discussions include comparative effectiveness research and cost effectiveness research. Recently, **John Brush, M.D., F.A.C.C.**, wrote an excellent editorial on this topic for the Lewin Report (*lewinreport.acc.org*). He recaps and expands his editorial here in "When Comparing Effectiveness, You Can't Ignore Costs."

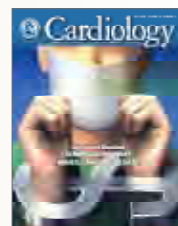
On a final health care reform note, ACC CEO **Jack Lewin, M.D.**, writes of ACC activities geared to help shape new payment and delivery system models. The College continues to carry through on its commitment to stand accountable and take a lead role in shaping health care reform. As you know, many of our programs, such as the appropriate use criteria (AUC) and the NCDR®, have been in place for awhile. New efforts include ACC's Hospital to Home (H2H) initiative. Read more of the details of ACC efforts with lawmakers and key health care stakeholders to develop and test different incentives for providers in "ACC Proposals Involve Testing New Payment and Delivery System Models."

This issue also includes news about two former ACC Presidents, **Robert O. Brandenburg, M.D., M.A.C.C.**, and **Paul Ebert, M.D., M.A.C.C.** — both of whom passed away recently. The health care system in which they worked is changing because what we have now is unsustainable. Quality of patient care is too easily lost in a system that rewards volume, not quality of care for the individual patient. In addition, with the advent of pre-disease diagnostic testing capabilities, advanced pharmaceuticals and other tools, medicine itself has changed, and prevention of disease plays a more dominant role.

I don't believe any of us expect to see the completion of health care reform this year, but we will see the process begin to take place — and I also believe that it will be a long-term process. What is important is that we stay well-informed and engaged in shaping the changes. I look forward to hearing your thoughts on many of these topics.

Alfred A. Bove, M.D., Ph.D., F.A.C.C.
ACC President

July 2009



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In Memoriam: Paul Ebert, M.D., M.A.C.C., and Robert O. Brandenburg, M.D., M.A.C.C.

Are Doctors Shackled by Malpractice Insurance? Where It's Going, What We Can Do

By John G. Harold, M.D., F.A.C.C.;
William J. Oetgen, M.D., M.B.A., F.A.C.C.;
and George Rodgers, M.D., F.A.C.C.



Harold



Oetgen



Rodgers

For cardiovascular (CV) professionals, the medical malpractice crisis is not dissipating in any way, as we see both insurance premiums and the number of filed medical professional liability claims continue to rise. The risk of medical professional liability claims remains a daily consideration in the practices of CV medicine specialists, and the crisis is likely to increase with the potential for changes in the insurance market as a result of the AIG (American International Group) restructure. Insurers may leave the market or demand heightened accountability in reporting and managing risks from providers.

In New York, physicians have seen a 55 to 80 percent increase in premiums over the past five years. New York Gov. David Paterson placed a freeze on rates in August 2008 after insurers had been allowed to increase rates by 14 percent; however, the freeze expires July 1, 2009, and insurance companies will be able to increase rates again. It's important also to note that New York does not have a cap on damages. In the 1990s, the state's Medical Malpractice Insurance

companies that are owned and/or operated by physicians and other health care providers. Their member companies insure more than 60 percent of America's practicing physicians, more than 1,300 hospitals and tens of thousands of other health care providers.

Self-Awareness Impact on Risk

Minimizing liability risk is a worthy goal for all practitioners, and the WG reviewed evidence from other specialties that supports the contention that educational efforts and other strategies aimed toward increasing practitioners' understanding of their liability risks may actually reduce those risks. The information supported the WG's view that increasing cardiovascular professionals' awareness of the problem of medical liability would not only improve the quality of patient care, it would also help reduce the incidence of liability claims in the future.

At its March 2009 meeting, the ACC Board of Trustees approved the Insurance Program and Risk Management

Minimizing liability risk is a worthy goal for all practitioners, and the WG reviewed evidence from other specialties that supports the contention that educational efforts and other strategies aimed toward increasing practitioners' understanding of their liability risks may actually reduce those risks.

Association (MMIA) lost \$691 million of its funds to the state. In 2007, the Medical Malpractice Insurance Pool, which insures risks unable to secure coverage in the standard market, had a deficit of \$525 million.¹

ACC Efforts Expand

The ACC Working Group (WG) on Malpractice Insurance, which was impaneled in 2008 by then **ACC President Douglas Weaver, M.D., M.A.C.C.**, was tasked to assist members by promoting tort reform and initiating programs to identify and control professional liability risks, including educational risk management efforts. To that end, the group will also sponsor educational efforts that will help cardiac care providers understand better the causes of process variations and prioritize resources accordingly.

To assist the WG and the College in addressing these initiatives, the College contracted with Michael Maglaras & Company, a well-known international insurance consulting firm that specializes in providing self-insurance and other alternatives to traditional insurance programs.

The WG has also developed a close working relationship with the Physician Insurers Association of America (PIAA). PIAA is an association of 60 domestic professional liability insurance companies and 12 international

Services Feasibility Analysis and recommendations from Michael Maglaras & Company and the WG. The primary recommendation was that the best way that ACC could position itself to assist members in the future would be for ACC to create a sound risk management program for cardiologists. Doing this would enable members to get the best information they can on how to manage risk better from a single trusted source — and that source should be the College. The study essentially recommended that the College provide assistance to CV professionals by developing a risk reduction education program.

Putting Results in Motion

As a result of the WG's efforts, the College plans to create a national risk management resource for practicing CV professionals — and, in some cases, for the hospitals that employ them. Creating a useable and best-practices risk management program such as this will help position the College as a potential insurance resource for its members. The proposed resource would include an online risk management education program — specifically, three modules targeted at physicians, practice administrators and hospital risk managers respectively.

The College will offer also a new service that provides on-site individual practice management audits. The WG proposed that ACC become a leader in understanding and

Medical Malpractice

continued from page 3

managing the risks of the practice of cardiology. This particular initiative may prove to be a “catalyst” for practice improvement by interpreting cardiologists’ professional liability claims data and thereby driving quality improvement.

The WG used information from many sources in compiling its report and recommendations, including member feedback from a survey on malpractice insurance. We studied environmental trend information that affects liability insurance, including economic, tort reform, technology, demographic and health care delivery trends. Much of this information will be used to help formulate the various Web-based educational modules that will eventually reside on ACC’s *Cardiosource.com*.

Other Considerations in Malpractice Claims

As part of its efforts, the WG also explored the role of expert witnesses in malpractice lawsuits. These suits depend on the truthful and objective testimony of physician experts to define the standard of care and to determine if the standard has been breached. For a law suit to move forward, some states now require an affidavit attesting to negligence and a departure from the standard of care from an expert who is credentialed and actively practicing in the same field as the physician defendant. This requirement has actually helped to reduce the number of “shotgun cases” in which every physician who participated in a patient’s care is sued. The ACC State Advocacy committee is working on a strategy

to help advocacy committees in states without this requirement promote this modest but important change in state civil procedure laws.

For members who have been called to serve as expert witnesses, the WG recommends that they take time periodically to review ACC’s detailed policy regarding the professional conduct of expert witnesses, which is part of the ACC Code of Ethics. The policy was developed several years ago by the ACC Ethics and Discipline Committee, working with ACC General Counsel Tom Arend. It also describes procedures for reporting a member for unprofessional conduct in the role of expert witness — a step that should never be taken lightly. Expert witness or not, all ACC members should make themselves familiar with the ACC Code of Ethics as part of their risk education.

1. Crittenden’s Medical Insurance News™.
June 1, 2009: 8.

Harold is Chair and Oetgen and Rodgers are members of the WG on Malpractice Insurance.

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1954 ACC President Robert Glover hires auditors at his own expense to set up a bookkeeping system for the ACC. The records of the College are collected from Founder Philip Reichert's apartment and Founder Bruno Kisch's office and consolidated in the College's first official headquarters at the Empire State Building.



National Health IT Committee Releases 'Meaningful Use' Definition

The Department of Health and Human Services' (HHS) Health Information Technology Policy Committee has released its preliminary definition for "meaningful use" of electronic health records (EHR) and a matrix of recommended outcomes and measures to document meaningful use. By 2011, the federal government will start paying bonuses to those practices that have adopted and are "meaningfully using" EHRs. The committee has sought input on the appropriate urgency of the implementation timeline, and on how best to frame measures to capture outcomes for meaningful use in 2011, 2013 and 2015. Definitions of meaningful use will differ between inpatient and outpatient settings, and the measures will be derived from NQF-endorsed measures.

The ACC has submitted comments and has previously submitted recommendations for what the definition should include. The ACC has put together helpful hints for selecting and implementing an EHR to assist members in taking advantage of this new federal program, available at www.acc.org/healthit.

ACC Testifies at Comparative Effectiveness Session

ACC Senior Vice President for Advocacy **Jim Fasules, M.D., F.A.C.C.**, testified in early June at a Federal Coordinating Council on Comparative Effectiveness Research Listening Session. Fasules said that "comparative effectiveness research aligned with cost effectiveness information has the potential to make it much easier for patients and their doctors to choose the best treatment and avoid unnecessary treatment for not only heart disease, but other diseases, thus improving quality and ensuring greater patient value. A crucial next step for making sure comparative effectiveness research fulfills its potential to improve care will be integrating the results of that research into guidelines and tools for clinical care." The complete testimony will be posted on qualityfirst.acc.org.



FDA Issues Class I Recall for Medtronic Pacemakers

The Food and Drug Administration on June 12 classified Medtronic's Kappa and Sigma pacemakers as a Class I recall, following a "Dear Physician" warning in late May. The Class I recall, related to about 21,300 Kappa and Sigma pacemakers, indicates these pacemakers have a wiring defect that causes the battery to run out or stop responding. The company recommends replacing the pacemaker in patients who are pacemaker-dependent and have been implanted with one of the affected devices.



ACC Attends Overuse, Appropriateness Conference

The National Committee on Quality Assurance (NCQA) and Physician Consortium for Performance Improvement (PCPI) held a conference on June 9 to discuss "Developing a Framework and Research Agenda for Overuse and Appropriateness." The ACC was recognized at the meeting, which was funded by the Agency for Healthcare Research and Quality, as a leader among medical specialties in addressing overuse. Appropriate Use Criteria (AUC) Task Force member **Robert Hendel, M.D., F.A.C.C.**, shared the College's experiences over the past four years in developing and implementing AUC. The result of the conference was consensus on clinical topic areas for which overuse and appropriateness measures might be developed, including cardiac imaging and coronary revascularization.



PCPI expects to integrate development of these types of indicators in future clinical measure sets later this year. NQF also announced that it will launch projects this fall on overuse and appropriateness measures. The College will actively engage with these various external stakeholders as they announce their initiatives and seeks to bring these various groups together around a national campaign leveraging their interests and those of the College.

Information About Potential Disruption in Global Mo-99 Supply

Providers who are considering using thallium 201 as an alternative to technetium-99m agents during this temporary shortage should refer to ASNC's Imaging Guidelines for Nuclear Cardiology Procedures for a discussion of the characteristics and protocols associated with this radiotracer. These are available at: www.asnc.org/section_73.cfm. A copy of the "Stress Protocols and Tracers" chapter of the guidelines is available and information on thallium can be found on page 8. Follow ASNC's updates here: www.asnc.org/content_7978.cfm.



HHS Releases New Report on Health Disparities

Health and Human Services (HHS) Secretary Kathleen Sebelius in June released a new report on health disparities in the U.S. The report, "Health Disparities: A Case for Closing the Gap," highlights some of the larger disparities in the current health care system and shows that minorities and lower-income Americans are more likely to be sick and less likely to get the care they need. To view the report, go to: www.HealthReform.gov.





When Comparing Effectiveness, You Can't Ignore Costs*

By John E. Brush Jr., M.D., F.A.C.C.

In the current health care reform debate, there has been considerable discussion about comparative effectiveness. This method of evaluation could provide valuable information on the relative value of competing drugs, devices and treatment strategies — which could then improve outcomes, efficiency and satisfaction. Critics are concerned, however, that comparative effectiveness could be used to deny

active effectiveness research will give policymakers important information that will help them set priorities for spending. Granted, at the level of the patient and provider, comparative effectiveness analysis, like guidelines, should inform but not dictate clinical decisions. Publicly-available information about comparative effectiveness should enhance, not encumber the doctor-patient relationship.

We face an unfortunate truth – the growth in health care spending is not sustainable, and it is making health care unaffordable for average Americans. In health care, we can have nearly anything we want – we just can't have everything we want.

coverage, squelch innovation and ration care. Because of these concerns, some stakeholders argue forcefully that comparative effectiveness evaluations should be totally devoid of cost considerations.

But, how can you compare competing treatments and ignore costs? Using heart failure as an example — could you really compare the relative effectiveness of ACE inhibitors and left ventricular assist devices and ignore the wide difference in costs between the two treatments? In addition, isn't the public's desire to gain "more bang for the buck" what's driving health care reform in the first place?

Cost effectiveness research is difficult and has recognized limitations, yet no method of research is perfect or definitive. Although cost effectiveness research has limitations, we should not reject the useful information that it provides for comparative effectiveness analysis.

There is a compelling need to contain costs in order to extend health care coverage universally in America. Compar-

Transparency and Separation Important

Oversight of comparative effectiveness research and analysis requires a disciplined and transparent approach. Advisory boards should be absolutely free of financial conflicts of interest and should be shielded from undue political influence. For years, the National Institutes of Health has distributed billions of dollars in funding, using established methods that are generally respected as fair and non-biased. Similar independence and discipline can be established for overseeing comparative effectiveness.

Comparative effectiveness research using cost considerations should be a two-part process. The first should pertain to relative clinical effectiveness, and the second should pertain to costs. For competing treatments with similar clinical effectiveness, direct cost comparisons to determine the optimal strategy would be straightforward. However, for comparisons where one treatment is more effective, careful analysis of costs will be necessary to estimate the relative value — or the cost

per unit of effectiveness — of the competing strategies.

A firewall should be constructed between comparative effectiveness evaluation and insurance coverage decisions. The funding level for coverage is a political or a business issue, not a scientific issue. Congress — and ultimately the taxpayers — decide funding levels for Medicare. Purchasers and benefit design managers determine funding levels for private health plans. Physician groups can advocate for coverage and reimbursement, but such efforts should be walled off from comparative effectiveness analysis.

To separate comparative effectiveness analysis from coverage decisions, we could borrow a method commonly used to determine grant funding. When judging grants, the judges evaluate the grants based on the scientific merit of the grant, without consideration of whether the grant will actually receive funding. Grants are graded on a relative scale, and the top grants that fall within the funding range are awarded. Judging grants and funding grants are independent processes. A similar method could be used to ensure that comparative effectiveness judgments are isolated from coverage decisions.

An Unfortunate Truth

The device and pharmaceutical industries are predictably worried about comparative effectiveness. Undoubtedly, comparative effectiveness will put pressure on pricing, which is generally lacking when providers and patients pass costs on to third-party payers. Transparent comparative effectiveness would give consumers of health care an opportunity to shop for greater value, which will help contain overall costs. The resulting market pressure should spur, not squelch, innovation.

We face an unfortunate truth — the growth in health care spending is not sustainable, and it is making health care unaffordable for average Americans. In health care, we can have nearly anything we want — we just can't have everything we want.

Providing a basic level of care to all Americans is simply a matter of triage. The current method is haphazard, expensive and inadequate. Given escalating costs and limited funding, we need to differentiate medical treatments with high value from those with little incremental value. Without objective analysis of comparative effectiveness, the costs of medical care will continue to rise — to the detriment of our patients and our profession. Comparative effectiveness analysis that includes cost considerations will help our country provide adequate care for all and will help us provide the most effective treatment for our patients.

Brush, who is with Consultant Cardiologists, Ltd., Norfolk, Va., is an active member of ACC Advocacy Committee.

***Adapted from editorial on LewinReport.acc.org.**



Letters

Positive Vote on Single-Payer Option

A single-payer system is essential to produce a significant saving in our health care system. It would eliminate layers of redundant administrative costs. A public health option would minimize the current, sometimes obscene, profits and salaries of the private health industry. As it is, our expensive, wasteful health care system does not give Americans adequate, quality health care.

Henry Kane, M.D., F.A.C.C.
Glen Mills, Pa.

Board Exams, a Hot Issue for Practicing Physicians

I am glad to see ACC finally address the numerous certification boards issue. I for one do not agree with having boards for every single aspect of cardiology. For those of us who are out of training, in addition to the expense, we face a loss of work and wages while preparing for and taking the exams.

In addition, many insurance companies are now taking advantage of these unnecessary boards to cut reimbursements. In addition to the cost implications of these unnecessary boards, they are now a powerful medico-legal tool with implications for the practice of medicine. This in itself should prompt us to do away with these expensive, unnecessary boards. The regular cardiovascular boards, I believe, are comprehensive and should be of a standard necessary to practice good medicine.

I would like to see a common platform through ACC for third-party reimbursements, so that individual members do not have to deal with this.

Ravindra Kolaventy, M.D., F.A.C.C.
Ocala, Fla.



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Douglas P. Zipes Distinguished
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Recognize one young scientist making outstanding contributions to the field of cardiovascular disease.

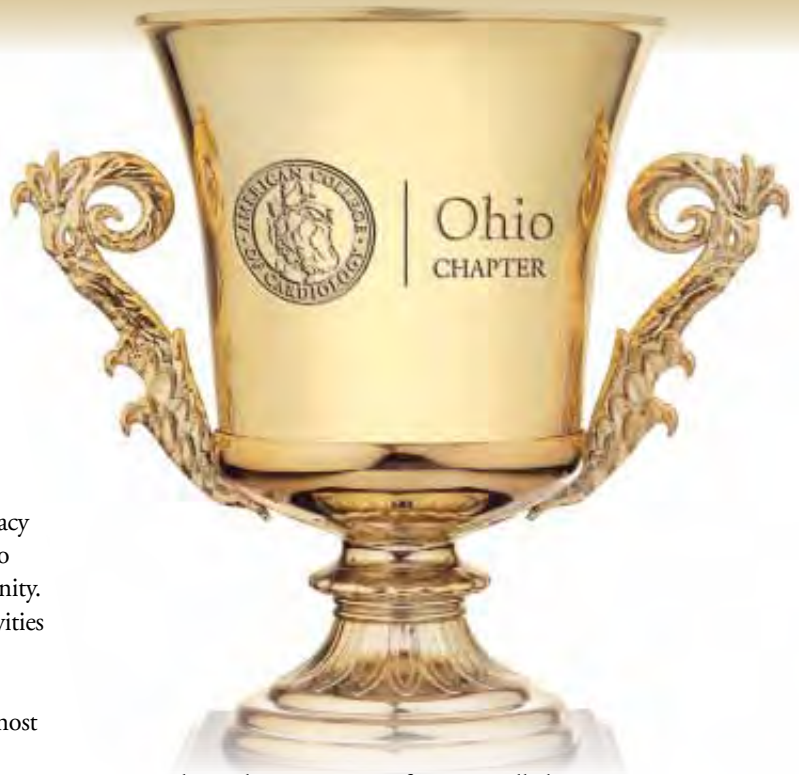
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Nominations are due September 1, 2009.

One recipient will receive \$1,000 plus complimentary travel, housing and registration to attend ACC.10, where he or she will be recognized for his or her achievements and present the scientific work.

Nominations are invited from U.S. and international cardiovascular organizations, medical schools and/or cardiology departments. Nominees must be no more than five years out of training from an accredited U.S. institution or comparable international training program. Nominees must demonstrate contributions to cardiovascular disease and that they have amassed an impressive body of scientific research in either the clinical or basic domain.

Visit www.acc.org/distinguishedawards for submission guidelines and more information.

For questions, please contact Kelli Bohannon at kbohanno@acc.org or (800) 253-4636, ext. 6635



There's a HERO in Ohio

The Ohio Chapter of the ACC knows the secret to member involvement — offer educational, advocacy and quality improvement opportunities tailored to meet the needs of the entire Ohio cardiovascular community. Its innovative efforts to involve members in Chapter activities have earned it one of the College's three HERO (Heroic Efforts creating Results and Opportunities) awards. The HERO awards recognize chapters that demonstrate the most promise in upholding the ACC's mission.

The Ohio Chapter's innovative educational meetings, including its annual meeting, offer a mix of advocacy, quality and educational presentations designed to meet the needs of the entire cardiac care team, which includes Fellows, fellows-in-training (FITs), practice administrators and cardiac care associates (CCAs) — ACC's registered nurse, nurse practitioner, clinical nurse specialist, physician assistant and CV pharmacist members. In 2006, the Chapter added oral abstract presentations to its annual meeting program, in addition to the already popular poster research competition between FITs.

Recognizing the importance of CCAs, FITs and practice administrators to the future of cardiology medicine, the Ohio Chapter has also emerged as a leader in involving these key constituencies in Chapter activities. The Chapter not only held the "First Annual Cardiac Care Associate Cardiovascular Update," it has also formalized both CCA and FIT councils. The first CCA meeting was well received and was followed by the second annual CCA meeting, which convened in April 2009.

On the Advocacy front, the Chapter offers several opportunities for its members to work on state and national issues important to the practice of cardiology. In 2008 and 2009, the Chapter held a "Cardiology Day" at the state capitol that provided an opportunity for members to meet with state lawmakers about the need for policies supporting a healthy Ohio. The Chapter also provides scholarships for several of its members to attend the ACC's annual Legislative Conference in Washington, D.C., each year. "This is a wonderful way to see ACC in action," says the Chapter's Immediate Past President **William Lewis, M.D., F.A.C.C.**

Given its active leaders and members, the Ohio chapter is bursting at the seams with novel ideas. It most recently

organized members into areas of interest called Expert Advisory Committees. Using a Web-based system, participants are able to interact and address acute challenges in areas of imaging, invasive cardiology, preventive cardiology, electrophysiology, cardiothoracic surgery and pediatric cardiology.

The Chapter continues to keep its finger on the pulse of what the membership desires by using surveys, conference calls and electronic white boards. However, the team effort involving members and leadership, including Chapter Executive Gwen Goldfarb, is what truly keeps the Chapter on the path to success.

"A large pool of actively engaged people leads to unique ideas that allow us to provide our members with a great chapter," says Lewis. He adds that "great ideas are part of the equation" and attributes the execution of those ideas to the Chapter support.

Among the many activities planned for the future, the Ohio Chapter has two new priorities in the coming year. A National Cardiovascular Data Registry (NCDR®) work group is scheduled to meet in collaboration with the Ohio Thoracic and Cardiovascular Data Management Group for October 2009 and January 2010. They also plan a long-term collaborative effort with the American Heart Association on "Mission Lifeline: STEMI Systems of Care," a statewide program to improve door-to-balloon times. The Chapter will also keep an eye on state legislation including the public smoking ban and tort reform.



2006 The ACC debuts Innovation in Intervention: i2 Summit during the 55th Annual Scientific Session in Atlanta.



Assessing Current Practice Management Issues in a Challenging Environment

By James T. Dove, M.D., M.A.C.C.

In the past, physician practices focused mainly on patient care and the quality of that care. With the advent of insurance coverage and Medicare, there was a need to become more involved in the business aspects of the practice. Most physicians whom I know would rather not deal with any practice business issues. Many joined practices where others managed the business of medicine. They accepted giving up some of their independence in exchange for someone else handling the business.

Other physicians, however, wanted to preserve their independence and set up their practices with that as a goal. Early on, it was common for a practice to have a business manager who did the usual duties of scheduling, purchase orders, etc. Even though physicians didn't enjoy the business side of medicine, some members of a practice continued to do it because the job simply had to fall to someone. In time, managing the business side of a practice became more complex and required a greater amount of time.

As the complexity of practice management increased, more practices gravitated toward hiring a business administrator with professional expertise in medical practice management. However, most independent practices continued to preserve a strong physician-directed philosophy. A successful practice often was grounded in the underlying importance of the roles played by the physician administrator and practice administrator.

Searching for Efficiencies with Quality, Revenues

Efficient business practice management became more important as fees for cardiovascular services were cut. Those losses could no longer be made up by increasing the volume of patients seen or setting up ancillary services. In the past 10

years, cardiovascular (CV) services have seen cuts in fees so severe that physicians would be required to perform twice as many procedures or office visits to just break even with what the purchasing power of the reimbursement was in 1997. That is physically impossible.

In response, many physician practices started looking for other options that would improve the quality and efficiency of their practices and provide additional revenue. Initially, they provided director services for the cardiac cath lab, electrophysiology lab, outpatient services and product line

The many environmental changes that CV professionals face today create a demand for information and ideas that will help us all find workable solutions.

management for the hospitals in which they worked. This type of physician involvement did help to influence the direction of the CV programs. However, the hospitals saw only modest gains in cost controls and savings.

When gain sharing was proposed as a model, the Centers for Medicare and Medicaid Services (CMS) and the Office of Inspector General (OIG) strongly discouraged that approach to cost control. Yet the savings are part of the efficiencies in a fully integrated system that can be shared. Unfortunately, the CMS/OIG approach provides another classic example of unequal opportunity perpetuated by inconsistent government decision-making.

Recovery Audit Contractors: Coming to an Office, Hospital Near You

Although the medical community has heard about the Recovery Audit Contractor (RAC) program for years, it is only in the coming weeks that the RACs will begin their work of collecting improper payments on a contingency basis throughout the country. The program began as a demonstration pilot in 2005 in California, Florida and New York, and in 2006, legislation was passed mandating a permanent, nationwide expansion of the program by 2010.

While Medicare payments have been subject to audits by numerous contractors over the years, the RAC program differs in that its contingency payment structure allows private contractors to keep a percentage of the overpayments that they collect. However, like auditors of the past, all the RACs have medical directors and employ nurses and certified coders to review claims.

Audit Scope, Claims Review

The RACs, which have now been appointed for the entire country, are allowed to look into all Medicare

payments, including those made to physicians, hospitals, nursing facilities and others. While most of the recovered funds came from hospitals during the demonstration project, this may change in the permanent program.

The RACs are limited in the number of records that they can request. These limits are based on practice size and range from 10 records per 45 days for a solo practitioner to 50 records per 45 days for groups greater than 16 practitioners. The RACs will be allowed to review claims from the past three years of service, although the farthest back auditors can review is Oct. 1, 2007.

The RACs will perform two types of claim reviews: automated and complex. In an automated review, existing claims data is reviewed to ensure that rules have been followed by the carriers that originally processed the claims. These reviews will not involve chart requests and will be largely invisible to physicians unless an issue is identified. The RAC auditors have started with these audits and will later move on to manual claim reviews.

In a complex review, the RAC requests records from a physician and reviews them for medical necessity, documentation and other issues. Physicians will not be reimbursed for the cost of copying records for these audits.

The RACs are required to work with the Centers for Medicare and Medicaid Services (CMS) to identify the issues they choose to audit. Physicians will have the same appeal rights for claims under a RAC review as they would otherwise.

Next Steps

The ACC will work closely with CMS to ensure that the RACs choose appropriate issues and treat physicians fairly. The College has plans to meet regularly with the agency to discuss the RACs' reviews and the potential administrative burden on physicians. The ACC encourages members to watch for and respond to any letters from the RACs. Any administrative questions or concerns should be directed to Brian Whitman at bwhitman@acc.org.

Sharing Burdens, Solutions

Recently, hospitals and physician practices have been challenged by the downturn in the economy. Many practices began looking to hospitals for some financial relief, and hospitals were looking for ways to secure a patient base while decreasing expenses. Hospitals also realized that peer-to-peer pressures to improve efficiencies and decrease costs were better received when physicians were engaged in developing strategies and delivering the message.

Hospital margins are dependent on the cardiovascular service line, with coronary artery bypass graft surgery (CABG), percutaneous intervention (PCI) and cardiac catheterization having the greatest impact on those margins. As CABG, PCI and cardiac cath services have contracted, hospital margins have decreased, forcing hospitals to seek ways to improve efficiency and decrease their fixed costs. For example, there are often wide variations in the costs of supplies used by physicians. Obviously, hospitals could realize savings by standardizing supplies without jeopardizing quality of care. Needless to say, the decreasing volume in the CV service line and hospital margins have led to various management models from cardiovascular service line management to full integration with the hospital.

Using the Thomson Reuters 2008 100 Top Hospitals® program, ECG Management and Thomas Reuters evaluated trends in cardiovascular service line management.* They

surveyed 136 top performing cardiovascular programs. Ninety-two percent of those programs had a CV service line structure. The product line governance team was in charge of business planning, development and clinical quality. The top performing hospitals were those that involved physicians in the management and governance. They ranked outcomes and patient satisfaction as key measures of success. The other key to success was the joint management of those cardiovascular programs by a physician and hospital administrator.

The many environmental changes that CV professionals face today create a demand for information and ideas that will help us all find workable solutions. For this reason, the Ad Hoc Task Force in Practice Management Strategies developed a Whitepaper, "Practice Opportunities: Practice Integration, Management Contracts, Practice Opportunities," which was released at ACC.09 in Orlando. Excerpts from the Whitepaper will be the topic of several articles appearing in the next five issues of *Cardiology*. The more complete section of the Whitepaper will be posted in the Practice Management Section of www.acc.org.

Dove, who is a past president of ACC, is chair of the Ad Hoc Task Force in Practice Management Strategies and one of the authors of the Whitepaper.



* For more information on 100 Top Hospitals® : Cardiovascular Benchmarks for Success 2008, go to www.100tophospitals.com.

Cardiovascular Care Teams Put Patient-Centered Care into Action

By Suzanne Hughes, M.S.N., R.N.,

Last summer, Robinson Memorial Hospital in Ravenna, Ohio, recruited computer-savvy teens and college students to work in the hospital's library, helping older patients navigate the Internet for reliable health information. The young volunteers showed a video created by the National Library of Medicine, handed out a vetted list of health Web sites (including CardioSmart), and then sat side-by-side with the seniors at computer terminals, helping them develop expertise in an unfamiliar world.

This was an innovative example of patient-centered education in a rural part of the country where not everyone has a computer at home. This example, in which patients were given the tools to be active partners in their own care, provides a good example of patient-centered care, which includes having a very strong relationship between the provider and patient.

The concept of educating patients to partner in their own care fits hand-in-glove with the theme ACC President **Alfred A. Bove, M.D., Ph.D., F.A.C.C.**, has chosen to highlight during his term, which he has labeled *The Year of the Patient*.

Cardiac Care Associates across the country are directing or playing a central role in patient-centered programs. These include heart failure clinics that teach patients to monitor their weight and adjust diuretic dose accordingly, anticoagulation clinics that instruct patients on use of home monitoring of international normalized ratio (INR) levels to help keep them in therapeutic range, and cardiac prevention programs that help patients create an individually-tailored health plan of diet, exercise, smoking cessation and stress reduction.

More than Just a Structure

Patient-centered care is a philosophical approach as well as a structured program that guides the individual interactions between patient and care provider. Patient-centered education starts with doing more listening than talking. The conversation with the patient begins with introducing an idea, then asking a question and then listening to the patient. In the end, when you try to put together the next step in a healthier path, you know what that patient's issues are.



Tips for successful patient-centered care include:

- When prescribing a new medication, engage patients in an open discussion about acceptable costs, dosing regimens and side effects. A patient who is part of the decision is more likely to stick with the plan.
- When choosing your words, think: What is this patient's "living room language," and am I speaking it? Most patients don't speak *medicalese*, but they may not let you know when they don't understand for fear of appearing uneducated.
- It takes skilled communication and coaching to help patients commit to taking medications that don't make them feel better on a day-to-day basis. Be sure they understand the medication's life-saving benefits taking place behind the scene.
- At first, some seniors may be disconcerted by a collaborative approach and think that the care provider is indecisive. Make sure they understand that all of the therapeutic choices you are offering are beneficial, but the best choice depends on a patient's abilities, lifestyle and values.
- Pay attention to the stress level of the patient. A stressed, frightened patient may not absorb the information you are giving them. The same goes for a patient who has been sedated for a procedure.
- Use "teach-back" to check on comprehension, supply written materials that reinforce verbal information, and check in with the patient later to reassess comprehension.

The most important thing is to see the world through the patient's eyes. Patient-centered care relies on shared decision-making, not on the old concept of compliance.

Cardiovascular Care Team members within the ACC are continuing to advocate for better patient care. To learn more about becoming a part of ACC's Cardiovascular Care Team, visit us online at www.acc.org/about/join_acc.htm.

Hughes is director of patient and community education and research at Robinson Memorial Hospital.



ACC Proposals Involve Testing New Payment and Delivery System Models

By Jack Lewin, M.D.

Health care reform is on the move, and the practice of medicine as we know it will change significantly in the coming years. As health care reform proceeds, the ACC stands ready to be accountable and to lead in improving quality and value through payment reform with tools such as the National Cardiovascular Data Registry (NCDR[®]), IC³ Program[®] and new clinical decision support programs and the development of new quality improvement clinical networks.

In fact, the College is already working in several areas to ensure improvement in imaging appropriateness, reductions in hospital re-admissions, reduction of geographic variations in care and resource allocation and improved adherence to

most appropriate both scientifically and clinically. This kind of project, with the right resources and/or incentives, could improve quality and reduce variation by using Web-based and EHR-embedded decision support for all specialties and practices dealing with cardiovascular care, and it would do so in a way that does not undermine practices. If we do not do this ourselves, others will do it with a *blunt instrument* approach.

Physician Network Proposal

On other fronts, the ACC is working with lawmakers and key health care stakeholders to develop and test different incentives for providers to work together to deliver cost-effective,

...the ACC proposal would create a voluntary, multi-specialty, quality physician network, organized around participation in CMS-approved clinical registries, to improve the coordination of post-hospitalization cardiac care and prevent avoidable re-admissions.

guidelines. Among the pilots underway, the ACC's Hospital to Home (H2H) initiative is committed to improving transitions across sites and sources of care for patients with cardiovascular disease, and thereby reducing preventable 30-day re-admissions for patients with heart disease by at least 20 percent by 2012.

The College is focused also on improving the evidence-based accuracy of imaging — i.e., using the right test the first time — by at least 15 percent through the use of appropriate use criteria (AUC) at the point of care. The ACC believes that imaging quality and cost effectiveness can best be improved by the systematic application of AUC.

When it comes to addressing the large variations in Medicare spending for similar cardiovascular patients with no correlation between higher spending and better care or improved health outcomes, the ACC has developed a “revascularization” tool to help clinicians determine from well over 100 clinical presentations which therapeutic approach is

efficient, quality care. One new proposal, which is garnering interest from the Centers for Medicare and Medicaid Services (CMS) and Congress, would enable smaller practices that are not part of a larger integrated system to participate in new payment incentives for improved quality and more efficient care through what Congress is calling *Accountable Care Organizations* (ACO). Our proposal applies a registry-measured quality of care improvement model that would align payment incentives with improvements in quality.

In brief, the ACC proposal would create a voluntary, multi-specialty, quality physician network, organized around participation in CMS-approved clinical registries, to improve the coordination of post-hospitalization cardiac care and prevent avoidable re-admissions. Physicians would be paid via a combination of budget neutral fee-for-service and a virtual bundled bonus (VBB) payment that would reward efficient practice and improved outcomes while reducing the cost to CMS over time.

The proposal would enable private practice physicians to deliver meaningful and economically rewarding collaborative care as a first step toward more formal integration over time (as in the ACO concepts), while still maintaining the autonomy necessary to meet local market demands and protect the primacy of the doctor-patient relationship. Furthermore, the physicians in the quality network would ensure that Medicare costs are no greater than actuarially predicted for the targeted population.

In terms of payment methodology, this approach is novel because it would allow for the distribution of bundled bonus payments without requiring contractual relationships between participating physicians or hospitals, creating three specific benefits. First, because the bundle would be divided and paid according to the services rendered for each individual patient episode, physicians would be rewarded for providing the customized, patient-specific inputs required to produce optimal outcomes. Second, it would provide significant economic incentive for physicians to collaborate in patient care during the transition to a more integrated delivery structure. Third, it would provide a model for virtual integration in geographies where formal integration is unlikely or impossible.

Coordinating Efforts

Obviously this proposal would only be successful if developed in cooperation with other health care constituencies. In particular, parallel incentives would need to be developed for hospitals and patients. However, the proposal has the potential to improve significantly the delivery and coordination of care and also ensure that physician incentives and reimbursement are aligned to support these changes — a component that seems to be missing from many of the overarching health care reform proposals on the table.

This is just one of several payment reform models that the ACC would like to see tested as reform efforts kick into high gear. Ultimately, the ACC's chief goal is to enable cardiovascular specialists to thrive in this changing and dynamic health care environment. The College is continuing to work with Congress, CMS and other stakeholders to develop a health care system that puts patients first and rewards physicians and other medical professionals for their commitment to quality, evidence-based care. Our ideas may not be perfect, but at least we have some ideas on the table. For more on the ACC's efforts, including a more detailed overview of the payment reform proposals outlined here, go to *qualityfirst.acc.org*. You can also share your thoughts on health care reform and related issues at *lewinreport.acc.org*.



Lewin is CEO of the American College of Cardiology.

Advocacy Briefs

House Committees Release Discussion Draft on Health Reform

Three House committees — Energy and Commerce, Ways and Means, and Education and Labor — on June 19 released a discussion draft that aims to provide high-quality, affordable health care to all Americans while containing cost growth. The discussion draft rebases the current sustainable growth rate thereby wiping out all deficits for the last nine years, provides a positive Medicare Economic Index (MEI) update in 2010 (approximately 1 percent) and removes Medicare Part B drugs and labs from the calculation of physician services spending. The draft establishes two spending targets under the SGR formula, one for primary care and preventive services and one for all other services. The draft also supports the Physician Quality Reporting Initiative by continuing funding, setting up an appeals process and providing more timely feedback. However, the draft bill includes a provision to change the assumption for the time imaging equipment that is in use from 50 percent to 75 percent, which will result in lower payments for imaging services. The ACC opposes this provision.

Senate Panel Releases Health Reform Proposal

The Senate Committee on Health, Education, Labor and Pensions (HELP) on June 17 began to mark up its health care reform legislation, the Affordable Health Choices Act. The bill encourages adoption and use of health IT; promotes evidence-based medicine; facilitates health literacy; and includes strategies for tackling preventable medical errors and hospital re-admissions, as well as better managing chronic conditions through care coordination, medical homes and community health teams. The ACC submitted a letter to the committee commending it for “tak[ing] the necessary steps towards improving the coordination and quality of care,” which is available on *qualityfirst.acc.org*.

There's Not Always Robust Evidence, Mr. President: The Lewin Report

Robert Hendel, M.D., F.A.C.C., featured on ACC's online forum, The Lewin Report, discussed the value of appropriate use criteria in filling the void in robust scientific evidence. Commenting on President Obama's speech to the American Medical Association: “President Obama cited the recent JAMA publication that found only half of all cardiac guidelines are based on scientific evidence,” Hendel wrote, “However, this conclusion is misleading with regards to the value of practice guidelines and the overall aim of providing the best care. Not every clinical scenario has robust literature support and in its absence, expert consensus opinion must fill the void to assist cardiologists in decision-making.” Read the post in full at: *LewinReport.acc.org*.

Conference Addresses Payment Reform, Cardiovascular Disease

The ACC on June 12 partnered with Avalere Health on a day-long symposium that used cardiovascular disease as a prism to explore the challenges and opportunities associated with payment reform. The event featured discussions and presentations by key health care reform leaders on innovative payment models that reward quality and more efficient care delivery; infrastructure needs to support health care providers; and new funding streams for health IT adoption. Special guest Rep. Lois Capps (D-Calif.) provided an overview of House efforts to pass overarching health care reform legislation. ACC CEO **Jack Lewin, M.D.**, spoke about cardiovascular care as a model for examining systemic payment reform, while ACC Senior Vice President for Science and Quality **Janet Wright, M.D., F.A.C.C.**, moderated a panel that looked at point-of-care information and its influence on care delivery. During the meeting, Avalere Health released a report — “Exploring Opportunities for Efficient Care” — focusing on the “potential for better use of risk stratification to advance the goal of greater efficiency.”

Finding a Job: A Guide from a Recent Graduate

By Andrew M. Freeman, M.D.

Each year, hundreds of cardiology fellows complete their training and head out into the workforce with limited guidance on the next step — finding a job. I thought it would be helpful to offer suggestions based on my experience. First, start early and have a plan in mind so that you can find a quality job, land it early and move on to more important things, such as passing board exams and entering the workforce.

Where Is Important

Seems simple to say, but the first thing to consider is where you want to work and live. Find a map online, narrow your selection to two or three places and place a time radius around them. In other words, if you want to work within a 30-minute drive, know whether the 30-minute drive is 35 miles or just 10 miles in heavy traffic.



Curriculum Vitae Speaks for You

Besides yourself, the most important asset you have is perhaps your Curriculum Vitae (CV). A CV is an invitation to hire you. It needs to be complete, attractive and polished and should tell of the hard work you have put into your career.

Your CV should be well-organized, accurate and complete. Include all of your publications, work and training experience, committee memberships and academic projects and pursuits. Enlist your colleagues to critique and check the wording, grammar and spelling. Find an appealing, crisp format or template.

Remove meaningless items from your CV. “Objective: To find a cardiology job” could work against you. Obviously, you’re trying to find a cardiology job. Stating the obvious demonstrates a lack of creativity and goal-setting. Unless you have a more specific goal, eliminate the “Objective” section. Also, consider saving your CV in a PDF format. PDF secures the look of your CV on nearly every computer platform. You can download free converters to PDF from many places. I used www.PrimoPDF.com.



Cover Letter, the Introduction

If you’ve gotten into a cardiology training position, you’re among some of the best and brightest, which means other graduating cardiology fellows will also have outstanding CVs — just like yours. Your cover letter separates you. It is a concise introduction that says who you are and what you want in a



job. Do you want to implant a million stents per year or to teach medical students or fellows? If yes, then say it. If you have specialized training or other advanced degrees that would make you more desirable to an employer, include them.

Use Your Networks

Many people undervalue their personal and local networks. Take a moment to list the echo, nuclear and cath lab staff, drug and industry representatives and faculty at your institution. Now add in all the places that you have trained, visited or at which you have medical school colleagues. These names represent your personal network. Let them know that you're looking for a job in a specific area; they may know about pending job openings. Establish contacts at other institutions. They might be able to make a connection for you. Follow up with an e-mail or phone call. Send a personalized cover letter and attach your CV in PDF



format or snail-mail to those who are not "Internet-savvy."

If you live or work in an area in which you wish to stay, your local network connections at the other institutions can be critical. Use an institution's Web site or a people search to find the chair of

cardiology or internal medicine. Often, a personal e-mail to these people can take you far. If you cannot find an e-mail address, search for a publication by that person in Google scholar (scholar.google.com), PubMed (www.ncbi.nlm.nih.gov/pubmed) or an Ovid Medline search. The corresponding author's e-mail address is usually listed. If you are interested in a private practice, contact the office manager or one of the physicians directly.

Public Network, aka Recruiters

Recruiters can be enormously helpful but proceed with caution. Smaller recruiting firms can be more personalized, will want to know who you are and what you want, in detail. Other firms, particularly larger ones, can be more impersonal. They may simply be "trying to fill a spot" and might inundate you with flyers, e-mails and phone calls about opportunities in which you are not interested.

Still, I advise using recruiters because they may find a job that you might never have known existed. Sign up with any that seem appropriate and with whom you feel comfortable. A word of caution, though — you should not have to, nor should you, give details of your birthday, places you lived or your social security number.

If you get e-mails for jobs outside of your specialty or for places you would never consider, reply politely and tell/remind the recruiter where and for what you are looking. Most important, don't be rude or hang up on a recruiter. Recruiters talk to each other about candidates, and you don't want a bad reputation. If a recruiter tells you about a job with which you have already made a connection, let the recruiter know.



Search Actively

Always be on the lookout for job postings in publications that you read. Use online job banks from ACC (www.acc.org) and elsewhere. (See pg. 25.) Check with your local ACC state chapter. List with Web sites like CareerMD (www.careermd.com) and others as you deem appropriate. Post your CV, but you might want to remove some of your personal information and just leave your e-mail address.

Always carry your CV on a USB memory stick and carry extra printed copies as well. Attend national meetings and visit the booths of recruiters and prospective employers. Meet colleagues from other institutions, and attend local and state ACC chapter meetings and receptions. Active searching and networking may reveal a great opportunity.



Final Thoughts

Finding a job can be difficult. Spending the time now to outline strategy and your timeline will save you in the long run. Good luck on your job search.

Freeman is chair of the ACC Fellows in Training Committee.



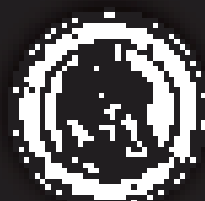
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Year of the Patient Update

When ACC President **Alfred A. Bove, M.D., Ph.D., F.A.C.C.** designated 2009 as “ACC’s Year of the Patient,” the ACC Foundation Patient-Centered Care Work Group (PCCWG), chaired by **Mary N. Walsh, M.D., F.A.C.C.**, was charged with leading ACC’s multi-year effort to incorporate patients’ perspectives into all work and to help clinicians deliver care that best fits patients’ needs.

Chapter Involvement

While every area of the College has been challenged to incorporate a patient focus into their work this year, the initial Year of the Patient plan identified by PCCWG includes a series of tools and programs to be disseminated through ACC Chapters. Currently, the PCCWG is working with the Georgia Chapter to host a community event in conjunction with the ACC.10 Annual Scientific Session in Atlanta. Planning and details will continue to emerge; however, present plans are for the event to hold blood-pressure screenings and patient education sessions based on the ACC guidelines.

The PCCWG is also developing a slide set for members to deliver to patients and family members at seminars or

town hall meetings along with a one-page checklist that explains performance measures and their relevance to health and condition management in lay terms. These tools will be available later this summer on CardioSmart (cardiosmart.org).

Patient Advisory Panel

Finally, a Cardiovascular Advisory Panel is being formed. The Panel will consist of people who have cardiovascular conditions and are willing to guide the College’s activities and inform its direction. The Board of Trustees recognizes the importance of obtaining and including the perspectives of those whose lives are affected by the care ACC members give. The incorporation of patient perspectives into the initiatives ACC offers to members will bring additional value to ACC products and increase the likelihood that the care delivered is most meaningful and beneficial for patients and their families.

More information will become available as the work of the PCCWG unfolds, and the group assesses the inventory of patient-focused activities occurring throughout the College. Members are encouraged to send their ideas or information about their patient-centered programs to kddoerma@acc.org.



Walsh

CardioSmart Offers New Spanish Section and More for Patients

CardioSmart, ACC’s patient education Web site, continues to expand the tools that you can use to help educate your patients about heart disease, their conditions and how they take an active role in their treatments. One of the newest tools is the “En Español” section under the “Learn about Heart Disease” tab.

CardioSmart provides many alternative education options for you and your patients, including the Condition Centers with their breakdown of easily understood explanations for Acute Coronary Syndrome, Atrial Fibrillation, Diabetes and Cardiovascular Disease and Hypertension and Heart Failure.

In the Video Library, **Elizabeth Klodas, M.D., F.A.C.C.**, CardioSmart editor in chief, explains many of these same conditions and more.

CardioSmart News provides explanations of news stories on heart disease research, new medications and other topics that patients are hearing or seeing the news. Recent articles include —

- Cardiac Rehabilitation Save Lives
- Cardio Health During Cancer Treatment
- Red Yeast Rice: A New Possibility for Lowering LDL Cholesterol

Remember, too, that you may sign up for CardioSmart Updates, which will alert you about what is new and important on the Web site. Patient-centered care is an important element in ensuring quality care for our patients, and CardioSmart provides practitioners with a useful and important tool. Log in today to www.cardiosmart.org.



Choosing the Right Non-Invasive Imaging Modality

By Mouaz Al-Mallah, M.D., M.Sc., F.A.C.C.

Recent advances in cardiovascular imaging provide clinical cardiologists with different options in the evaluation of patients with cardiac diseases. However, since each imaging modality has its own strengths and limitations, it is essential for practicing physicians to choose the right imaging modality. Choosing an inappropriate imaging modality exposes a patient to unjustified risks, leads to redundant testing and increases health care costs. In this article, we review the role of different imaging modalities in the evaluation of various symptoms and disease conditions.

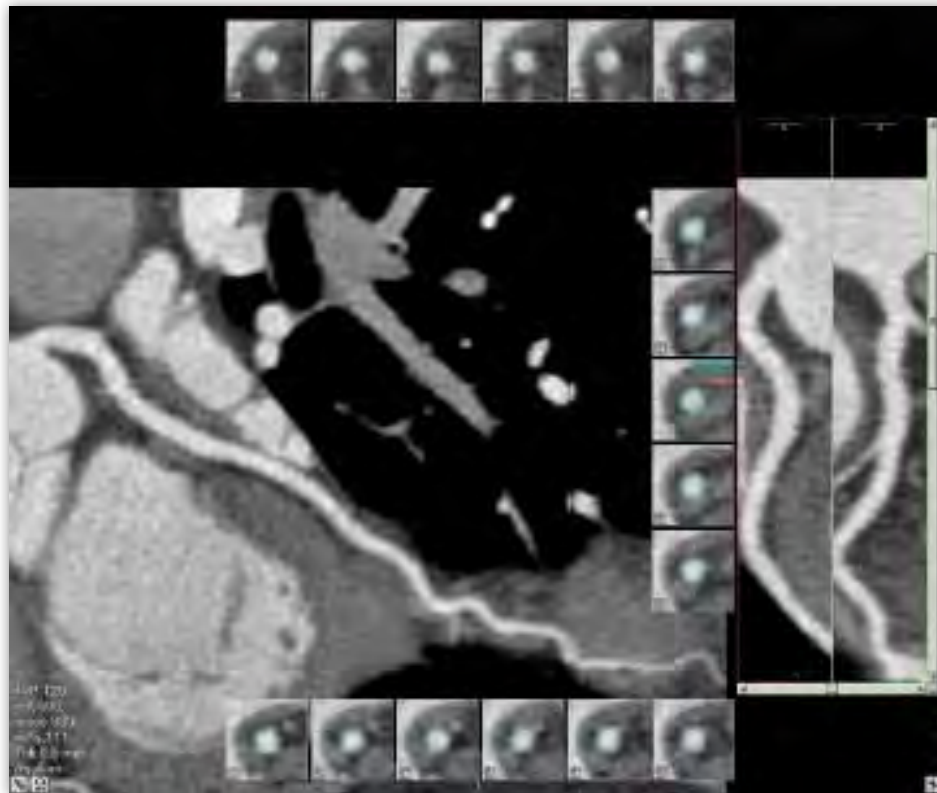
Assessing Ventricular Function

Echocardiography is the ideal initial test for evaluating ventricular function. It is quick, portable and widely available. In addition, it has high temporal and spatial resolution and provides assessment of systolic and diastolic function. However, two-dimensional echocardiography is limited by significant inter-observer and intra-observer variability. Many patients have poor acoustic windows. The use of echo contrast agents in these patients provides more accurate and reproducible assessment of left ventricular function. For patients in whom detection of minor changes in left ventricular function is important — patients on chemotherapy or prior to defibrillator insertion — other imaging modalities may be used such as radionuclide ventriculography (also known as MUGA scan) or magnetic resonance imaging.

Echocardiography (both trans-thoracic and trans-esophageal) remains the ideal test for the evaluation of valvular function or suspected endocarditis.

Assessing Chest Pain Syndromes, Detecting Coronary Disease

Of the more than five million patients seen in the emergency room each year for chest pain, in the majority of the cases,



Normal coronary artery on coronary CT angiography

the pain is not cardiac in origin. While exercise electrocardiography should be the first test in patients with intermediate pre-test likelihood (based on the modified Diamond Forrester criteria), many patients — those who are unable to exercise or who have an abnormal baseline echocardiogram (ECG) — will require imaging to rule out obstructive coronary artery disease (CAD). Multiple imaging modalities have been used in evaluating these patients. The availability of different modalities and local expertise are usually the main reasons for choosing one modality over another.

Stress echocardiography (SE) has been used for years to assess wall motion abnormalities at peak exercise or peak dobutamine infusion. Multiple studies in thousands of patients confirmed the high accuracy of SE in evaluating patients with chest pain. In addition, patients with normal SE have very low event rate on follow-up. The use of echo

contrast agents made high quality SE possible in patients with poor acoustics windows. However, SE may be difficult to interpret in patients with left bundle branch block or paced rhythm.

Nuclear myocardial perfusion imaging (MPI) is also widely used. MPI has higher sensitivity but lower specificity than SE for detecting obstructive CAD. Vasodilator MPI is the test of choice in patients with left bundle branch block or paced rhythm. Prognostic studies have shown that patients with normal MPI have a very low cardiac event rate (<1%/year). In addition, the extent of the perfusion defects on MPI predicts outcomes and should guide medical therapy. Patients with small defects benefit more from medical therapy while patients with high risk scans should be referred for revascularization.

Positron emission tomography (PET) perfusion imaging can be used for the diagnosis of CAD and has higher diagnostic accuracy than single photon emission computed tomography SPECT (89 percent vs. 79 percent with a 70 percent angiographic threshold). PET perfusion imaging is preferred in patients with morbid obesity and in whom SPECT imaging may be technically limited.

Recently, a coronary CT angiography (CCTA) using multislice CT systems has become widely available. CCTA has a very high negative predictive value to rule out CAD (95 percent to 99 percent). However, its positive predictive value has been modest (40 percent to 80 percent). Most of the currently available CT systems require heart rate control prior to imaging, and patients with irregular heart rates cannot be imaged with 64-slice CT systems. Iodinated contrast is used in CCTA, thus limiting its use in patients with renal failure. Concerns have been raised about CCTA-associated radiation dose; however, radiation exposure can be significantly reduced

using prospective gating or other algorithms. Clinically, it appears that CCTA is best used in patients with low intermediate pre-test likelihood of CAD. Studies are currently being planned for a head-to-head comparison between CCTA and nuclear MPI or SE.

Assessing myocardial viability, cardiomyopathy

Dobutamine echocardiography, which has long been used for the assessment of

myocardial viability, has high specificity for the detection of viable myocardium. The presence of “biphasic response” (initial improvement of wall motion with low-dose dobutamine followed by worsening wall motion at high dose) has been associated with improvement of wall motion after revascularization. PET has also been used to assess viability.

Contractile dysfunction is predicted to be reversible after revascularization in regions with perfusion-metabolism mismatch and irreversible in those with perfusion-metabolism match pattern. Using these criteria, the average positive predictive value for predicting improved segmental function after revascularization is 76 percent, whereas the average negative predictive accuracy is 82 percent.

The enhanced spatial resolution of cardiac magnetic resonance imaging (MRI) provides clinicians with superior ability to detect even small areas of myocardial infarction and scarring. The combination of cine function, myocardial perfusion at rest and stress, and delayed enhancement provides a comprehensive assessment that can establish the cause of the cardiomyopathy as well as guide therapy in cases of ischemic cardiomyopathy. Delayed enhancement of less than 50 percent of the overall left ventricular wall thickness has been associated with an increased likelihood of recovery of wall motion after revascularization. In addition, in patients with non-ischemic cardiomyopathy, cine MRI and a delayed enhancement pattern could provide clues to the etiology of the cardiomyopathy and whether it is infiltrative (amyloid, sarcoid), myocarditis, hypertrophic cardiomyopathy or arrhythmogenic right ventricular cardiomyopathy.

Evaluating Pericardial Diseases

Echocardiography is the most common initial imaging tool to assess pericardial pathology. It is the test of choice in hemodynamically unstable patients suspected of cardiac tamponade. However, in patients with poor imaging windows, CT or cardiac MRI may be used. Cardiac MRI has these distinct advantages —

- unrestricted imaging of all areas of the pericardial sac
- superior tissue contrast to assess for contents of pericardial fluid and the myocardium
- sufficient temporal and spatial resolution to assess for any constrictive physiology of affected cases.

Moreover, cardiac MRI and CT are more accurate than echocardiography in locating and sizing loculated pericardial effusion, identifying pericardial hemorrhage, characterizing the content of the pericardial mass or fluid and differentiating constriction from restriction.

Clearly, it is possible to use a variety of imaging modalities to evaluate the same disease process. However, clinicians must be responsible for being well-versed in which modality offers the best quality of patient care while also being the most cost-effective. Making the right choice will help to reduce health care costs and ensure a better outcome for patients.

Al-Mallah is with the Henry Ford Hospital Department of Cardiology, Detroit.

Conflicts of interest: None



Delayed enhancement on MRI in the basal inferolateral wall on MRI





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ACCF CME Evolves with Performance Improvement Initiative

The ACC Foundation has launched a new initiative that will combine educational content with powerful quality improvement resources to create a new breed of continuing medical education (CME).

Dubbed “Keeping PACE: Patient-centered ACS Care Education,” this first cross-divisional performance improvement CME (PI-CME) initiative is designed to enhance the competence and improve the performance of CV professionals in diagnosing and treating acute coronary syndrome (ACS). ACS, which is a major public health issue, is prevalent, costly and deadly.

That said, cardiovascular practitioners need to focus on a clinical continuum approach — risk reduction, accurate diagnosis, primary and secondary prevention with optimal episodes of care when acute events happen and re-occur and in the context of co-morbid conditions.

However, gaps in care persist. Reasons for the gaps include sub-optimal implementation of the ACC/American Heart Association evidence-based guidelines and performance measures for STEMI and NSTEMI, the continuing need for patient education and shared decision-making, low patient adherence to prescribed pharmacologic and non-pharmacologic treatments, gender bias and disparities in care.

The PACE initiative will address these and other gaps through a long-term strategic learning model that consists of three separate but integrated stages of learning (PI-CME) derived from:

- Active involvement in assessing practice gaps, which ACC will derive from data submitted through the ACC-NCDR® ACTION Registry®-GWTG™ (stage A)

- Participation in and application of targeted online and live CME-/CE- certified interventions designed to address the specific practice gaps in ACS identified in stage A and to reinforce relevant key practice points for narrowing those gaps (stage B)
- Reassessment and documentation of measurable improvements in performance data after participation to (stage C)

Five (5) AMA PRA Category 1 Credits™ are offered for completion of each stage of the PI-CME initiative; and for participants who complete all three stages, an additional five credits are provided as a bonus. In addition to CME/CE credits, ACC is pleased to announce that the American Board of Internal Medicine (ABIM) has approved ACC’s PI-CME model for MOC Part 4 credit.

“The ACC is at the forefront of the evolution of CME,” says ACC President **Fred Bove, M.D., Ph.D., F.A.C.C.**

“The College is well-positioned and extremely proud to lead this effort to fully integrate quality improvement, lifelong learning and continuing education.”

More information about enrolling in the PI-CME initiative will be coming over the next few months, so keep a keen eye out for announcements at your hospitals (NCDR® ACTION Registry®-GWTG™ sites) and in other College publications.

Major support for Keeping PACE is provided by an independent medical education grant from Bristol Myers Squibb/Sanofi Pharmaceuticals Partnership.

Additional grant support provided by Schering-Plough.

...cardiovascular practitioners need to focus on a clinical continuum approach — risk reduction, accurate diagnosis, primary and secondary prevention with optimal episodes of care when acute events happen and re-occur and in the context of co-morbid conditions.

In Memoriam: Paul Ebert, M.D., M.A.C.C.

Paul Allen Ebert, M.D., M.A.C.C., former president of the American College of Cardiology, died April 21 of an acute myocardial infarction. He was 76.

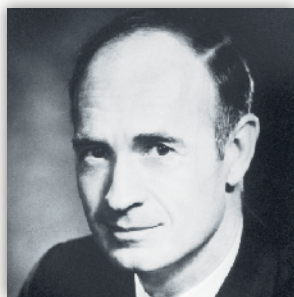
Ebert received his M.D. from Ohio State University in 1958.

He completed his internship and residency at Johns Hopkins Hospital under Alfred Blalock, M.D., and then spent two years as a Senior Assistant Surgeon at the National Heart Institute, National Institutes of Health, Bethesda, Md. He specialized in thoracic and cardiovascular surgery.

His stature in his field grew quickly. He became a professor of surgery at Duke University Medical Center. From 1971 to 1975, he was chairman of the department of surgery at Cornell University Medical College, and from 1975 to 1986, he was chairman of the department of surgery at the University of California San Francisco Medical Center.

A former director of the American College of Surgeons, Ebert was president of the American Association for Thoracic Surgery, the Society of University Surgeons and the Western Thoracic Surgical Association, in addition to his service to the ACC. He was considered one of the world's outstanding pediatric heart surgeons. Those who knew him well, however, remark upon his kindness and sympathy to his patients and his skill in guiding his trainees.

Before earning his medical degree, Ebert was an All American in both baseball and basketball at the Ohio State University, and he played semi-pro baseball. He is survived by his wife, three children and five grandchildren.



In Memoriam: Robert O. Brandenburg, M.D., M.A.C.C.

Robert O. Brandenburg, M.D., M.A.C.C., a former ACC President, died Friday, June 5, at his home in Bloomington, Minn., surrounded by his family. He was 90.

Brandenburg graduated from North Dakota State University and the University of North Dakota Medical School. He

completed his medical education at the University of Pennsylvania Medical School. He met his future wife, Jean, a nurse, while he was interning at Presbyterian Hospital in Philadelphia.

After his Army Air Force service in World War II, he and his wife settled in Rochester, where he completed a residency in cardiology at the Mayo Clinic and was asked to join the staff.



Brandenburg went on to become chairman of the cardiology department at Mayo Clinic. The ACC recognized Brandenburg's outstanding contributions to ACC and cardiology by giving him its Distinguished Fellowship Award in 1988. A year earlier, he had co-authored *Cardiology: Fundamentals and Practice*, described by one reviewer as a "superb, up-to-date, encyclopedic work."

Following his retirement from Mayo Clinic in 1984, the Brandenburgs moved to Green Valley, Ariz., where he taught at the University of Arizona Medical School and was a consulting physician at the Tucson VA Hospital until he was 81. He also served as president of the Green Valley chapter of the American Heart Association, wrote a cardiovascular disease column for the Green Valley News and was active in the Rotary Club. They moved back to Minnesota in 2002.

Brandenburg was a lifelong musician. He played clarinet with the Lawrence Welk Orchestra while he was still in high school and in college, his band played with singer Peggy Lee. He was a founding member of the Notochords, a group of Mayo Clinic physicians who made music in their off-hours, including impromptu jam sessions with visiting Clinic patients such as Duke Ellington and Al Hirt.

Brandenburg is survived by his wife of 64 years, a daughter, three sons and nine grandchildren.



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July 7

- Combining Antiplatelet and Anticoagulant Therapies: A Note of Caution - *JACC* White Paper
- Longer Term Follow-up of Patients Recruited to the REACT (REscue Angioplasty versus Conservative treatment or repeat thrombolysis) Trial
- Impact of Heterogeneity of Human Peripheral Blood Monocyte Subsets on Myocardial Salvage in Patients with Primary Acute Myocardial Infarction

July 14

Hypertrophic Cardiomyopathy Focus Issue

- The 50-Year History, Controversy, and Clinical Implications of Left Ventricular Outflow Tract Obstruction in Hypertrophic Cardiomyopathy: From IHSS to HCM
- Diagnostic, Prognostic and Therapeutic Implications of Genetic Testing for Hypertrophic Cardiomyopathy
- Hypertrophic Cardiomyopathy Phenotype Revisited at 50 Years with Cardiovascular Magnetic Resonance

July 21

- Effect of Intensive Statin Therapy on Regression of Coronary Atherosclerosis in Patients with Acute Coronary Syndrome: A Multi-center Randomized Trial Evaluated by Volumetric Intravascular Ultrasound Using Pitavastatin Versus Atorvastatin (JAPAN-ACS Study)
- Extended Mechanical Circulatory Support with a Continuous-flow Rotary Left Ventricular Assist Device
- ANKRD1- The Gene Encoding Cardiac Ankyrin Repeat Protein Is a Novel Dilated Cardiomyopathy Gene

July 28

- Sympathetic Nervous System Activation in Human Heart Failure: Clinical Implications of an Updated Model
- What is the Strength of Evidence for Heart Failure Disease Management Programs?
- Heart Failure with Preserved Ejection Fraction: Failure to Preserve, Failure of Reserve, and Failure on the Compliance Curve

JACC cardiovascular Interventions

- Drug-eluting Stent Thrombosis: The Kounis Syndrome Revisited
- Percutaneous Left Atrial Appendage Occlusion for Patients in Atrial Fibrillation Suboptimal for Warfarin Therapy: 5 Year Results of the PLAATO Study
- Drug Eluting Stents and the Use of PCI among Patients with Class I Indications for CABG Undergoing Index Revascularization: Analysis from the NCDR®

JACC cardiovascular Imaging

- Association of Myocardial Deformation with Mortality Independent of Myocardial Ischemia and Left Ventricular Hypertrophy
- Real-Time 3D Echocardiographic Assessment of Left Ventricular Dyssynchrony: Pitfalls in Patients with Dilated Cardiomyopathy
- Diagnostic Accuracy of CT Angiography in Patients after Bypass Grafting: Comparison to Invasive Coronary Angiography

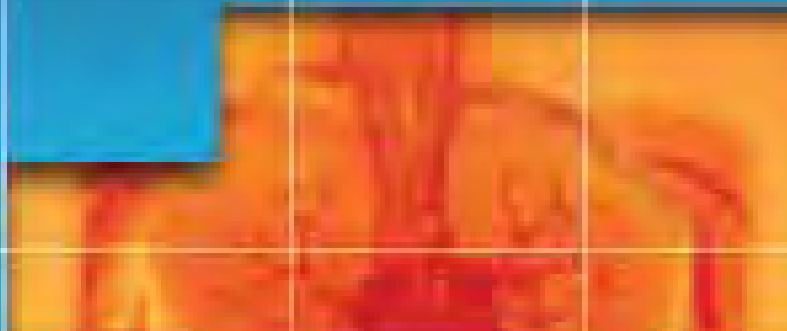
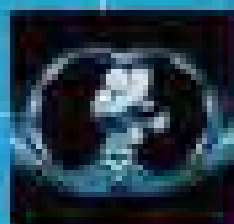
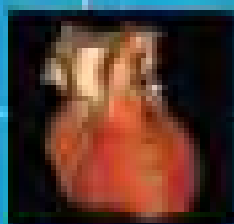
Educational Programs Calendar

	2009* ACCF/SCCT Coronary CTA Practicum *Program Dates available online	Washington, D.C.
	August 20, 2009 ACCF Study Session for Maintenance of Certification – Interventional Cardiology Updates 2007 and 2008 Joseph D. Babb, M.D., F.S.C.A.I., F.A.C.C. James E. Tcheng, M.D., F.A.C.C., F.S.C.A.I., F.E.S.C	Dallas
	August 21 - 23, 2009 ACCF/SCAI Premier Interventional Cardiology Overview and Board Preparatory Course Joseph D. Babb, M.D., F.S.C.A.I., F.A.C.C. James E. Tcheng, M.D., F.A.C.C., F.S.C.A.I., F.E.S.C	Dallas
	September 8 - 13, 2009 ACCF Cardiovascular Board Review for Certification and Recertification Kim A. Eagle, M.D., M.A.C.C. Patrick T. O'Gara, M.D., F.A.C.C.	Lake Las Vegas, Nev.
	September 10 - 12, 2009 Arrhythmias in the Real World 2009 Peter N. Smith, M.D., F.A.C.C.	Washington, D.C.
	September 10 - 12, 2009 2009 Heart Valve Summit David H. Adams, M.D., F.A.C.C. Steven F. Bolling, M.D., F.A.C.C. Robert O. Bonow, M.D., M.A.C.C. Howard C. Herrmann, M.D., F.A.C.C.	Washington, D.C.
	September 12, 2009 ACCF Study Session for Maintenance of Certification (MOC): Cardiovascular Disease Updates 2008 and 2009 Rick A. Nishimura, M.D., F.A.C.C. Patrick T. O'Gara, M.D., F.A.C.C.	Lake Las Vegas, Nev.
	September 22, 2009 Hot Topics in Clinical Cardiology ACC.09 Highlights for the Interventional, Invasive and General Cardiologist Aaron Kugelmass, M.D., F.A.C.C. Marc E. Shelton, M.D., F.A.C.C.	San Francisco
	October 22 - 25, 2009 2009 Foundations for Practice Excellence: A Core Curriculum for the Cardiovascular Clinician Eileen M. Handberg, Ph.D., A.R.N.P., F.A.H.A., F.A.C.C. Joseph S. Alpert, M.D., F.A.C.C.	Washington, D.C.
	December 4 - 5, 2009 How to Become a Cardiovascular Investigator Valentin Fuster, M.D., Ph.D., F.A.C.C.	Washington, D.C.
	December 11 - 13, 2009 42nd Annual New York Cardiovascular Symposium Valentin Fuster, M.D., Ph.D., F.A.C.C.	New York

For a complete listing of upcoming events and to register online, go to www.acc.org/education/programs/programs.htm

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